

1 **Q. Please state your name, business address, and present position with**  
2 **PacifiCorp dba Rocky Mountain Power (“the Company”).**

3 A. My name is Stefan A. Bird. My business address is 825 NE Multnomah Street,  
4 Suite 600, Portland, Oregon 97232. I am Senior Vice President, Commercial and  
5 Trading, for PacifiCorp Energy, a division of PacifiCorp.

6 **Q. Please describe your education and business background.**

7 A. I hold a B.S. in mechanical engineering from Kansas State University. I joined  
8 PacifiCorp Energy and assumed my current position in January 2007. From 2003  
9 to 2006, I served as president of CalEnergy Generation U.S., an owner and  
10 operator of Qualifying Facility and merchant generation assets, including  
11 geothermal and natural gas-fired cogeneration projects across the United States.  
12 From 1999 to 2003, I was vice president of acquisitions and development for  
13 MidAmerican Energy Holdings Company (“MEHC”). From 1989 to 1997, I held  
14 various positions at Koch Industries, Inc., including energy marketing, financial  
15 services, corporate acquisitions, project engineering and maintenance planning in  
16 the Americas and Europe.

17 In my current position I oversee the Company’s Commercial and Trading  
18 organization which is responsible for dispatch of the Company’s owned and  
19 contracted generation resources, procurement of new generation resources, and  
20 natural gas and electricity wholesale purchases and sales to balance the  
21 Company’s load and resources. I am also responsible for PacifiCorp’s load and  
22 revenue forecast, integrated resource plan (“IRP”) and net power costs modeling.  
23 Most relevant to this testimony, I oversee PacifiCorp’s renewable energy credit

24 (“REC” or “RECs”) portfolio, including sale of RECs in excess of compliance  
25 requirements.

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

27 A. My testimony addresses the level of revenue in this case related to the sale of  
28 RECs. First, I support and provide the basis for the REC revenue forecast of \$42.2  
29 million or \$25.0 million on a Utah basis for the test period in this case, the 12  
30 months ending May 2013 (“the Test Period”). Second, I explain why the REC  
31 revenue in the Test Period is lower than both the actual revenue booked in the  
32 base period, the 12 months ended June 2011, and the amount of REC revenue  
33 currently in base rates established in Docket No. 10-035-124 (the “2011 GRC” ).  
34 Finally, I explain the current REC market, and provide additional insights into the  
35 expectations for future REC sales.

36 **Test Period REC Revenue**

37 **Q. How much revenue from the sale of RECs is included in the Test Period?**

38 A. The Test Period includes \$42.2 million of REC revenue on a total Company basis,  
39 or \$25.0 million on a Utah-allocated basis. My testimony provides support for the  
40 total Company level of REC sales, and Company witness Mr. Steven R.  
41 McDougal provides details of the allocation of total Company REC revenue to  
42 Utah.

43 **Q. How did the Company calculate the forecast REC revenue in the Test  
44 Period?**

45 A. The Company has included expected REC revenue from three executed  
46 Agreements that are in place at the time this case is filed (“Existing Contracts”)

47 plus additional revenue at projected volumes and forecasted market prices for  
48 RECs. To determine the volume of RECs available for sale in the Test Period  
49 above and beyond the Existing Contracts the Company considered the wind  
50 resource generation output during the Test Period, net of amounts banked to  
51 satisfy renewable portfolio standards in California, Oregon and Washington  
52 (“RPS Banking Requirements”). After accounting for RPS Banking  
53 Requirements, the Company’s policy is to make available for sale ■ percent of  
54 the forecast RECs generated during a given year, with ■ percent available for  
55 sale in the subsequent year (“Vintage RECs”).<sup>1</sup> In this case the total marketable  
56 wind RECs projected in the Test Period is ■ (‘‘Total Projected  
57 RECs’’). The sales from Existing Contracts were then subtracted from the  
58 projected RECs to determine the remaining marketable REC volume in the Test  
59 Period.

60 For purposes of this case, due to the lack of market opportunities that I  
61 describe later in my testimony, the Company has capped the volume of additional  
62 projected REC sales at ■ per annum in 2012 and ■ per  
63 annum in 2013 (“Market REC Cap”). These projected sales are assumed to be  
64 made at an average forecast price of ■ per MWh. Prorating the annual Market  
65 REC Cap for the Test Period results in a total of ■ sold during the  
66 Test Period in addition to the Existing Contracts.<sup>2</sup> See Confidential Exhibit

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<sup>1</sup> Due to the application of the Market REC Cap to projected sales the Company has not included additional revenue from forecast Vintage RECs sales that could be made during the Test Period.

<sup>2</sup> ■

67 RMP\_\_\_(SAB-1) for a summary of total Test Period REC sales, including the  
68 Existing Contracts and additional forecast sales.

69 **Q. Has the Company changed the REC revenue forecast methodology from that  
70 used in the 2011 GRC, which set the level of REC revenue that is currently in  
71 base rates?**

72 A. The Company's REC revenue forecast methodology is consistent with what was  
73 used in the 2011 GRC with the exception of imposing the Market REC Cap. The  
74 Company assumes that all of the projected marketable RECs in the Test Period  
75 are available to be sold; however, for the purpose of forecasting REC revenues for  
76 the Test Period the Company applied the Market REC Cap.

77 **Q. Why did you impose the Market REC Cap to the Test Period REC sales  
78 volumes?**

79 A. The Market REC Cap was imposed to recognize the limited market opportunities  
80 for REC sales that the Company experienced in 2011, and that the Company  
81 expects will continue through May 2013. The REC market is currently illiquid  
82 and not transparent. The cause of the limited market opportunities is twofold.  
83 First, there has been an overall increase to the supply of renewable projects and  
84 long term power purchase agreements that can provide REC products. Second, the  
85 new requirements and product definitions adopted under the recent Renewable  
86 Portfolio Standard ("RPS") decision in California for products that are more  
87 desirable to purchasers has limited the Company's to sell RECs in the California  
88 market.

89 **Q. What was the REC volume that the Company sold in 2011 above the volumes**  
90 **associated with the Existing Contracts?**

91 A. In 2011 the total REC MWh sold above the Existing Contracts was [REDACTED]  
92 MWh. See Confidential Exhibit RMP\_\_\_(SAB-2).

93 **Q. How did the Company determine the level of megawatts associated with the**  
94 **Market REC Cap in 2012 and 2013?**

95 A. The size of the Market REC Cap is based on the Company's experience  
96 marketing and selling RECs. Prior to the recent unique opportunities generated by  
97 the Company in California and Nevada in 2009 and 2010, the Company's REC  
98 sales volumes ranged from 132,965 MWh in 2005 to 918,822 MWh in 2008. See  
99 Exhibit RMP\_\_\_(SAB-3). The unique opportunities that existed at the end of  
100 2009 through the beginning of 2011 have now been eliminated. The forecast  
101 Market REC Cap in 2012 and 2013 is calculated using the level of megawatts sold  
102 in the past, prior to the unique opportunities.

103 **Q. Why is the Market REC Cap forecasted in calendar 2012 [REDACTED] than in**  
104 **2013?**

105 A. The Market REC Cap in 2012 is forecasted to be [REDACTED] than 2012 because the  
106 Company has additional time to potentially transact in the 2013 REC market.

107 **Q. If an opportunity arose that pushed sales over the Market REC Cap would**  
108 **the Company sell its marketable RECs?**

109 A. Yes. The Company would sell RECs available for sale after RPS Banking  
110 Requirements consistent with its policy on forward REC sales; however, based on

111 current experience the Company is unlikely to be able to sell the projected RECs  
112 in the Test Period above the Market REC Caps.

113 **Q. If an additional sale was made over the Market REC Cap would customers**  
114 **still receive credit for the additional REC revenues not included in the Test**  
115 **Period in this case?**

116 A. Yes. The Commission established a REC Balancing Account (“RBA”) in Docket  
117 No. 10-035-124 which provides for a symmetrical, dollar-for-dollar true-up of  
118 REC revenue in base rates to actual REC revenue booked for the same time  
119 period. This ensures Utah customers are made whole should any additional REC  
120 sales materialize.

121 **2011 GRC Revenue vs. Test Period Revenues**

122 **Q. How does the recent change in the REC market climate impact the difference**  
123 **between the current base level of REC revenues from the 2011 GRC and the**  
124 **amount projected for the Test Period?**

125 A. As established in Docket No. 10-035-124, REC revenue in the 2011 GRC was  
126 \$86.1 million on a system-wide basis or \$50.9 million on a Utah-allocated basis.  
127 By comparison, the revenue forecast for the Test Period in this case is \$42.2  
128 million on a system-wide basis and \$25 million on a Utah-allocated basis.

129 **Q. What are the main drivers that reduce the REC revenue from the base**  
130 **amount in the RBA set in the 2011 GRC to the Test Period?**

131 A. There are two primary drivers. First, the [REDACTED] structured, [REDACTED], bundled  
132 Existing Contracts expire December 31, 2012, and there are [REDACTED],  
133 [REDACTED] contracts in 2013. Second, due to the lack of market opportunity

134 described below, there is no market for additional structured, bundled  
135 transactions, and there are limited opportunities for even simple unbundled REC  
136 transactions.

137 **Q. How much of the Test Period revenue is attributable to the Existing**  
138 **Contracts that will expire December 31, 2012?**

139 A. Approximately [REDACTED] million of the \$42.2 million of REC revenue forecast in the  
140 Test Period is from the [REDACTED] Existing Contracts. The remainder is from the  
141 projected sales of RECs at [REDACTED] per MWh. See Confidential Exhibit RMP\_\_\_(SAB-  
142 1).

143 **Q. Has the Company sold any RECs on a forward basis other than the three**  
144 **Existing Contracts in the Test Period?**

145 A. No.

146 **Q. Is the price assumed for unspecified projected sales in the Test Period the**  
147 **same as what was assumed in the 2011 GRC?**

148 A. Yes. The price for unspecified RECs sold in addition to the Existing Contracts is  
149 forecast to be [REDACTED] per MWh. This is consistent with the price assumption used to  
150 develop the REC revenue forecast in the 2011 GRC. However, as discussed  
151 below, this assumption is [REDACTED].

152 **Q. What is the Company's basis for the [REDACTED] price per MWh associated with the**  
153 **forecast Market REC Cap megawatts in 2012 and 2013?**

154 A. The Company has been tracking its activity on both the pricing available for sales  
155 of RECs in the market and the prices associated with the Company REC  
156 purchases executed under the Blue Sky program. During 2011, the Company

157 participated in several requests for proposals from the market, issued a reverse  
158 request for proposal to the market and completed [REDACTED] bilateral transactions, as  
159 described in the attached Confidential Exhibit RMP\_\_\_(SAB-4).

160 **Q. Please explain the range of pricing in the seven transactions the Company**  
161 **executed and explain the differences in those transactions compared to what**  
162 **is available in 2012 and 2013.**

163 A. The Company executed [REDACTED] structured transaction [REDACTED] which is one of  
164 the three Existing Contracts included in this Test Period. The [REDACTED] additional  
165 contracts executed in 2011 are [REDACTED] REC transactions. Throughout the year,  
166 the value of RECs continued to [REDACTED]. The Company's last REC transaction in  
167 [REDACTED] was executed at [REDACTED] per MWh for 2011 RECs. Confidential  
168 Exhibit RMP\_\_\_(SAB-5). The Company continues to work with the broker  
169 market and is issuing request for proposals for the sale of RECs; however, there  
170 has been no interest to date. The Company will continue to issue request for  
171 proposals on a rolling monthly basis for the sale of RECs throughout 2012 in  
172 addition to working on a bilateral basis and with the broker market.

173 **Q. What was the response to the Company's reverse request for proposal?**

174 A. Although the reverse request for proposal was posted on the Company's website  
175 and also emailed directly to [REDACTED] potentially interested parties, the Company  
176 received [REDACTED] responses. [REDACTED]

177 [REDACTED]

178 [REDACTED]



179

[REDACTED]

180

[REDACTED].

181

**Q. What was the average price for the RECs sold in 2011 above the Existing Contracts?**

183

A. The average price for the RECs sold in 2011 above the Existing Contracts was [REDACTED] MWh. Confidential Exhibit RMP\_\_\_\_(SAB-2).

185

**Q. Did the prices decrease throughout the calendar 2011?**

186

A. Yes, prices for RECs went from [REDACTED] per REC in March 2011 to [REDACTED] per REC in December 2011. Confidential Exhibits RMP\_\_\_\_(SAB-2), RMP\_\_\_\_(SAB-4) and RMP\_\_\_\_(SAB-5).

189

**Q. What were the volumes and prices of the RECs that the Company purchased to meet the requirements under the Blue Sky program?**

191

A. The Company purchased [REDACTED] MWh of RECs for the Blue Sky program in 2011 for an average price of [REDACTED] per MWh. Confidential Exhibit RMP\_\_\_\_(SAB-4).

194

**Q. Has the Company pursued either an extension to the executed transaction with NV Energy or a new transaction?**

196

A. Yes, however NV Energy has met its RPS compliance requirements through 2015. See Exhibit RMP\_\_\_\_(SAB-6) page 26.

198

**Q. Did the Company respond to the three California investor-owned utilities' request for proposals?**

200

A. Yes.

201 **Q. Was the Company successful in any of the proposals it submitted?**

202 A. No. The Company was provisionally shortlisted under the Pacific Gas and  
203 Electric request for proposals, contingent on California regulatory approval of  
204 certain matters respecting the 33 percent RPS requirement, for an unbundled REC  
205 transaction with a range of ■ per MWh to ■ per MWh in 2011 through 2015.  
206 However, the Company was subsequently informed that PG&E no longer needed  
207 the unbundled RECs.

208 **Q. Please explain why the REC market in California is limited.**

209 A. Before California amended its RPS law in 2011, the Company's renewable  
210 resources qualified for use by compliance entities without discrimination by the  
211 California Energy Commission's "firming and shaping" delivery standard. This is  
212 no longer the case. The new RPS eliminates that standard, and breaks compliance  
213 products down into a premium product ("Bucket One"), a lesser product, called  
214 "firming and shaping" ("Bucket Two"), and a RECs-only product ("Bucket  
215 Three"). Bucket One is the only desired product and it requires real-time, hourly  
216 scheduling of resources into a California balancing authority, which the Company  
217 is unable to supply since the Company's resources are not located in California.  
218 The Company's balancing area territory in California is specifically not a  
219 qualifying balancing authority. The amendments to the RPS favor in-state  
220 resources over out-of-state resources by granting privileges, such as bankability,  
221 to Bucket One products that are not granted to other products.

222 Further limiting the California market are the three tiered compliance  
223 periods related to the California RPS requirements. The first compliance period is

224 2011-2013 where at least 50 percent of renewable generation must be from  
225 Bucket One for the period, rising to 65 percent in the second compliance period  
226 between 2014-2016, and rising to 75 percent by the third compliance period  
227 between 2017-2020. Up to 25 percent of procurement targets can be satisfied with  
228 unbundled RECs in 2011-2013 decreasing to 15 percent in 2014-2016, and 10  
229 percent in 2017-2020. The out-of-state energy imported into California that is  
230 firmed and shaped can account for the remainder of a utility's RPS obligations in  
231 each compliance period. Currently the investor-owned utilities in California have  
232 indicated that they have satisfied their ability to purchase from other product  
233 categories during the first and second compliance periods.

234 **Q. Is the Company pursuing additional opportunities to sell RECs despite these**  
235 **limitations?**

236 A. Yes. The Company has responded to a request for proposals from [REDACTED]  
237 [REDACTED] in California at prices ranging from [REDACTED] per MWh for the  
238 first compliance period. This proposal is currently outstanding. [REDACTED]  
239 [REDACTED] is expected to make a decision in [REDACTED]. In addition, the Company has  
240 pursued opportunities with counterparties in Arizona and Nevada, but with no  
241 success to date.

242 **Q. What do you conclude regarding the Company's forecast of REC revenues**  
243 **during the Test Period?**

244 A. The Company's forecast of amounts in addition to the Existing Contracts is  
245 [REDACTED]  
246 [REDACTED].

247 **Q. Is there an existing mechanism in Utah that allows the Company to true up**  
248 **the forecast REC revenues in the Test Period to actual REC revenues**  
249 **realized?**

250 A. Yes. As I mentioned earlier, variances between actual REC revenues realized and  
251 forecast REC revenues set in this case will be symmetrically trued up, with  
252 interest, in the RBA.

253 **Q. Given the RBA, do the Company and its customers have a common objective**  
254 **in forecasting REC revenues during the Test Period?**

255 A. Yes. The Company and its customers have a common objective of attempting to  
256 keep the balance in the RBA as low as possible. Customers would not be well  
257 served by forecasting an unreasonably high level of REC revenues during the Test  
258 Period and then being required to make up the shortfall with interest in the future  
259 through the RBA.

260 **Q. Does this conclude your direct testimony?**

261 A. Yes.