

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Application)
of PacifiCorp for Approval)
of an IRP Based Avoided Cost) Docket No. 03-035-14
Methodology for QF Projects)
Larger than 1 MW)
)

REBUTTAL TESTIMONY OF BRUCE W. GRISWOLD

September 2005

1 **Q. Are you the same Bruce W. Griswold that filed direct testimony in this case?**

2 A. Yes I am.

3 **Purpose of Testimony**

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

5 A. I will be responding to a number of comments made by parties in their direct
6 testimony in this Docket including: energy prices for a QF that has the option but not
7 the obligation to deliver power to PacifiCorp; the treatment of Renewable Energy
8 Credits known as “REC” or “Green Tags”; avoided cost adjustments for wind QF
9 projects; and other miscellaneous comments related to the QF contract negotiation
10 process.

11 **Energy pricing for a QF with a put option**

12 **Q. Several of the Intervenors in this Docket have proposed pricing methodologies**
13 **different from the Company’s DRR methodology for periods when the QF has**
14 **the unilateral right to decide when PacifiCorp will purchase their power (a**
15 **“put”). Does PacifiCorp agree with or support these Intervenors’ position?**

16 A. No. It is interesting that this is becoming a major issue in this docket. Let’s first
17 understand what a “put” means. A put in this circumstance represents the QF’s
18 option, but not obligation, to deliver power to PacifiCorp in those hours in which
19 PacifiCorp has not scheduled or dispatched the QF to deliver its net dependable
20 capacity to PacifiCorp. For example, if PacifiCorp scheduled deliveries for on-peak
21 hours, the QF would have the option to continue delivering power to PacifiCorp in all
22 other hours. Thus, the QF would have the option but not the obligation to deliver any
23 amount up to its contractual limits in any hour. Several current QF agreements are

24 structured in this manner including Tesoro, US Magnesium, and Kennecott. These
25 QF contracts are all “put” options under the Stipulation. Such a put means that the
26 QF has no contractually imposed obligation whereas PacifiCorp still has the
27 obligation to accept the energy in any amount in any hour. Thus, the QF can
28 maximize its own revenue stream to the detriment of PacifiCorp and its ratepayers.

29 **Q. What is PacifiCorp’s position on energy pricing for a QF that has a put to**
30 **PacifiCorp?**

31 A. The Company believes the DRR methodology as presented by Mr. Duvall clearly
32 outlines the pricing methodology for the avoided energy cost when a QF resource has
33 a “put” option to PacifiCorp.

34 **Q. Can the DRR methodology calculate the avoided energy cost for a QF that has a**
35 **“put” to PacifiCorp?**

36 A. Yes, as Mr. Duvall points out in his direct and rebuttal testimony, the DRR
37 methodology takes into account the specific operating characteristics of the QF to
38 arrive at an annual \$ per MWh avoided energy cost for the specific QF.

39 **Q. Why is a market index based price inappropriate for a QF with a put option?**

40 A. It is inappropriate because it results in customers overpaying for QF power in certain
41 time periods. While a number of the intervening parties have pointed to paying the
42 QF some percent of a market index¹, this concept is not appropriate because the DRR
43 methodology is clearly capable of determining the energy price paid to a QF based on
44 its specific operating characteristics including those hours of redispatch (*i.e.*, backing

¹ Direct Testimony of Scott Gutting, page 16, lines 13-22 and page 17, lines 1-16.
Direct Testimony of Roger Swenson for US Magnesium, page 11, lines 17-19.

45 down of PacifiCorp's low cost coal plants when the QF is delivering energy to the
46 Company in hours it does not need the power and/or cannot move the QF power to
47 wholesale markets for sale).

48 The intervenors' logic on using a market index based price for QF energy is
49 flawed. Regardless of what percentage of market is being paid, if it is higher than the
50 Company's own resource being backed down or there is no market to sell into in that
51 hour, that incrementally higher cost will be borne by ratepayers and violate the
52 ratepayer indifference standard.

53 Finally, while it is true that the QF projects under the Stipulation used market
54 index based prices for payment to the QF for energy delivered in non-scheduled or
55 dispatched hours, the use of index based pricing was on an interim basis while a
56 methodology was developed that could calculate energy only pricing for non-firm QF
57 projects. The Company's proposed DRR methodology accounts for the expected
58 redispatch in its pricing methodology and thus, better reflects the Company's avoided
59 costs for QF power put to the utility.

60 **Renewable QF price adjustments and Renewable Energy Credits**

61 **Q. Do you agree with Mr. Swenson's statement that the QF pricing methodology for**
62 **wind should be benchmarked to the prices paid for the latest wind contract**
63 **through its 2003B RFP?**

64 A. No, for several reasons. The most important reason is that it does not reflect the
65 Company's avoided costs. This initial RFP occurred under unique circumstances
66 including among others, a limited period in which the wind developer could secure
67 production tax credits ("PTCs") and a rapidly changing market, in both price and

68 availability, of wind turbines. The 2003B RFP was the Company's first experiment in
69 acquiring economic renewable resources through a market-based RFP and we were
70 not successful in meeting our initial goal of 100MW. Based on this initial
71 experiment, the results from the entirely market-based RFP did not provide
72 PacifiCorp the ability to fully meet its goal of economically procuring 100MW in
73 2005. Because of the unique circumstances that are influencing the RFP results, the
74 Company does not believe that resources from the RFP should be considered
75 representative of what wind project costs will be over the long term or that the results
76 of RFP 2003B should be considered, due to the circumstances cited above, deemed to
77 be representative of the Company's Utah avoided cost.

78 Second, it is inappropriate to segregate avoided resources by fuel type (*i.e.*,
79 there is no wind avoided resource or geothermal avoided resource). The avoided cost
80 paid to a wind QF should not be based on avoiding another wind resource, but on
81 avoiding the Company's next proposed resource as identified in its IRP.

82 Finally, there are also other important differences in the initial 2003B RFP
83 results. For example, resources in the RFP provide RECs to the Company. In
84 contrast, as noted below, the other parties to this case have proposed that QFs keep
85 their RECs.

86 **Q. Has the Company changed its position on Renewable Energy Credits ("RECs")**
87 **or Green Tags from its direct testimony?**

88 A. No. However, we do want to clarify our position. The intervenors in this Docket
89 have all stated their position on RECs. It has been made clear by all the intervening
90 parties that they believe that the RECs should not belong to PacifiCorp's customers.

91 Under such an interpretation, the RECs would not transfer to the Company, for the
92 benefit of customers, with the purchase of capacity and/or energy from a QF. From
93 the Company's perspective, RECs are the non-energy attribute that defines the energy
94 from a generating source, such as wind, as being renewable. If intervenors' proposals
95 are adopted the Commission should understand two important consequences.

96 First, if the RECs do not accompany the capacity and/or energy delivered to
97 PacifiCorp through a QF power purchase agreement as proposed by the intervenors
98 then the capacity and/or energy cannot be considered renewable energy in the
99 Company's system. Instead, the Company will deem the renewable QF capacity
100 and/or energy as "generic" capacity and/or energy. This also means that in the event
101 that Utah passes a Renewable Portfolio Standard ("RPS") or a Federal RPS applies,
102 the Company will not be able to consider purchases from renewable QF projects
103 toward the RPS or in any reporting.

104 If the Company is not receiving the RECs in paying avoided costs to QFs, the
105 Company's position going forward is that without a mechanism for regulatory
106 recovery of the costs for RECs purchased from renewable QFs, PacifiCorp will treat
107 the renewable QF as a generic QF purchase of capacity and/or energy only with no
108 obligation or requirement to purchase the RECs.

109 **Q. Some Intervenors have expressed the opinion that, in the case of a wind QF and**
110 **even without the REC, the Company would still be purchasing energy from a**
111 **wind project. Is this not the case?**

112 A. While some may view this to be the case, the Company does not. As stated above, it
113 is the Company's view that it is the REC that defines the renewable attributes. I am

114 advised by Company counsel that there may be serious commercial code implications
115 to representing the “sale” of a product twice.

116 **Q. Is PacifiCorp’s proposed QF wind price adjustment for capacity within the**
117 **ranges known throughout the wind and utility industry?**

118 A. Yes, my direct testimony outlined the specific wind adjustments and a methodology
119 that should be used with the initial DRR pricing.

120 While several of the intervenors² have suggested other values for wind QF
121 capacity contribution, the Company’s position that the QF receive 20% of the capacity
122 payment if the QF meets a 35% capacity factor in on-peak hours is a reasonable and
123 valid approach based on the known available information and modeling the Company
124 has completed in its IRP process. The Company also agrees that if a QF has a higher
125 capacity factor in the on-peak hours then its capacity contribution should be
126 proportionally higher and vice versa, a capacity factor in on-peak hours less than 35%
127 would receive a proportionally lower capacity contribution.

128 Mr. Swenson suggests that it should be a one-for-one relationship (*i.e.*, a 35%
129 capacity factor receives a 35% capacity contribution); however, he also bases his
130 calculation on all hours and not just on-peak hours. Since wind is seasonally and
131 diurnally skewed, this can result in a capacity contribution to payments based on a
132 higher amount of off-peak hours when the Company does not need incremental
133 resources and would be backing down its own lower cost resources. The Company’s

² Direct testimony of Roger Swenson, line 15-20, page 5; Direct testimony of Phil Hayet, page 24, lines 9-11.

134 proposal takes this problem into account and offers a reasonable solution to pay more
135 for power that is delivered when needed by PacifiCorp.

136 Finally, Mr. Hayet acknowledges our proposed capacity adjustment but also
137 suggests a range of 20 to 30% as a minimum for the capacity contribution for
138 payment. In fact, the Company's proposal does not have a minimum capacity factor
139 for payment but rather make a proportional adjustment to the 20% capacity
140 contribution as the 35% capacity factor changes. Said differently, the QF will
141 continue to receive a capacity contribution in its payment that will be more or less
142 than the 20% based on the ratio of QF's actual capacity factor to the 35% capacity
143 factor.

144 **QF Contract Structure and Miscellaneous Issues**

145 **Q. UAE and US Magnesium witnesses have proposed both a tolling and a fixed**
146 **price structure for the energy pricing in a QF contract. What is the Company's**
147 **position on the tolling structure?**

148 A. The Company is opposed to the use of a tolling structure in a QF agreement,
149 particularly tolling structures proposed by UAE and US Magnesium. This type of
150 arrangement clearly shifts the gas price risk from the QF to the Company and the
151 ratepayers. Since customer rates are established in general rate cases based on
152 normalized conditions, the Company will bear the risk between rate cases for any
153 deviation between projected and actual costs. Tolling arrangements that have indexed
154 gas pricing almost guarantee that actual costs will deviate from projected costs,
155 thereby significantly increasing the Company's risk should a large amount of QF
156 generation be structured on tolling arrangements that are indexed to gas. If tolling

157 arrangements are to be allowed in QF contracts, then PacifiCorp recommends that its
158 risk be mitigated through the implementation of a mechanism, such as a power cost
159 adjustment mechanism (“PCAM”), thereby allowing it to recover costs associated
160 with the gas volatility.

161 **Q. Intervenors have suggested that QF contracts should be afforded terms up to 35**
162 **years in length. Does the Company agree?**

163 A. No. The Company believes that the current allowed term length of up to twenty (20)
164 years in Utah represents an appropriate balance between a term that allows the QF to
165 secure financing and limiting the risks that accompany long range power price
166 forecasting. Because of the dynamics of energy prices in the utility industry, the
167 longer the term, the greater the risk to the Company and ratepayers of incurring an
168 uneconomic power purchase agreement. The fundamental objective of the term of a
169 QF contract is to enable eligible QFs to obtain adequate financing but also limit or
170 minimize the possible divergence of the QF contract prices from actual avoided costs.

171 Furthermore, UAE and US Mag’s position ignores the fact that a QF has the
172 option to renew its contract or seek a new contract once its initial contract expires and
173 thus can continue to make sales to the PacifiCorp, if PURPA is still in-place, or to
174 third parties, allowing the QF to recover its investment so long as the plant is
175 operational. The contract term does not limit the period of time in which a QF may
176 recoup its investment, it merely limits the period for which pricing is based on a
177 snapshot projection of avoided costs. The Company also points to its other
178 jurisdictions where the QF contract term is set at lengths up to twenty years.

179 **Q. UAE witnesses have suggested problems in negotiations of previous QF**
180 **contracts. Has the Company complied with the QF negotiation process as**
181 **outlined in Schedule 38?**

182 A. Yes. Mr. Baebler and Mr. Gutting discuss what they characterize as an onerous
183 negotiation process and significant obstacles in their negotiations with PacifiCorp.
184 Mr. Baebler has suggested a “one-stop” shop for all QF agreements with PacifiCorp.
185 While such a process could streamline negotiations, unfortunately, through mandated
186 separation of transmission and merchant functions in the utility business, FERC does
187 not allow the interrelationship Mr. Baebler seeks. Second, Mr. Baebler speaks to long
188 and laborious contract negotiations with PacifiCorp. In fact, much of the time was
189 spent with Mr. Baebler and his consultant working through a number of options to
190 allow Tesoro the maximum operating flexibility for their own refinery needs and
191 structuring the pricing within the confines of the Stipulation in order to maximize the
192 output to PacifiCorp when it is in the best interest of customers. Finally, while Mr.
193 Baebler and Mr. Gutting both discuss the lost possibility of a larger Tesoro QF
194 project, from the beginning of PacifiCorp’s negotiations in early 2003 with Tesoro,
195 Mr. Baebler never proposed a larger project to us and his FERC self-certification
196 didn’t reflect that possibility. In fact, while Mr. Baebler was negotiating with us,
197 additional megawatts were available under the Stipulation pricing for long-term
198 contracts. This leaves me unclear as to how PacifiCorp adversely impacted his
199 project size.

200 With respect to Mr. Gutting’s testimony, he talks to the limited development
201 of QF projects in Utah due to the continued utility hostility of the Company and

202 regulatory entities³ toward QFs via unclear processes and pricing. For support, he
203 offers Exhibit UAE Exhibit 1.1 (SAG-1) which shows only four QF projects in Utah.
204 Our records show a total of 13 QF projects under contract in Utah totaling over
205 240MW of which 10 projects were signed since 2000. That would seem to show an
206 increased activity with QF projects in recent years and the Company's willingness to
207 negotiate in good faith and in a timely fashion.

208 **Q. Mr. Swenson indicated in his direct testimony that the Company should be**
209 **assisting US Magnesium in seeking funding from the US DOE for the**
210 **development of a coal gasification plant. Would you clarify the Company's**
211 **position on this?**

212 A. Yes. During contract negotiations in 2004, US Magnesium indicated that they were
213 pursuing funding for the study and possible development of a coal gasification plant
214 and sought the interest of the Company in pursuing such a technology. We agreed as
215 part of the final settlement on the electric service agreement to have our generation
216 technology folks meet with US Magnesium and understand their project. That
217 meeting was held and a follow-up letter has been delivered. The Company did not
218 agree to any funding or participation in US Magnesium's proposed plant but did agree
219 to continue to make our generation folks available for consultation.

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

221 A. Yes, it does.

³ Direct Testimony of Scott A. Gutting, page 4, line 12.