

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of Rocky Mountain Power's
Proposed Electric Service Schedule No.
32, Service from Renewable Energy
Facilities

DOCKET No. 14-035-T02

SURREBUTTAL TESTIMONY OF TYLER POULSON
ON BEHALF OF
SALT LAKE CITY CORPORATION

December 2, 2014

RESPECTFULLY SUBMITTED,
Salt Lake City Corporation

Tyler Poulson
Salt Lake City Corporation

1 **BACKGROUND**

2 **Q. Please state your name, business address and current position with**
3 **Salt Lake City Corporation (“City”)**

4 A. My name is Tyler Poulson. My business address is 451 S State Street,
5 Salt Lake City, Utah. I am currently a Sustainability Program Manager for
6 Salt Lake City Corporation.

7 **Q. Have you previously provided testimony in this docket?**

8 A. No. I have participated in the docket through technical conferences and
9 settlement discussions, but have not provided direct testimony thus far.

10 **QUALIFICATIONS**

11 **Q.** Please briefly describe your qualifications and experience.

12 A. I have a Bachelor of Science (BS) and a Master of Science (MS) degree,
13 both in Economics from the University of Utah. I have been working on
14 energy-related matters, including energy efficiency, conservation, and
15 renewable energy, for local governments in Utah since 2009. I am
16 currently representing Salt Lake City Corporation in this docket given the
17 City’s interest in pursuing renewable energy for our municipal operations.

18 **RESPONSES TO REBUTTAL TESTIMONY**

19 **Q. What is the purpose of your surrebuttal testimony?**

20 A. The intent of my surrebuttal testimony is to comment on the complexity,
21 and associated administrative costs, of Rate Schedule 32 as currently
22 proposed. I will also address a portion of the methodology that has been
23 proposed for calculating customer demand contributions. Comments in

24 this surrebuttal testimony will be in direct response to the rebuttal
25 testimony of David L. Taylor on behalf of Rocky Mountain Power dated
26 October 9, 2014 and rebuttal testimony of Sarah Wright on behalf of Utah
27 Clean Energy dated October 9, 2014.

28 **Q. What is your understanding of how a customer bill is calculated**
29 **under the proposed rate schedule?**

30 A. The currently proposed rate schedule requires evaluating energy
31 consumption and energy generation data on 15-minute intervals in order
32 to create a net energy outcome for each meter. Through a series of
33 numerous steps this process is used to derive a monthly customer bill and
34 ultimately determines the value of renewable energy projects for
35 customers. The proposed rate schedule results in a cumbersome process
36 for RMP. The implications of this process are indicated in the rebuttal
37 testimony of Mr. Taylor:

38 "RMP acknowledges that the administrative fee may serve as a
39 barrier for some customers with multiple smaller delivery points. As
40 indicated in my direct testimony, the administrative fee is intended
41 to cover the cost of data collection and manual billing. The existing
42 customer service billing system, established in 1995 was not
43 programmed to accommodate complex billing of this type."

44 RMP estimates this process will cost \$260 per meter per month. Beyond
45 fiscal implications of the administrative fee, the process also results in a

46 calculation that makes it difficult for customers to assess the economics of
47 renewable energy projects under Rate Schedule 32.

48 **Q. How does the proposed process make it difficult for customers to**
49 **assess the value of renewable energy?**

50 A. In order to evaluate the economics of a project under Rate Schedule 32,
51 customers need to know the generating profile of the proposed renewable
52 energy source and the consumption profile of their facilities on 15-minute
53 interval timescales. Detailed interval information is generally not readily
54 available for most facilities, including the vast majority of meters owned by
55 the City. The City has one meter that participates in the Energy Profiler
56 Online program offered by RMP and this provides more granular data for
57 this site. However, exporting interval data in a robust way to match
58 against a renewable generation profile is not allowable with the current
59 software. For facilities not currently leveraging Energy Profiler Online, or
60 alternative propriety software, no level of interval data is readily available.
61 Requesting this information from RMP for a variety of meters would be a
62 time- and resource-consuming process for both the customer and the
63 utility.

64 **Q. What are the implications of the currently proposed administrative**
65 **fee for customers that aggregate multiple meters?**

66 A. As noted by Mr. Taylor, the administrative fee may pose a barrier for some
67 customers. In order to meet the 2 MW minimum generation requirement
68 the City would need to aggregate numerous meters. This aggregation

69 requires that for each facility the City needs to base its renewable energy
70 potential on the *minimum* customer load during renewable energy
71 generating hours in order to not over-generate. For example, a solar
72 project would need to base its development on weekend and holiday
73 electricity load for offices that operate under a typical 5-day work week.
74 This would lead to developing a small amount of renewable energy to
75 serve that facility and simultaneously increase the necessity to aggregate
76 multiple meter sites. The City has evaluated the solar potential for the
77 aforementioned metered site that utilizes Energy Profiler Online software.
78 This site used just over seven (7) million kilowatt-hours (kWh) in 2013, but
79 would only be suitable for roughly a 600 kilowatt (kW) solar array in order
80 to not over-generate during weekend hours. This 600 kW solar installation
81 would only generate around 12% of the facility's total annual electricity
82 consumption. The installation would also fall far short of the 2 MW
83 development minimum referenced by Senate Bill 12. Hence, the City
84 would need to select additional sites and aggregate a sizable amount of
85 meters in order to meet the 2 MW minimum. This aggregation would lead
86 to cost-prohibitive charges related to Schedule 32. As an example,
87 aggregating eight meters would result in a \$24,960 starting annual
88 administrative fee.

89 **Q. Is there an alternative process that could be used to enable the**
90 **development of renewable energy under Senate Bill 12?**

91 A. Yes. As noted in the rebuttal testimony of Mrs. Wright, Rate Schedule 32
92 could be simplified by using general service rate schedules (e.g.,
93 Schedule 6, 8 and 9) as the foundation for how a customer is billed.
94 Customers would then be provided an offset for energy charges in
95 accordance with how much renewable energy is generated. Power
96 charges would also be reduced by a reasonable amount through a pre-
97 defined capacity credit. Per the testimony of Mrs. Wright the alternative
98 rate schedule would:

99 "Provide a reasonable capacity credit as an offset to customer bills
100 in recognition of the capacity value of additional renewable energy
101 facilities coming online on RMP's system."

102 In addition to greatly simplifying the process, reducing the burden on RMP
103 administrative staff, and lowering associated billing costs, this modification
104 would make the Rate Schedule far more approachable from a customer
105 perspective. Evaluating the economics under this alternative scenario
106 would not require rigorous comparisons of interval data for each customer
107 meter. Having this alternative process available would ensure broader
108 access to Rate Schedule 32 for large users of electricity that happen to
109 have their demand spread across many meters.

110 **Q. How would this method protect both participants and non-**
111 **participants in Rate Schedule 32?**

112 A. Renewable energy facilities offer value to the overall electric grid and
113 ratepayers as a whole. By compensating renewable energy through a

114 capacity payment that aligns with the value that each generation source
115 brings to the system, renewable energy customers are properly
116 incentivized to develop diverse energy assets in ways that benefit all
117 customers. The proposed simpler, yet fair, method would encourage
118 private investments aligned with a cleaner and more diversified electricity
119 portfolio.

120 **Q. Is this alternative dramatically different than Rate Schedule 32 as**
121 **proposed?**

122 A. The alternative proposal is similar to Rate Schedule 32, as proposed, in
123 many ways although it does deviate in terms of how it quantifies and
124 compensates for capacity contributions. This deviation is proposed in
125 order to allow simplification for all parties and more reasonable access to
126 the types of renewable energy development cited in Senate Bill 12.

127 **Q. Is this alternative compatible with the related enabling legislation**
128 **(Senate Bill 12)?**

129 A. Yes, this alternative pathway would still allow a simple check-and-balance
130 to verify that customers are not over-generating with renewable energy
131 resources relative to their facility meters. Rather than requiring a rigorous
132 15-minute interval energy comparison and utility bill derivation for each
133 location, RMP staff could base customer compliance on a moving scale of
134 historic monthly load averages for each site. The low-end daily average
135 for a facility that also coincides with generating hours for the renewable
136 energy source would act as the upper-end for renewable energy

137 generation potential. Some form of this simpler check-and-balance could
138 be used to ensure compliance with the related enabling legislation.
139 Rather than using a complex algorithm to determine billing costs, this
140 alternative would use a simple approach rooted in existing general service
141 rate schedules plus a reasonable capacity credit. There would still be
142 administrative costs for this process, but they would be greatly reduced.

143 **Q. Should this alternative methodology completely displace Rate**
144 **Schedule 32 as proposed by RMP?**

145 A. Not necessarily. Rate Schedule 32 as currently proposed by RMP could
146 remain in a roughly similar format. The current rate schedule and its
147 proposed interval-based energy balancing process could prove accessible
148 for customers with one, or slightly more than one, meter that uses a
149 sizable amount of electricity. These very large facilities could prove a
150 good match for certain renewable energy types while also not creating the
151 burden of numerous monthly administrative charges for a single customer.
152 The proposed alternative, simpler rate schedule could coexist alongside
153 RMP's Rate Schedule 32 as proposed. This would ensure enhanced
154 customer choice and better access for commercial customers wishing to
155 leverage the renewable energy opportunities potentially created by Senate
156 Bill 12.

157 **Q. Aside from creating an alternative pathway for customers, do you**
158 **have any comments on whether RMP's proposed approach to Rate**
159 **Schedule 32 should be modified?**

160 A. Yes. In Mr. Taylor's rebuttal testimony he argues that allowing the daily
161 power charge to be calculated on an hourly level, as has been advocated
162 in testimony related to this docket, is not an appropriate way to formulate a
163 demand charge for a customer. Mr. Taylor argues that:

164 "At that level of granularity, the proposed "hourly on-peak shaping
165 charge" ceases to be a demand related charge and simply
166 becomes an additional kWh or energy charge billed during the on-
167 peak period."

168 Given that 15-minute interval meter data will be available and used to
169 create the customer bill for the proposed Schedule 32 tariff, it is fair and
170 reasonable that this information should be leveraged to compensate
171 renewable energy in a more precise way that better reflects contributions
172 to a customer's demand needs and the overall grid. Compensating for
173 demand contributions on an hourly basis would accomplish just that.

174 **Q. Will this hourly demand charge calculation add to billing costs**
175 **incurred by RMP when administering Schedule 32?**

176 A. Not necessarily. The rate schedule currently proposed by RMP requires
177 calculations that deal with facility energy usage and renewable energy
178 generation on a 15-minute interval basis. These calculations are used to
179 formulate daily profile summaries which are then used to create a
180 customer bill. The proposed hourly calculation would use the exact same
181 data fields to convert energy profile information into a monthly bill. This
182 hourly valuation process would use automatic calculations in much the

183 same way that the proposed daily bill methodology leverages automatic
184 calculations. In both cases interval data is quickly summed using pre-
185 existing formulas to create a monthly customer bill.

186 **Q. Does this conclude your surrebuttal testimony?**

187 A. Yes.