

November 21, 2017

VIA ELECTRONIC FILING

Utah Public Service Commission
Heber M. Wells Building, 4th Floor
160 East 300 South
Salt Lake City, UT 84114

Attention: Gary Widerburg
Commission Secretary

RE: **Docket No. 17-035-T07 - In the Matter of Rocky Mountain Power's Proposed
Tariff Revisions to Electric Service Schedule No. 37, Avoided Cost Purchases
from Qualifying Facilities**

**Docket No. 17-035-37 – In the Matter of Rocky Mountain Power's 2017
Avoided Cost Input Changes Quarterly Compliance Filing**

The Company hereby files its Surrebuttal Testimony as directed by the Commission. Rocky Mountain Power respectfully requests that all formal correspondence and requests for additional information regarding this filing be addressed to the following:

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Informal inquiries may be directed to Jana Saba at (801) 220-2823.

Sincerely,



Joelle R. Steward
Vice President, Regulation

Rocky Mountain Power
Docket No. 17-035-T07/
17-035-37
Witness: Daniel J. MacNeil

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF UTAH

ROCKY MOUNTAIN POWER

Surrebuttal Testimony of Daniel J. MacNeil

November 2017

1 **Q. Are you the same Daniel J. MacNeil who presented direct and rebuttal testimony**
2 **in this proceeding on behalf of PacifiCorp, d.b.a. Rocky Mountain Power (“the**
3 **Company”)?**

4 A. Yes.

5 **PURPOSE OF TESTIMONY AND RECOMMENDATION**

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

7 A. I respond to the rebuttal testimony filed on October 31, 2017 by witnesses Dr.
8 Abdinasir M. Abdulle for the Division of Public Utilities (“DPU”), Ms. Cheryl Murray
9 for the Office of Consumer Services (“OCS”), and Mr. Ken Dragoon and Ms. Kate
10 Bowman for Utah Clean Energy (“UCE”).

11 **Q. Please summarize the issues addressed in your surrebuttal testimony.**

12 A. I address the following issues:

- 13 • UCE’s and the Renewable Energy Coalition’s (“Coalition”) failure to include
14 supporting calculations for their proposals;
- 15 • Additional considerations related to potential deferral of the Aeolus to
16 Bridger/Anticline transmission upgrade;
- 17 • Factors affecting avoided costs and ratepayer indifference, specifically
18 additional qualifying facilities (“QF”) resources and avoided cost updates.

19 **Q. Please summarize Dr. Abdulle’s position regarding UCE’s and the Coalition’s**
20 **failure to provide supporting calculations for their recommended proposals.**

21 A. Dr. Abdulle addresses UCE’s and the Coalition’s failure to support their proposal in
22 his rebuttal testimony, stating, “[b]ecause Mr. Dragoon presented no numerical
23 calculations in relation to his proposed alternative method, the Division is unable to

24 determine whether or not the proposed method would yield a reasonable avoided cost.”¹
25 He takes the same position with regard to the proposals made by Mr. Lowe and Mr.
26 Townsend for the Coalition.²

27 **Q. Do you agree with Dr. Abdulle that it is impossible to evaluate the reasonableness**
28 **of Mr. Dragoon’s proposed methodology since no supporting calculations were**
29 **provided?**³

30 A. Yes. Without an avoided cost, it is difficult to know whether an avoided cost
31 methodology will produce reasonable avoided cost results. Dr. Abdulle notes the
32 importance of the customer indifference standard in setting avoided cost, and it is
33 impossible to assess customer indifference without having at least an indication of the
34 avoided cost outcomes.

35 To assess customer outcomes, the Company asked UCE for avoided cost
36 calculations based on Mr. Dragoon’s proposed avoided cost methodology. In response,
37 UCE indicated that it “has not proposed a specific pricing method or pricing options,
38 and therefore has not prepared the requested calculations.” See Rocky Mountain Power
39 Data Request 1 to UCE, attached as Exhibit RMP__(DJM-1S).

40 Similarly, the Company asked the Coalition for avoided cost calculations based
41 on the proposed avoided cost methodologies of Mr. Townsend and Mr. Lowe. The
42 Coalition’s response indicated that it “has not prepared the requested calculations.” See
43 Rocky Mountain Power Data Request 1 to the Coalition, attached as Exhibit
44 RMP__(DJM-2S).

¹ Abdulle Rebuttal at page 3, lines 56-59.

² Abdulle Rebuttal at page 3-4, lines 61-69.

³ Abdulle Rebuttal at page 3, lines 56-60.

45 **Q. Mr. Dragoon states that “there is no compelling reason to exclude renewable QFs**
46 **from the opportunity to defer renewable resources of a different type.”⁴ Do you**
47 **agree?**

48 A. No. First, Mr. Dragoon appears to conclude that Mr. Townsend’s analysis of the
49 deferral of renewable resources of different types was inadequate and is unable to
50 provide an alternative. As such, Mr. Dragoon has no compelling reason to allow
51 deferral of renewable resources of any type as he proposes. More importantly, as
52 discussed in my rebuttal testimony, the current method of capacity-equivalence does
53 not adequately account for the variations in operational characteristics between
54 different types of renewable resources. In other words, while one apple and two donuts
55 may weigh the same, this does not mean they cost the same, provide the same
56 nutritional benefits, or are interchangeable components of a healthy diet. Mr. Dragoon
57 recommends replacing 3.8 megawatts (“MW”) of wind resource with 1 MW of tracking
58 solar resource, claiming this produces an equivalent portfolio without any supporting
59 calculations to verify the result.⁵

60 **Q. Mr. Dragoon also suggests that excluding deferral of renewables of different types**
61 **“may deprive Utah ratepayers of the opportunity to benefit from local renewable**
62 **resources.”⁶ How do you respond?**

63 A. The Company’s avoided cost methodology does not account for costs and benefits that
64 are beyond the scope of its revenue requirement and customer rates. Customers have

⁴ Dragoon Rebuttal at page 3, lines 31-32.

⁵ One MW of east tracking solar with a 59.7 percent capacity contribution is equivalent to approximately 3.8 MW of east wind with a 15.8 percent capacity contribution, as both resources provide 0.597 MW of capacity.

⁶ Dragoon Rebuttal at page 3, lines 33-34.

65 other opportunities to voluntarily support local renewable resources. For example, large
66 customers may be eligible to receive service from renewable resources under Schedules
67 32 or 34, and small customers can request service from renewable resources under
68 Schedules 70, 73 or 136. Schedules 32 and 34 allow large customers to enter
69 agreements to receive service from renewable resources. Schedule 70 is the Company's
70 Blue Sky program, under which the Company procures renewable energy credits
71 ("RECs") to match customer subscriptions. Funds remaining after REC procurement
72 and administrative costs are used to fund community-based renewable energy projects.
73 Schedule 73 is the Company's Subscriber Solar program, the gives customers the
74 opportunity to buy kilowatt-hour blocks of electricity from a Company solar resource
75 at a fixed price, with purchased energy offsetting a portion of their own billed energy
76 usage at their home or business. Schedule 136 is the Transition Program for Customer
77 Generators, which supersedes the net-metering tariff and identifies the terms and
78 conditions for customers which own, lease, or purchase renewable generation that is
79 located on or adjacent to their premises and which is intended to offset their load. All
80 of these schedules allow customers the opportunity to support renewable generation at
81 their discretion.

82 **Q. Dr. Abdulle suggests that it is appropriate to include avoided transmission costs**
83 **if the 2021 Wyoming wind is considered deferrable. Should the Commission**
84 **consider both the wind and transmission resources deferrable?**

85 A. No. While the Aeolus to Bridger/Anticline transmission upgrade cannot be
86 incrementally adjusted to a smaller size, the associated wind resource additions could
87 be incrementally reduced. This means that even if the 2021 Wyoming wind resource is

88 considered deferrable, the Aeolus to Bridger/Anticline transmission upgrade does not
89 necessarily need to be considered deferrable as well.

90 **Q. Is the Aeolus to Bridger/Anticline transmission upgrade solely for the purpose of**
91 **connecting the 2021 Wyoming wind resource to the Company's transmission**
92 **system?**

93 A. No. The transmission upgrades, which enable interconnection of the 2021 Wyoming
94 wind resources, provide additional benefits beyond the connection of the proposed
95 wind to the Company's system. First, the wind resource additions have an average
96 output of approximately 450 MW, which leaves more than one third of the 750 MW of
97 incremental transfer capability available for other resources such as the Company's
98 existing wind resources and Dave Johnston and Wyodak coal plants. Thus, the
99 incremental transfer capability creates additional customer benefits by allowing these
100 low-cost resources to displace higher-cost resources elsewhere on the Company's
101 system. Further, as noted in the 2017 IRP, in addition to the increase in transfer
102 capability, the transmission upgrade will result in reduced line losses and reduced
103 transmission system derates.⁷ If transmission costs are included in avoided costs, the
104 lost transmission benefits described above should also be considered.

105 **Q. Ms. Bowman claims that only 18 small QF projects have been completed in Utah**
106 **and that only 12.2 MW came online during 2016.⁸ Are her claims accurate?**

107 A. No. Ms. Bowman's figures did not include several hydro and baseload/cogeneration
108 projects. At present, the Company has 25 small QF projects in Utah that are delivering

⁷ PacifiCorp's 2017 IRP Volume I, p. 62-63. Available online at:
www.pacificorp.com/content/dam/pacificorp/doc/Energy_Sources/Integrated_Resource_Plan/2017_IRP/2017_IRP_VolumeI_IRP_Final.pdf.

⁸ Bowman Rebuttal at page 3, lines 37-39.

109 power under QF power purchase agreements. In addition, while small Utah QF
110 contracts with 2016 commercial operation dates (“CODs”) were relatively limited, over
111 800 MW of new QFs achieved CODs in 2016. While 12.2 MW of new QFs may not
112 have a significant impact on avoided costs, 800 MW certainly could impact avoided
113 costs. Ignoring that impact, as proposed by Ms. Bowman, would result in rates above
114 the Company’s actual avoided cost, violating the customer indifference standard to the
115 detriment of retail customers.

116 **Q. Ms. Murray suggests that if the 2021 Wyoming wind resource is included in the**
117 **calculation of avoided cost pricing, it should immediately be removed at such time**
118 **as the project stops being pursued to ensure that the customer indifference**
119 **standard continues to be upheld. How do you respond?**

120 A. The Company agrees that changes in avoided cost rates are necessary to maintain
121 customer indifference, but this is true whether the Company’s avoided cost goes up or
122 down. In particular, the 2021 Wyoming wind resource was included in the 2017
123 preferred portfolio due to the projected customer benefits of a portfolio including that
124 resource relative to other potential portfolios. Since other potential portfolios are more
125 expensive, the Company’s avoided cost should be higher if the 2021 Wyoming wind
126 resource is not feasible or cost-effective, barring other changes in conditions. As shown
127 in Figures 2R, 3R, and 4R in my rebuttal testimony, assuming the Wyoming wind
128 resource is not deferred by Utah QFs results in higher avoided costs, particularly for
129 wind QFs, which represent the most direct and reasonable comparison.⁹ This is because
130 there are elements within the 2017 IRP preferred portfolio that are higher cost than the

⁹ MacNeil Rebuttal at pages 23-35, lines 483-505.

131 2021 Wyoming wind. If the 2021 Wyoming wind was removed from the portfolio,
132 more of these higher cost elements would be necessary.

133 **Q. How does the Company intend to incorporate the outcome of the wind RFP in**
134 **avoided costs?**

135 A. Once they are fully executed, new contracts and agreements would be included in
136 avoided costs calculated under Schedule 38, displacing resources identified in the IRP
137 preferred portfolio just like QF resources of the same type. The Company's 2017 IRP
138 Update preferred portfolio, to be filed in March 2018, is expected to reflect the results
139 of the wind RFP, either through executed agreements or a portfolio without the 2021
140 Wyoming wind and transmission. The 2017 IRP Update preferred portfolio would be
141 used to determine Schedule 38 rates once it is filed and would form the basis for a filing
142 in April 2018 to update Schedule 37 rates.

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

144 A. Yes.

Rocky Mountain Power
Exhibit RMP___(DJM-1S)
Docket No. 17-035-T07/
17-035-37
Witness: Daniel J. MacNeil

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF UTAH

ROCKY MOUNTAIN POWER

Exhibit Accompanying Surrebuttal Testimony of Daniel J. MacNeil

Rocky Mountain Power Data Request 1 to Utah Clean Energy

November 2017

RMP Data Request 1.

Please provide avoided cost calculations based on Mr. Dragoon's proposed Schedule 37 and 38 methodology(ies) for the 10 MW base load, wind, fixed tilt solar, and tracking solar resources used in the Company's direct filing. Please provide all workpapers and assumptions used in the development of the requests results.

UCE Response to RMP Data Request 1.

In response to the Company's application, Mr. Dragoon's testimony outlines a conceptual framework for how Schedule 38 avoided costs could be calculated when there is a renewable proxy in the IRP. Utah Clean Energy has not proposed a specific pricing method or pricing options, and therefore has not prepared the requested calculations. Mr. Dragoon's testimony did not address Schedule 37.

RMP Data Request 2.

Please explain how Mr. Dragoon's proposed methodology accounts for the following, and provide all workpapers necessary to implement the proposal:

- a. Timing differences between a proposed QF's output and the output of the renewable proxy resource
- b. Locational differences between a proposed QF output and a renewable proxy resource
- c. The aggregate effect of QF resources on the Company's avoided capacity and energy costs.

UCE Response to RMP Data Request 2.

Please see the answer to question 1.

Rocky Mountain Power
Exhibit RMP___(DJM-2S)
Docket No. 17-035-T07/
17-035-37
Witness: Daniel J. MacNeil

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF UTAH

ROCKY MOUNTAIN POWER

Exhibit Accompanying Surrebuttal Testimony of Daniel J. MacNeil

Rocky Mountain Power Data Request 1 to
Renewable Energy Coalition

November 2017

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BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

<p>In the Matter of: Rocky Mountain Power’s Proposed Tariff Revisions to Electric Service Schedule No. 37, Avoided Cost Purchases from Qualifying Facilities</p> <p>In the Matter of Rocky Mountain Power’s 2017 Avoided Cost Input Changes Quarterly Compliance Filing</p>	<p>Docket No. 17-035-T07</p> <p>Docket No. 17-035-37</p> <p>RENEWABLE ENERGY COALITION’S RESPONSES TO ROCKY MOUNTAIN POWER’S FIRST SET OF DATA REQUESTS</p>
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Rocky Mountain Power’s data requests, as provided to the Renewable Energy Coalition (“**REC**” or the “**Coalition**”) on October 17, 2017, are in bold, below, and the Coalition’s responses to each follow.

DATA REQUESTS AND RESPONSES

1. Please provide avoided cost calculations based on Mr. Townsend’s proposed Schedule 37 and 38 methodology(ies) for the 10 MW base load, wind, fixed tilt solar, and tracking solar resources used in the Company’s direct filing. Please provide all workpapers and assumptions used in the development of the requests results.

RESPONSE: Since this case involves the revolves around the method to use for QF pricing (not the prices themselves), Mr. Townsend has not prepared the requested calculations for RMP’s Utah QF cases.

2. Please provide avoided cost calculations based on Mr. Lowe’s proposed Schedule 37 and 38 methodology(ies) for the 10 MW base load, wind, fixed tilt solar, and tracking solar resources used in the Company’s direct filing. Please provide all workpapers and assumptions used in the development of the requests results.

RESPONSE: Since this case involves the revolves around the method to use for QF pricing (not the prices themselves), Mr. Lowe has not prepared the requested calculations for RMP’s Utah QF cases.

CERTIFICATE OF SERVICE

Docket No. 17-035-T07 and 17-035-37

I hereby certify that on November 21, 2017, a true and correct copy of the foregoing was served by electronic mail to the following:

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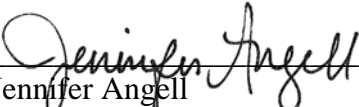
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