BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Application	)	
of PacifiCorp for Approval	)	Docket No. 03-035-14
of an IRP Based Avoided Cost	)	
Methodology for QF Projects	)	Direct Testimony of
Larger than 1 Megawatt	)	Mahendra B. Shah
	)	

May 2005

1 **Q. Please state your name, business address and present position with**
2 **PacifiCorp.**
3 A. My name is Mahendra B. Shah. My business address is 825 N.E.
4 Multnomah, Suite 1900, Portland, Oregon 97232. I am the Director of
5 Treasury at PacifiCorp.
6 **Qualifications**
7 **Q. Please briefly describe your education and business experience.**
8 A. I received a Ph.D. degree in Finance from University of Houston in 1979.
9 In 1984, I received the CFA Charter Designation. Since November 2004,
10 I have been employed at PacifiCorp. Previously, I was employed for 24
11 years at Portland General Electric Company. My business experience has
12 included financing of Utility electric operations and non-utility activities,
13 investment management, investor relations and management of credit
14 exposure. I have testified before the Oregon Commission on matters
15 related to financing applications, project financing and leveraged lease
16 transactions.
17 **Q. Please describe your present duties.**
18 A. I am responsible for the Company's pension and other investment
19 management and support the Utility financing activities.
20 **Purpose of Testimony**
21 **Q. What is the purpose of your testimony?**
22 A. As Mr. Larson explains in his direct testimony, Emerging Issues Taskforce
23 01-08 ("EITF 01-08") and Financial Accounting Standards Board (FASB)

24 No. 13 require PacifiCorp to recognize its obligations under certain
25 Qualifying Facility ("QF") contracts as capital lease obligations. Because
26 these QF capital lease obligations are considered to be debt and would be
27 treated like any other debt obligation of the Company, they have impacts
28 on both the Company's financial commitments and credit quality. Further,
29 even if a QF contract is not treated as a capital lease obligation, it may
30 have similar debt impacts pursuant to Financial Interpretation No. 46R
31 ("FIN 46R") and/or it would have similar debt-like impacts on the
32 Company under guidelines established by rating agencies.

33 My testimony will provide an overview of the way in which
34 PacifiCorp finances its operations and discuss the reasons why the
35 recognition of additional debt associated with purchases from QFs will
36 impose additional costs on the Company and its customers. I will also
37 explain how to calculate the incremental cost associated with the
38 additional debt and the Company's proposal for how to recover that
39 additional cost.

40 **Financing Overview**

41 **Q. How does PacifiCorp finance its electric utility operations?**

42 A. PacifiCorp requires large amounts of capital to construct and maintain its
43 electrical infrastructure. In order to raise that capital, PacifiCorp relies on
44 a mix of first mortgage bonds, other secured debt, tax exempt debt,
45 unsecured debt, preferred stock and common equity.

46 Much of the Company's long-term financing is done using secured
47 first mortgage bonds issued under a PacifiCorp Mortgage Indenture dated
48 January 9, 1989. As of December 31, 2004, PacifiCorp had $3,143
49 million of first mortgage bonds outstanding. In addition, the Company
50 regularly borrows tens of millions of dollars to meet more short term
51 financing requirements.

52 PacifiCorp has a large capital program that is expected to further
53 increase in order to serve the growing needs of its customers. In order to
54 have access to the capital markets and attract the capital that will be
55 necessary to fund this expansion, PacifiCorp must maintain its credit
56 quality and comply with its financing agreements and other commitments.

57 **Regulatory Commitments**

58 **Q. Does PacifiCorp have commitments that limit the amount of debt in**
59 **its capital structure?**

60 A. Yes. For example, PacifiCorp and ScottishPower have made
61 commitments to state utility commissions and the U.S. Securities and
62 Exchange Commission ("SEC") concerning PacifiCorp's minimum level
63 of common equity as a percentage of capitalization. These commitments
64 must be met for PacifiCorp to continue to utilize financing authority from
65 the SEC. To the extent that obligations under QF contracts are treated as
66 debt under accounting standards, it will impact PacifiCorp's ability to
67 meet those tests. This may lead to the likelihood of seeking new common

68 equity or delaying or reducing capital spending programs that would
69 otherwise be occurring to meet the growing needs of our customers.

70 **Additional Costs Imposed by QF Contracts**

71 **Q. Could the direct recognition of QF obligations as debt on the**
72 **Company's balance sheet impose additional costs associated with**
73 **credit quality?**

74 A. Yes. It is important to have a balanced capital structure and additional
75 debt through QF contracts will lead to a need for additional equity to avoid
76 adverse impacts on credit quality. The debt related to a QF power
77 purchase reduces the amount of debt the Company might otherwise issue.
78 There is a cost when the Company's ability to issue debt is reduced.
79 Specifically, because equity is more expensive than debt, the increase in
80 equity required to offset the QF-related debt and allow PacifiCorp to
81 maintain credit quality and compliance with its financing agreements and
82 other commitments would impose additional costs on PacifiCorp and its
83 customers.

84 **Q. Would all QF contracts result in debt being added directly to**
85 **PacifiCorp's balance sheet?**

86 A. No. As Mr. Larson discussed, the only QF agreements that would result in
87 debt being added directly to PacifiCorp's balance sheet and interest
88 expense being included on the income statement are those agreements
89 where the application of EITF 01-08 or FIN 46R accounting rules would
90 dictate such an application. However, even if debt is not added directly to

91 the Company's balance sheet due to accounting treatment, in certain
92 situations, credit rating agencies infer debt associated with power purchase
93 agreements.

94 **Q. If a contract results in debt being added to the Company's balance**
95 **sheet, yet it does not require the utility to immediately issue equity to**
96 **balance the capital structure, is there an additional cost?**

97 A. Yes. All QF contracts, whether large or small, that result in debt
98 equivalent recognition on the financial statements or by the credit rating
99 agencies, diminish the credit capacity of the utility. There is a cost related
100 to the diminished credit capacity.

101 **Q. Can that cost be calculated or observed?**

102 A. Yes. The additional cost associated with a QF contract is equal to the pro-
103 rata share of the cost of diminished credit capacity. The additional cost is
104 the difference between the cost of equity and the blended cost of capital
105 required to balance the capital structure, times the amount of equity that
106 must be infused as a result of the recognized debt due to the QF contract.
107 The size of the additional cost is large or small depending upon the
108 amount of debt that arises as a result of the contract. Whether the absolute
109 magnitude of the impact is large or small, the cost should be recognized,
110 calculated, and borne by the party that imposes the cost. In simple terms,
111 the cost is the difference between the pre-tax cost of equity and the pre-tax
112 weighted average cost of capital times the amount of equity needed to
113 rebalance the capital structure.

114 **Q. Even if a QF obligation is not recognized as debt on PacifiCorp's**
115 **books, does it adversely impact PacifiCorp's credit quality and result**
116 **in an additional cost, such as that described previously?**

117 A. Yes. Rating agencies view long-term purchased-power agreements as
118 debt-like in nature. Cash flow is one of the more important items in credit
119 analysis. For rating purposes, the rating agencies do not simply assess a
120 company's revenues, but also all of the expenses a company must cover
121 with its revenues. Cash flow is measured as the cash available from
122 operations plus any non-cash expenses and is compared against various
123 debt and fixed obligation measures, including an amount of inferred debt
124 associated with fixed payment obligations associated with QF purchased
125 power.

126 Even when the accounting standards do not classify a contract as a
127 capital lease, in certain situations, rating agencies (such as Standard &
128 Poor's) will calculate an amount to impute as a debt equivalent related to
129 purchased-power agreements. This amount of debt equivalent is added to
130 a utility's reported debt to calculate adjusted debt and evaluate cash flow
131 to debt metrics. Similarly, rating agencies impute an associated interest
132 expense related to the debt equivalent which is then added to reported
133 interest expense to calculate adjusted interest coverage ratios. The
134 attached Exhibit UP&L ____ (MBS-1) details Standard &Poor's views on
135 this matter.

136 **Q. What debt level (accounting-related or rating agency methodology)**
137 **should be utilized in determining these additional costs?**
138 A. The debt that should be utilized for determining additional debt-related
139 costs associated with QF agreements should be the higher of: (1) the debt
140 directly added to the Company's balance sheet as a result of applying
141 applicable accounting rules or, (2) the debt determined by the most
142 transparent rating agency methodology.
143 **Q. Which rating agency currently has the most transparent**
144 **methodology?**
145 A. At present, it is Standard & Poors.
146 **Q. What risk factor should be applied under the Standard & Poor's**
147 **methodology to calculate the amount of debt equivalent for QF**
148 **obligations?**
149 A. Standard & Poor's has stated that a 50% risk factor is appropriate for long-
150 term commitments (e.g. terms greater than three years) as a generic
151 guideline for utilities with purchased power agreements. Standard &
152 Poor's presently uses a 50% risk factor in their credit evaluation of
153 PacifiCorp. PacifiCorp will track changes in the rating agency perspective
154 on the debt equivalence of power purchase commitments as and when the
155 agencies update their methodology. The rating agencies have also
156 indicated to the Company that it should reduce that risk factor to 30% for
157 resources acquired through the Energy Resource Procurement Act process.

158 **Q. How does S&P use the risk factor to translate the costs associated**
159 **with PPAs into an amount of debt it will impute or infer on the**
160 **purchaser's financial statements?**
161 A. Standard & Poor's calculates the amount of debt by multiplying the risk
162 factor by the present value of fixed payments, discounted at 10%.
163 **Q. Does PacifiCorp propose that the QF generator bear the cost it**
164 **imposes on the utility to maintain credit quality either because of**
165 **imputed or direct debt?**
166 A. Yes. The Company believes that since the QF generator imposes the need
167 to rebalance the capital structure, it should bear the related cost. Whether
168 a QF contract results in debt being added directly to the Company's
169 balance sheet because of the new accounting standards or being imputed
170 onto the Company's balance sheet by rating agencies, there is a real and
171 calculable additional cost to the Company. If the cost is not borne by the
172 QF, the cost will effectively be shifted to customers and result in
173 compensation to the QF that exceeds the avoided cost. In that case, the
174 PURPA ratepayer indifference standard will be violated. In order to
175 maintain ratepayer indifference, PacifiCorp proposes to calculate the
176 additional costs associated with the direct or imputed debt on an
177 agreement-by-agreement basis and then make a debt-related adjustment to
178 the QF payment.
179 **Q. How can the cost of diminished credit be equitably borne by the QF?**

180 A. PacifiCorp proposes that the total revenue requirement of a QF contract
181 should equal the avoided cost. QF contracts have two cost impacts, cash
182 payments and the cost of rebalancing the capital structure to offset the
183 diminished credit related the debt or debt equivalence of the contract.
184 Cash payment to the QF would equal the avoided cost less the change in
185 revenue requirement due to rebalancing the capital structure required by
186 the contract.
187 For illustration purposes, if the avoided cost determined by the
188 Public Service Commission is $46/MWh and the average cost per MWh
189 impact of rebalancing the capital structure is $2/MWh, then the cash
190 payment to the QF would equal the avoided cost less the cost of
191 rebalancing, or $44/MWh. The cash payment to the QF is reduced by an
192 amount equal to the revenue requirement impact of rebalancing the capital
193 structure. This method results in a combined cost of power to customers
194 that equals the avoided cost. Failure to adjust the avoided cost payment
195 for costs the QF imposes on utility customers will result in a contract cost
196 that exceeds the avoided cost.
197 **Q. How does the Company calculate the additional costs imposed on the**
198 **Company related to direct or imputed debt?**
199 A. As the cost equals the incremental equity required to rebalance the capital
200 structure times the difference between the pre-tax cost of equity and the
201 pre-tax weighted average cost of capital, the Company determines the
202 amount of equity needed to offset the debt or debt equivalent (imputed

203 debt) in order to maintain the capital structure at the same level that was in
204 place prior to entering into the contract. An example of a theoretical
205 calculation is provided in Exhibit UP&L ___(MBS-2). In the example,
206 the beginning equity ratio is 48%, shown on line 2. In this example, $100
207 million of debt is added to the Company's balance sheet as a result of a
208 capital lease, reducing the equity ratio to 43.6%, shown on line 6. $92.3
209 million of equity is then issued to offset the direct debt. As can be seen on
210 line 11, the equity ratio returns to the original 48% ratio from this equity
211 infusion. The revenue requirement of the incremental equity is calculated
212 in lines 13 through 17, which shows an annual cost of $5.149 million.
213 Simply stated, the revenue requirement cost equals the cost of equity
214 minus the weighted average cost of capital times the amount of equity
215 issued to rebalance the capital structure. This cost or revenue requirement
216 would then be converted to a basis for adjusting compensation to the QF.
217 A similar method would be used to calculate the costs associated with
218 imputed debt; however, as noted above, the higher of the two calculations
219 should be used for determining additional debt-related costs.

220 **Q. How will the Company ensure that ratepayers receive the benefit of a**
221 **debt-related cost adjustment to the avoided cost payment?**

222 A. Each period when a payment is remitted to a QF, PacifiCorp will record
223 the full amount of the avoided cost in Purchased Power Account 555, with
224 a credit entry or contra-expense in the same account for the amount of the
225 debt imputation adjustment. The net expense in Purchased Power expense

226 will equal the amount remitted to the QF, while the contra-expense
227 amount is clearly presented in the Company accounts. This practice will
228 serve to demonstrate that the cost is real and measurable. By reducing
229 purchased power expense, the financial records will be explicitly clear that
230 the adjustment to QF payments directly reduces revenue requirement,
231 thereby flowing through directly to ratepayers and offsetting the increase
232 in cost of capital.

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

234 A. Yes.