

In the Matter of the Application of  
PacifiCorp for an Order Approving Avoided Cost Rates

Docket 03-035-14

DPU Exhibit 2.0

Direct Testimony of Andrea Coon  
Division of Public Utilities

July 29, 2005

1 **Q. Please state your name and business address, employer, and position for**  
2 **the record.**

3 A. My name is Andrea Coon. My business address is 160 E. 300 S. SLC, UT. I  
4 work as a Technical Consultant for the Utah Division of Public Utilities.

5 **Q. Please summarize your educational and pertinent professional**  
6 **background for the record.**

7 A. I have a Bachelor's degree in Economics, a Master's degree in  
8 Communications, and have completed all coursework toward a Ph.D. in  
9 Economics. I have been working in utility regulation since 2001. I have  
10 participated in a number of areas including IRP, power costs, special  
11 contracts, and QF agreements.

12 **Q. What is the purpose of your testimony in this proceeding?**

13 A. The purpose of my testimony is to discuss PacifiCorp's most recent proposed  
14 Avoided Cost Methodology for medium and large Qualifying Facilities (QF).  
15 In this testimony, I will cover several topics including the proposed  
16 differential revenue requirement (DRR) model and method for pricing  
17 avoided costs to be applicable to QFs between 3 and 99 MW, the proposed  
18 method for pricing avoided costs to be applicable to QFs with a capacity of  
19 100 MW or more, and PacifiCorp's proposed adjustments to the Avoided  
20 Costs for QF specific operating characteristics.

21 **Q. Does the Division have recommendations in this matter?**

22 A. Yes. The Division recommends that the Commission adopt PacifiCorp's  
23 proposed DRR method as a permanent methodology for calculating Avoided

24 Costs for QFs between 3 MW for a Small Power Production facility and 1  
25 MW for a Cogeneration facility (both covered by Schedule 37) and 99 MW.  
26 For any QF 100 MW or over, we recommend that the DRR method be used to  
27 provide an energy payment for the QF. We recommend that a capacity  
28 payment only be paid to those large QFs that bid into and win an RFP.

29

### 30 **DRR Model and Method**

31 **Q. Has the Division examined the production cost model used by PacifiCorp**  
32 **as part of a proposed DRR?**

33 A. Yes, we have. The GRID model in general is familiar to the Division, as it has  
34 been used in the last two PacifiCorp rate cases to calculate Net Power Costs.  
35 For both of those cases, the model has been examined by an outside consultant  
36 as well as by Division personnel. Division personnel have been trained to run  
37 the model, and have run it with inputs provided by PacifiCorp and also with  
38 input changes or “scenarios”. Division personnel performed numerous runs  
39 both in the last rate case as well as for the current docket.

40 **Q. Have there been any problems with using the model for the most recent**  
41 **proposed methodology?**

42 A. Yes there have. First, the model did not arrive before the day on which  
43 PacifiCorp’s most recent testimony in this docket was filed. In fact, it did not  
44 arrive until around a week later. Then, the model that was sent had errors that  
45 prevented the scenarios from running. This meant that a “fix” for the errors  
46 had to be sent from Portland, resulting in additional delays. When the model

47 was fixed, the Division discovered that the model as sent by PacifiCorp  
48 contained memory levels that were insufficient for the task of running and  
49 retaining multiple scenario runs. The Division attempted to fix this problem  
50 with the use of an outside hard drive, but was unsuccessful. The Division is  
51 currently working with PacifiCorp to see this problem resolved.

52 Notwithstanding these problems, however, the Division has been able to  
53 successfully recreate PacifiCorp's runs, as well as run limited scenarios up to  
54 the memory limitations.

55 **Q. Do the initial problems with the GRID model indicate that it is not an**  
56 **appropriate tool to be used for calculating Avoided Costs for QFs**  
57 **requesting pricing in the future?**

58 A. Not at all. The problems described above are irritations rather than fatal flaws.  
59 The Division believes that GRID is an appropriate tool to use for determining  
60 indicative pricing for medium size QFs (3MW to 99MW).

61 Using the GRID model enables the Division to examine runs made by  
62 PacifiCorp as well as to recreate those runs to check for accuracy and whether  
63 prices proposed for QF contracts appear to meet both the ratepayer  
64 indifference standard and the just and reasonable standard. The Division is  
65 also able to examine input assumptions for reasonableness. Using the  
66 Henwood (IRP) model, which the Division understands to be the other major  
67 production cost model currently in use by PacifiCorp, would not allow  
68 regulators to check on the prices and inputs used by PacifiCorp because the  
69 Henwood model is proprietary with a hefty license fee. Although the Division

70 could request that PacifiCorp pay this fee so that regulators could use the  
71 machine, it would mean that ratepayers would be paying for a large licensing  
72 fee on a yearly basis, whether there were any QFs requesting pricing or not.  
73 The GRID model is not bound by the same restrictions. Also, the Division  
74 staff has been and will continue to be trained on the GRID model as updates  
75 emerge. This should provide potential QF developers some measure of  
76 comfort in that a third party will be able to examine the model being used to  
77 determine pricing offered by the utility.

78  
79 **QFs with a capacity in excess on 99 MW**

80 **Q. Has the Division considered the question of how to calculate avoided costs**  
81 **for QFs of at least 100 MW?**

82 A. We have. The Division had numerous internal discussions regarding large  
83 scale QFs (100MW and over). Particularly in light of the recently passed  
84 SB26 that requires PacifiCorp to solicit bids for resources of 100 MW or more  
85 for terms over 10 years, the Division found it reasonable to also require QFs  
86 falling into this size or contract length to bid into an RFP in order to be  
87 awarded a capacity payment. The capacity and energy payment would then be  
88 determined by the winning bid price rather than an avoided cost run. The QF  
89 would not, however, need to win a bid in order to receive an energy payment,  
90 as the Division believes that federal law under PURPA mandates PacifiCorp  
91 to purchase energy output from all Qualified Facilities. Therefore, if a large

92 QF were an unsuccessful bidder into an RFP, it would still be able to request  
93 indicative energy pricing from an avoided cost run.

94 **Q. Are there other reasons that the Division believes that a bid process for**  
95 **large QFs is an appropriate manner in which to determine pricing?**

96 Yes. The Division examined several reasons for a bid process being a  
97 viable method of setting avoided costs for a large QF:

98 First, the Division agrees with PacifiCorp in recognizing that Utah Code  
99 section 54-12-2 lists a bidding process as an acceptable method for the  
100 Commission to use to set rates. It states, "...the commission shall either  
101 establish a procedure under which small power producers and cogenerators  
102 offer competitive bids for the sale of power to purchasing utilities...." The  
103 Division does, however, disagree with PacifiCorp's assertion "that  
104 competitive bidding is **the method** recognized under Utah Code..."<sup>1</sup>  
105 (Emphasis added) The Division does not believe that only the competitive  
106 bidding method satisfies the statute.

107 Second, the Division believes that offering very large QFs pricing that is  
108 not necessarily market based may result in the ratepayer indifference standard  
109 not being satisfied. For example, if a 200 MW QF were to receive pricing  
110 that was above that which was bid into an RFP, ratepayers would not be held  
111 indifferent. Also, offering pricing other than what is market based creates an  
112 atmosphere that is anti-competitive in that a QF would not be required to put  
113 forward a "best price" offer to compete with other independent generation if  
114 the QF could simply request avoided cost pricing. Again, this would violate

---

<sup>1</sup> Griswald Direct Testimony dated May 2005 at lines 297 and 298

115 the ratepayer indifference standard in that perhaps a better price could have  
116 been obtained from a different type of resource on the market. It could also  
117 violate the Utah statute 54-12-1, which calls for use of energy resources in a  
118 manner that will “provide for their most efficient and **economic** utilization.”  
119 (Emphasis added)

120 Third, the Division believes that the ability of very large QFs to  
121 circumnavigate the RFP process could lead to problems in the planning  
122 process. It could also result in unnecessary expenses for both PacifiCorp and  
123 other potential resources, since a lengthy and expensive RFP selection could  
124 be made invalid by a QF requesting pricing after failing to win a bid.

125 Finally, a reason behind having published avoided cost rates for small QF  
126 projects is to reduce the administrative burden for PacifiCorp and the resource  
127 burden on the small QFs. It is also acceptable because very small QFs have a  
128 very small impact on PacifiCorp’s system. A medium to large QF, conversely,  
129 could have a major impact on PacifiCorp’s system, thereby justifying a larger  
130 administrative burden on the part of PacifiCorp. A QF project of 100 MW or  
131 more should have sufficient resources and sophistication to participate in a bid  
132 process.

133 The Division does not believe that this is an exhaustive list of possible  
134 problems that could be associated with allowing large QFs to escape what we  
135 see as a legislative directive for the acquisition of major resources by the  
136 utility. We simply believe that this list is sufficient to justify requiring large  
137 QFs to bid into an RFP in order to receive a capacity payment.

138

139 **Proposed adjustments to the avoided cost calculations**

140 **Q. In his testimony, lines 59-109, Bruce Griswald outlined several areas in**  
141 **which adjustments should be made to any QF pricing. Does the Division**  
142 **agree or disagree with any or all of the adjustments listed?**

143 **A.** In order to ensure that the Division's position on each of the adjustments is  
144 clear, I will outline each adjustment along with the Division's position on  
145 each below.

146 **Type of power being delivered:** The Division read this adjustment to be  
147 contingent upon whether a QF would be firm or non-firm. The Division  
148 agrees that non-firm resources should be subject to an adjustment. Non-firm  
149 resources provide less value based upon the fact that PacifiCorp is unable to  
150 use the resource as effectively for planning purposes. This means that a non-  
151 firm resource, even of some size, will not enable PacifiCorp to avoid or delay  
152 a resource because PacifiCorp cannot plan on a non-firm resource being  
153 available when needed. Also, since operating reserves do have a value, a QF  
154 willing to provide operating reserves to PacifiCorp should be duly  
155 compensated.

156 **QF availability during daily and seasonal peak periods:** The Division  
157 reads this adjustment to mean that if a QF will not commit to provide energy  
158 and capacity on peak, then the resource should be treated as a non-firm  
159 resource for that period in which it is unwilling or unable to provide for on-  
160 peak needs. The Division agrees with this adjustment for the following reason.



161 The Division has examined the load resource balance that PacifiCorp faces  
162 over the next few years. During that time, the eastern control area is actually  
163 long on capacity during the off-peak, not short. PacifiCorp is short only during  
164 certain peak periods. Therefore, if a QF determines to only provide energy to  
165 PacifiCorp during off peak hours, this will only cause PacifiCorp to back  
166 down its own plants. This would not enable PacifiCorp to avoid or delay a  
167 resource meaning that the QF should be subject to an adjustment.

168 **Ability of the utility to dispatch the QF:** The Division reads this to mean  
169 that dispatchability would be accounted for in the model when determining  
170 pricing if applicable. The Division agrees that dispatchability is indeed a  
171 quality that should be modeled to ensure that the QF is given credit for the  
172 flexibility that it offers to PacifiCorp. Dispatchability could enable PacifiCorp  
173 to back down a QF rather than a coal unit for economic reasons in hours  
174 during which the extra energy was not needed. The Division also agrees that  
175 not meeting minimum availability requirements should be subject to an  
176 adjustment.

177 **Reliability of the QF:** The Division reads this proposal to mean that QF  
178 specific rates should be based upon actual operating characteristics of the  
179 plant, rather than on hypothetical operating characteristics or on  
180 characteristics of the avoided resource. The Division agrees that pricing  
181 should be based as closely as possible on the actual characteristics of the QF  
182 being priced. Anything else may not result in a price that maintains both an  
183 accurate avoided cost for the plant and ratepayer indifference.

184                   **Type of Generation technology and fuel source:** Since this area seems  
185                   to primarily deal with renewable resources, specifically wind, I will leave this  
186                   topic of discussion to Dr. Abdinasir Abdulle, who is addressing renewable QF  
187                   issues on behalf of the Division in this docket.

188

189                   **Miscellaneous**

190                   **Q.     In Division Witness Dr. Powell’s Surrebuttal testimony filed as DPU**  
191                   **Exhibit 1.0SR (dated May 12, 2004), he indicates that it would be**  
192                   **reasonable for the Division to examine a proxy plant method that would**  
193                   **be used in lieu of a DRR. Did this examination occur in the taskforce?**

194                   A.     Yes and no. The Division did examine the proxy related documents submitted  
195                   by UAE during the taskforce, but we did not see a proxy method that was  
196                   sufficiently developed so as to alter our opinions on the method’s adequacy.  
197                   Therefore, without a completely developed proxy method in hand, it was  
198                   impossible to thoroughly evaluate the option.

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

200                   A.     Yes it does.