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**BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH**

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In the Matter of Rocky Mountain Power's  
Proposed Tariff Revisions to Electric  
Service Schedule No. 37, Avoided Cost  
Purchases from Qualifying Facilities

In the Matter of Rocky Mountain Power's  
2017 Avoided Cost Input Changes  
Quarterly Compliance Filing

Docket No. 17-035-T07

Docket No. 17-035-37

**SURREBUTTAL TESTIMONY OF  
JOHN LOWE**

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The Renewable Energy Coalition, (the “**Coalition**”) hereby submits the attached Surrebuttal Testimony of John Lowe on behalf of the Coalition in this combined docket.

Respectfully submitted this 21<sup>st</sup> day of November, 2017.

**SMITH HARTVIGSEN, PLLC**

/s/ Adam S. Long

Adam S. Long  
*Attorney for Renewable Energy Coalition*

**CERTIFICATE OF SERVICE**

I hereby certify that a true and correct copy of the Surrebuttal Testimony of John Lowe was served on this 21<sup>st</sup> day of November, 2017 upon the following as indicated below:

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**SURREBUTTAL TESTIMONY  
OF  
JOHN LOWE  
FOR  
RENEWABLE ENERGY COALITION**

**November 21, 2017**

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

1 **I. INTRODUCTION**

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

3 **A.** My name is John R. Lowe. I am the director of the Renewable Energy Coalition  
4 (the “**Coalition**”). My business address is PO Box 25576 Portland, Oregon  
5 97298.

6 **Q. Are you the same John R. Lowe who previously provided direct testimony in**  
7 **this case on behalf of the Coalition?**

8 **A.** Yes.

9 **Q. Please summarize your surrebuttal testimony.**

10 **A.** The Coalition responds to some issues discussed in rebuttal testimonies of Daniel  
11 J. MacNeil of Rocky Mountain Power Co. (“**Rocky Mountain Power**” or the  
12 “**Company**”), Abdinasir Abdulle of the Division of Public Utilities (“**DPU**”), Ken  
13 Dragoon of Utah Clean Energy (“**UCE**”), and Cheryl Murray of the Office of  
14 Consumer Services (“**OCS**”). I will explain why offering a renewable avoided  
15 cost rate is not inconsistent with the customer indifference standard under the  
16 Public Utilities Regulatory Policies Act (“**PURPA**”), discuss several assertions  
17 made by Rocky Mountain Power about its avoided cost methodology, discuss the  
18 Coalition’s renewable energy certificate (“**REC**”) ownership proposal, and  
19 explain that the Wyoming wind resource is deferrable because RMP has stated  
20 that it will incrementally reduce the size of its Wyoming projects based on new  
21 QF-related power.

22 Although the Coalition did not make a detailed recommendation earlier  
23 regarding the queue, the Coalition opposed RMP’s approach and remains  
24 concerned over RMP’s presentation of that issue. The Coalition specifically

25 recommends that the Commission adopt a more reasonable approach to the queue,  
26 which does not include all QFs that have requested contracts in the entire QF  
27 queue. Finally, the Coalition supports UCE's recommendations to set a  
28 renewable price floor or include avoided line losses. More specifically, if the  
29 Commission declines to adopt a separate renewable price stream, which UCE  
30 claimed may be a more durable option, then the Commission should consider  
31 setting a renewable price floor. Likewise, the Commission should consider  
32 including avoided line losses where applicable.

33 **Q. Is the Coalition sponsoring any additional surrebuttal testimony?**

34 **A.** Yes. Neal Townsend is presenting testimony addressing ad hoc changes to the  
35 avoided cost methodology made by Rocky Mountain Power that appear to  
36 respond to the Coalition's testimony on the 2021 Wyoming wind resource. As  
37 Mr. Townsend explains, after accounting for the loss of the production tax credits,  
38 avoided costs are higher under Rocky Mountain Power's proposal than when the  
39 deferral of 2021 wind resource is assumed.

40 **II. A SEPARATE RENEWABLE RATE IS NOT INCONSISTENT WITH**  
41 **PURPA'S CUSTOMER INDIFFERENCE STANDARD**

42  
43 **Q. Can you summarize your impression of Mr. MacNeil's testimony on**  
44 **PURPA's customer indifference standard?**

45 **A.** Mr. MacNeil suggests that a separate renewable avoided cost rate would be  
46 inconsistent with PURPA's customer indifference standard, presumably because  
47 Utah does not have a renewable portfolio standard ("RPS") requirement.

48 **Q. Do you agree with Mr. MacNeil?**

49 **A.** No. Although Mr. MacNeil does not directly claim, or explain, why a separate  
50 renewable rate would be inconsistent with PURPA's customer indifference

51 standard, the Federal Energy Regulatory Commission (“FERC”) has been quite  
52 clear on the subject and many states have already implemented PURPA to allow  
53 for both a renewable and nonrenewable avoided cost rate.

54 The Coalition will address this issue in legal briefing in more depth, but it  
55 is my understanding that FERC has consistently allowed states “a wide degree of  
56 latitude” in implementing PURPA and establishing avoided cost prices.<sup>1</sup>  
57 According to FERC, “a state may determine that capacity is being avoided, and so  
58 may rely on the cost of such avoided capacity to determine the avoided cost  
59 rate,”<sup>2</sup> or “a state may, through state action, influence what costs are incurred by  
60 the utility in order to *encourage* renewable generation, and that a state may, in  
61 fact, ‘order utilities to purchase renewable generation.’”<sup>3</sup> FERC has also  
62 emphasized, “while the Commission provided guidance on the concept presented  
63 by the [California Public Utility Commission], states may have other ways of  
64 establishing avoided cost rates that may be consistent with the Commission’s  
65 PURPA regulations.”<sup>4</sup> The Coalition’s recommendation better ensures that  
66 avoided costs are based on Rocky Mountain Power’s avoided capacity costs as  
67 well as accounting for the fact that state actions have encouraged and required  
68 PacifiCorp to acquire renewable resources.

69 **Q. Please comment on Dr. Abdulle’s testimony on PURPA’s customer**  
70 **indifference standard?**

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<sup>1</sup> California Public Utilities Commission, 134 FERC ¶ 61,044 at P.34 (2011) (citing Signal Shasta Energy Co. Inc., 41 FERC ¶ 61,120 at 61,295 (1987)).

<sup>2</sup> Id. at P.32 (citing Order 69, FERC Stats & Regs. ¶ 30, 128, 30,884-85 (1980)).

<sup>3</sup> Id. at n.75 (citing Southern California Edison Co., 71 FERC ¶ 61,269, 62,080 (1995)) (emphasis added).

<sup>4</sup> Id. at P.36.

71 A. Dr. Abdulle seems to suggest that allowing QFs to select between a renewable  
72 and non-renewable rate is inconsistent with the customer indifference standard,  
73 because QFs cannot choose the resource that it helps defer or avoid.

74 **Q. How do you respond?**

75 A. First, Dr. Abdulle is incorrect about the customer indifference standard because  
76 FERC has approved a “menu of pricing options from which QFs could choose.”<sup>5</sup>  
77 Second, Dr. Abdulle appears to misunderstand the Coalition’s proposal. The QF  
78 is not choosing the rate that provides it higher benefits; it is choosing the proxy  
79 resource that best matches its own operating characteristics. For example, hydro  
80 QFs operate more like non-renewable facilities than intermittent renewable  
81 facilities that are most likely the next planned resource acquisition. Thus, due to  
82 the way renewable avoided costs are calculated, a hydro facility would essentially  
83 be penalized if it were paid a renewable rate based upon a planned wind plant.

84 Ultimately, the Coalition’s goal is customer indifference too. There is no  
85 customer indifference, however, if Rocky Mountain Power acquires 1000 MW of  
86 Wyoming wind that could have been deferred with Utah solar facilities.  
87 Customers are harmed if the Company unnecessarily acquires Wyoming wind  
88 when it could have acquired Utah solar from QFs at the same value. Under  
89 Rocky Mountain Power’s proposal, the Company will pay more for utility-owned  
90 Wyoming wind than nonutility-owned Utah solar.

91 From a broader perspective, not having a separate renewable rate would  
92 actually be inconsistent with the customer indifference standard. Rocky  
93 Mountain Power is not planning on acquiring thermal resources for a long period

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<sup>5</sup> Id. at P.34 (citing Signal Shasta at 61,294)

94 of time, but is planning on acquiring renewable resources. Under Rocky  
95 Mountain Power’s approach, customers will be harmed because the Company will  
96 only be acquiring utility-owned renewable projects, but not renewable QF  
97 projects. The only way to achieve customer indifference when there are  
98 significant different planned dates of the next renewable and non-renewable  
99 resource acquisition is to provide renewable QFs an opportunity to be paid a  
100 renewable rate.

101 **Q. Is there anything else about Dr. Abdulle’s testimony on PURPA’s customer**  
102 **indifference standard worth pointing out?**

103 **A.** Yes. In arguing against the Coalition’s proposal to offer a renewable rate, Dr.  
104 Abdulle states, “[t]here should be no gaming in the calculation of avoided costs.”<sup>6</sup>  
105 It strikes me as odd that Dr. Abdulle does not support QFs choosing between a  
106 renewable and nonrenewable rate, but does support Rocky Mountain Power’s  
107 “like-for-like” proposal, which allows the Company to choose which planned  
108 resource each type of QF is allowed to defer. The Company’s IRP date for solar  
109 is not reasonable, especially in light of the Company’s already-issued solar RFP.  
110 Utah solar QFs should be allowed to defer Rocky Mountain Power’s existing  
111 needs.

112 **Q. Is an RPS obligation required to justify a separate renewable avoided cost**  
113 **rate?**

114 **A.** No. FERC has expressly stated that an RPS obligation *can* serve the basis for a  
115 state’s implementation of a renewable rate; but, as described above, but FERC has  
116 never said that an RPS obligation was *required* to offer tiered rates, or a separate  
117 renewable rate. To the contrary, FERC has said that states could use a renewable

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<sup>6</sup> DPU Rebuttal Testimony of Abdulle at 6.

118 rate to encourage renewable generation or more accurately reflect the avoided  
119 resource, which could be a renewable rather than thermal resource. Given the  
120 latitude provided by FERC to states to implement PUPRA, Utah’s renewable  
121 portfolio goal provides an adequate basis for a renewable rate. In addition, the  
122 fact that Rocky Mountain Power is in the process of acquiring renewable (wind  
123 and solar) but not thermal resources is an adequate basis by itself to create  
124 renewable rate.

125 **Q. Please respond to Mr. MacNeil’s testimony regarding the REC Ownership?**

126 **A.** Mr. MacNeil appears to miss the Coalition’s point. When Rocky Mountain  
127 Power plans to build a renewable resource, which has environmental attributes,  
128 then QFs should sell their renewable power and RECs to the Company—if they  
129 are being paid based on the costs of the renewable resource. If QFs are being paid  
130 based on the costs of a thermal resource, then they should keep their RECs. The  
131 Coalition’s proposal is consistent with Rocky Mountain Power’s like-for-like  
132 approach in which a renewable QF is paid based on the costs of “like” renewable  
133 resources and transfers over the RECs. The only substantive difference is that the  
134 Coalition is expanding this proposal to allow any renewable resource to defer (and  
135 be compensated for) Rocky Mountain Power’s next renewable resource  
136 acquisition.

137 **Q. Finally, do you agree with Mr. MacNeil that if avoided costs are too low they**  
138 **violate the customer indifference standard?**

139 **A.** Yes. I am glad to see the Company acknowledge that the ratepayer indifference  
140 standard means that Rocky Mountain Power should not pay less for renewable

141 resources than it would otherwise incur.<sup>7</sup> This raises another issue: if the  
142 Commission declines to adopt a separate renewable rate, it must include cost-  
143 effective renewable resource acquisition in the Company's avoided cost pricing in  
144 order to ensure the customer indifference standard is met. Ignoring certain cost-  
145 effective renewable resource acquisitions would result in avoided costs that are  
146 not based on the Company's plans, which makes them both too low and  
147 inconsistent with PURPA.

148 **III. ROCKY MOUNTAIN POWER'S AVOIDED COST METHODOLOGY**

149  
150 **Q. How do you respond to Mr. MacNeil claims that unacknowledged data is not**  
151 **used in the calculation of avoided cost prices?**

152 **A.** Although Mr. MacNeil is correct that parties have the opportunity to review  
153 quarterly updates to its pricing or submit data requests, that does not change the  
154 fact that the Company is effectively using a black box to calculate its avoided cost  
155 rates and making ad hoc changes with near impunity.

156 **Q. What do you make of Dr. Abdulle's claim that it might be premature to**  
157 **include Wyoming wind resource, because it is not approved?**

158 **A.** This speaks to the issue above, and—like PURPA's customer indifference  
159 standard—should cut both ways. In Utah, Rocky Mountain Power's Schedule 38  
160 avoided cost rates include unacknowledged IRP inputs and assumptions. If the  
161 basis for Rocky Mountain Power's avoided cost prices is its next planned  
162 acquisition (from its not yet approved IRP), then as soon as it has a new IRP it is  
163 not premature to include those resources in the next avoided cost pricing. The  
164 Company's avoided cost prices must accurately reflect its incremental costs. And

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<sup>7</sup> Rebuttal Testimony of Daniel J. MacNeil at 10.

165 if some unacknowledged information is included in the avoided cost calculation,  
166 then all of the relevant acknowledged information should be included. The  
167 Company should not be allowed to “cherry pick” inputs to lower its costs.

168 **Q. How do you respond to Mr. MacNeil suggestion that a QF’s operational**  
169 **characteristics must perfectly align with the proxy resource to maintain the**  
170 **least cost, least risk characteristics of the preferred portfolio?**

171 **A.** This is inconsistent with PURPA and decades of avoided cost principles from  
172 FERC. The avoided cost is not supposed to replicate all aspects of the  
173 Company’s preferred portfolio. Utilities consider myriad benefits and risks,  
174 including cost, in their long term planning. The avoided cost only looks to the  
175 preferred portfolio to establish the utilities’ incremental costs, not the rest of it.  
176 Attempting to add a more nuanced evaluation, i.e. capture cost and risk benefits in  
177 the avoided cost, is unnecessarily burdensome. As Mr. Dragoon succinctly states,  
178 resources with different characteristics need not be a barrier to setting avoided  
179 cost rates.<sup>8</sup>

180 **Q. Is there anything else about Mr. MacNeil’s operational characteristics**  
181 **testimony you would like to comment on?**

182 **A.** Yes. Mr. MacNeil’s opposition to a renewable cost floor proposal seems  
183 inconsistent with the Company’s rationale for its like-for-like proposal. For  
184 example, Mr. MacNeil rejects UCE’s proposal as “needlessly complicated” and  
185 suggests that avoided costs should not be based on a thermal resource and then  
186 adjusted consistent with the IRP resource. Mr. MacNeil’s rationale, however,  
187 appears to be based upon the fact that those adjustments would not perfectly  
188 match the “geographic location and resource operating parameters [as] captured

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<sup>8</sup> Rebuttal Testimony of Ken Dragoon at 5.

189 through a resource’s inclusion in the GRID model and its impacts on the  
190 Company’s operations.”<sup>9</sup> In my view, this underscores the distinction I make  
191 below between “precise” and “accurate” avoided cost prices. Rocky Mountain  
192 Power’s modeling may be needlessly complicated, but it has selected this  
193 modeling, and that should not prohibit the Company from finding a reasonable  
194 configuration that calculates reasonable rates.

195 **Q. Can you comment on Mr. MacNeil’s comparisons between Rocky Mountain**  
196 **Power’s avoided cost rate and the pricing it expects to receive in its**  
197 **upcoming RFP?**

198 **A.** Yes. FERC defines avoided costs as “the incremental costs to an electric utility of  
199 electric energy or capacity or both, which but for the purchase from the qualifying  
200 facility ..., such utility would generate itself or purchase from another source.”<sup>10</sup>  
201 This means that Rocky Mountain Power’s incremental costs, and not market costs  
202 or competitive bid prices (especially those without executed contracts and built  
203 projects)<sup>11</sup>—which in some situations could be below market costs—are relevant  
204 when setting avoided cost rates. Contrary to Mr. MacNeil’s testimony, the  
205 customer indifference standard only dictates that the Company pays QFs no  
206 higher than its own incremental costs.<sup>12</sup>

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<sup>9</sup> Rebuttal Testimony of Daniel J. MacNeil at 17.

<sup>10</sup> 18 CFR 292.101(b).

<sup>11</sup> For example, PGE selected a utility owned gas fired “Carty” generation project through a competitive bidding process, which is almost \$150 million over budget. This would not have occurred if the utility had entered into a power purchase agreement with an independent power producer, like a QF. See Re PGE’s Application for Deferral of Incremental Revenue Requirement Associated with the Carty Generating Station and Delay of Commission Review of PGE’s Application until Legal Actions are Resolved, Docket No. UM 1791, PGE Application at 2 (July 29, 2016).

<sup>12</sup> Rebuttal Testimony of Daniel J. MacNeil at 11 (“To the extent substantial opportunities exist to acquire renewable resources at costs lower than those

207 **Q. What do you make of Mr. MacNeil’s assertion that QFs are replacing higher**  
208 **cost existing resources rather than new resources?**

209 **A.** Rocky Mountain Power’s current avoided cost rate is set at the Company’s  
210 incremental costs. But, avoided cost is not set in real time. Once accepted by the  
211 Commission, they are determined reasonable until the utility makes an updated  
212 filing. When energy prices fall, avoided cost prices fall too. When energy prices  
213 rise, so do avoided cost prices. This does not mean they are inherently incorrect  
214 or unreasonable.

215 If anything, Mr. MacNeil seems to confirm that Rocky Mountain Power’s  
216 existing resource fleet is no longer economical, and that the Company should  
217 fully consider economic shut downs to take advantage of current market  
218 conditions. In other words, if QFs are replacing higher cost existing resources,  
219 then that is appropriate and results in savings to ratepayers.

220 **Q. Finally, Mr. MacNeil states that the Coalition has not offered any evidence**  
221 **that a proxy is more accurate. How do you respond?**

222 **A.** First, Rocky Mountain Power has not provided any evidence that the proxy price  
223 is not reasonable. Mr. MacNeil argues that deferring “like-for-like” resources  
224 using the specific rules described in Rocky Mountain Power’s rebuttal testimony  
225 produces the most accurate avoided costs by maintaining a reasonable balance of  
226 cost and risk consistent with the IRP preferred portfolio which represents least  
227 cost/least risk outcome among available alternatives. Each resource selected in  
228 the portfolio was selected based on its specific operating characteristics.  
229 Proxy/PDDRR method cannot be adjusted for operational and risk characteristics,

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identified in the 2017 IRP preferred portfolio, the customer indifference standard would dictate that the Company seek competitive bids to acquire the lowest cost opportunities, as it is currently in the process of doing.”).

230 only capacity contributions. Thus, it is appropriate to align the operational and  
231 risk characteristics of the QFs with the resources being deferred to maintain  
232 equivalence with the preferred portfolio to maintain the customer indifference  
233 standard.

234 It is also important to distinguish between “accurate” and “precise”  
235 avoided cost calculations. As I stated in my direct testimony, Rocky Mountain  
236 Power’s proposal may be more precise, and based on complex computer models,  
237 but that does not mean that they are more accurate overall. Rocky Mountain  
238 Power’s configuration of the PDDRR method is not more accurate because it fails  
239 to produce accurate avoided cost rates for all resource types. The simpler proxy  
240 method is easily configured to ensure accurate avoided cost rates for all resource  
241 types.

242 Even Rocky Mountain Power has argued that its PDDRR methodology  
243 cannot accurately calculate capacity contributions for different types of  
244 resources.<sup>13</sup> This appears to be why Rocky Mountain Power believes a “like-for-  
245 like” limitation is necessary. Although the Coalition disagrees, and believes that  
246 the PDDRR methodology can be used for all types of resources, the complexity of  
247 the modeling configuration—along with fundamental differences in points of  
248 view about what should or should not be included in the Company’s avoided  
249 costs—suggests that Rocky Mountain Power’s precise modeling is unlikely to  
250 actually return accurate results.

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<sup>13</sup> As explained in the testimony of Neal Townsend on behalf of the Coalition, the Coalition disagrees that the Company’s computer models are unable to accurately calculate renewable avoided cost rates.

251 **IV. THE WYOMING WIND RESOURCE IS DEFERRABLE**

252 **Q. What do you make of Dr. Abdulle's claim that the Wyoming wind resource**  
253 **would be deferrable if it were demonstrated that the Company would**  
254 **incrementally reduce the size of its Wyoming projects as new QF-related**  
255 **power comes on line?**

256 **A.** It appears that DPU agrees with the Coalition that the Wyoming wind resource is  
257 deferrable, because the Company has already acknowledged it plans to reduce the  
258 size of its Wyoming projects to account for newly-executed QF contracts.<sup>14</sup>

259 **Q. Dr. Abdulle also concludes that if the Wyoming resource is deferrable, then**  
260 **the Wyoming transmission should be included too, right?**

261 **A.** Yes. The Coalition reads DPU's testimony as confirming that the Wyoming wind  
262 resource, along with the associated transmission, should be included in Rocky  
263 Mountain Power's avoided costs.

264 **Q. Can you please summarize OCS's position on the Wyoming wind resource?**

265 **A.** Yes. OCS takes no position on whether the Wyoming wind resource should be  
266 included in Rocky Mountain Power's avoided costs, but does suggest that if it is  
267 included that it be immediately removed if the Commission denies  
268 acknowledgement.

269 **Q. How do you respond?**

270 **A.** First, although OCS officially takes no position, it seems that OCS implicitly  
271 suggests that the Wyoming wind resource should be included. Second, because  
272 the Company includes resources in their avoided cost prices that the Company is

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<sup>14</sup> **Exhibit A** (Response to REC Data Request 1.25 in Wyoming Schedule 37 Proceeding, WY 20000-518-EA-17).

273 planning to acquire, it may not be appropriate to remove certain resources until  
274 the Company indicates it is not planning to acquire them. For example, if the  
275 Company decides not to pursue the Wyoming wind resource, because it is not  
276 acknowledged or otherwise, it should make a new, updated Schedule 37 filing.

277 **V. ROCKY MOUNTAIN POWER'S QF QUEUE**

278 **Q. How do you respond to Rocky Mountain Power's impact graphs regarding**  
279 **the queue issue?**

280 **A.** The Coalition does not agree that it is necessary, but would not oppose some  
281 accounting for the fact that the Company will likely acquire additional QF  
282 resources during the Schedule 37 effective period, which the queue placement  
283 attempts to do. But, including all of the QFs that have requested power purchase  
284 agreements artificially lowers avoided cost prices and is not reasonable.

285 **Q. What would the Coalition recommend instead?**

286 **A.** A more reasonable position would be to use the historic percentage of QFs that  
287 are constructed as compared to the entire queue, or certain completion milestones  
288 that show a proposed project is likely to be constructed—like completing the  
289 interconnection study process or executed contracts.

290 **VI. CONCLUSION**

291 **Q. Does this conclude your testimony?**

292 **A.** Yes