

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

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

REBUTTAL TESTIMONY OF WILLIAM E. AVERA

September 8, 2005

I. INTRODUCTION

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

2 A. William E. Avera, 3907 Red River, Austin, Texas, 78751.

3 **Q. By whom are you employed and in what capacity?**

4 A. I am a principal in Financial Concepts and Applications, Inc. (FINCAP), a firm
5 engaged in financial, economic, and policy consulting to business and
6 government.

7 **Q. Have you prepared an exhibit describing your educational background,
8 professional qualifications, and prior experience?**

9 A. Yes. The details of my experience and qualifications are attached as Rebuttal
10 Exhibit UP&L ___ (WEA-1R).

11 **Q. Have you previously testified before this commission?**

12 A. Yes. I testified last year in the Application of PacifiCorp for a Certificate of
13 Convenience and Necessity Authorizing Construction of the Lake Side Power
14 Project, Docket No. 04-035-30.

15 **Q. What is the purpose of your rebuttal testimony?**

16 A. I am responding to the testimony submitted by Dr. Artie Powell on behalf of the
17 Division of Public Utilities, Mr. Roger Swenson on behalf of U.S. Magnesium,
18 LLC, and Mr. Scott A. Gutting on behalf of the UAE Intervention Group. My
19 testimony explains how purchase power agreements (PPAs) with qualifying
20 facilities (QFs) impose real financial costs on PacifiCorp. Unless these costs are
21 included in calculations of avoided costs, they will ultimately be paid by
22 PacifiCorp's customers. Moreover, ignoring these real financial costs would

23 distort the efficient allocation of economic resources in Utah.

24 **Q. Please summarize your rebuttal to individual witnesses.**

25 A. My rebuttal testimony makes the following points:

- 26 • Although Dr. Powell eloquently argues that avoided costs should be measured
27 as accurately as possible and he recognizes the reality of debt equivalence in
28 connection with QF PPAs, he wrongly concludes that calculating an
29 adjustment would be “problematic.” My testimony resolves Dr. Powell’s
30 problems and shows that his 15% risk factor would cost PacifiCorp’s
31 customers money because it is lower than Standard & Poor’s (S&P’s) current
32 50% factor.
- 33 • Mr. Gutting’s speculation that the development of QF power has been limited
34 by pricing methodology ignores the role of industrial base in creating
35 opportunities for the development of economical QFs. The S&P report
36 attached to his testimony confirms that debt equivalence is a real cost
37 notwithstanding SB26. Similarly, his attachment from the Oregon Public
38 Utility Commission staff confirms investors’ consideration of debt
39 equivalence.
- 40 • Mr. Swenson’s suggestion that rating agencies should ignore the risk of
41 nonrecovery of PPA costs is contrary to the interests of the investors they
42 serve.

43 **Q. Do you have experience with regulatory policy for QFs and the calculation of**
44 **avoided costs?**

45 A. Yes. I was serving as Director of Economic Research at the Public Utility
46 Commission of Texas in 1978 when the Public Utility Regulatory Policies Act
47 (PURPA) was passed. I was appointed to a technical committee formed by the
48 National Association of Regulatory Utility Commissioners (NARUC) to advise
49 the Federal Energy Regulatory Commission (FERC) in developing rules to
50 implement PURPA, including the calculation of avoided costs. In 1980, I served
51 as consultant to a task force of stakeholders who developed avoided cost policy in
52 Texas. Subsequently, I played a similar role for a New Mexico task force that
53 developed the avoided cost methodology for that state. Over the past 25 years, I

54 have continued to serve as a consultant to individual QFs and industry groups on
55 QF issues including avoided cost calculation. Recently, I advised QF
56 stakeholders in negotiations establishing the competitive market structure in
57 Texas.

58 **Q. What are your conclusions regarding the financial impact of purchasing QF**
59 **power on PacifiCorp and its customers?**

60 A. Investors regard the fixed obligations associated with QF PPAs as being
61 equivalent to debt. If PacifiCorp is to continue to access forward markets, raise
62 required capital, and take other actions for the benefit of customers, it must offset
63 the effect of this implicit debt. This is most directly accomplished by increasing
64 the equity component of the company's capital structure, resulting in higher
65 capital costs.

66 Regulators, the accounting profession, and bond rating agencies have
67 recognized the financial impact and resulting costs of debt-like obligations that
68 arise from purchased power commitments with QFs. Incorporating into avoided
69 cost the additional equity that is required to offset this implicit debt is consistent
70 with sound economics and the treatment afforded these obligations by other
71 regulatory agencies. If these costs are ignored, QF power is incorrectly priced
72 and customers ultimately bear the costs.

73 Ignoring these very real costs sends the wrong price signals to QFs and
74 thereby encourages uneconomic QF projects. The economy is best served when
75 the payments to QFs accurately reflect the avoided costs of the purchasing utility.
76 Otherwise, utilities may pay too much for QF power. The result is not only

77 harmful to customers, but also wasteful of society's scarce resources.

78 **Q. How do QF PPAs impact PacifiCorp's financial leverage?**

79 A. When a utility enters a PPA, the fixed charges associated with the contract
80 increase the utility's financial risk in the same way that long-term debt and other
81 financial obligations increase financial risk. Under current accounting rules, the
82 accounting for a PPA is not a discretionary matter if the transaction meets the tests
83 embodied in EITF 01-08 for lease accounting and the tests for a capital lease
84 embodied in FAS 13. If these conditions are met, the PPA is considered a capital
85 lease obligation and must be explicitly recorded as a debt obligation on the
86 utility's balance sheet.

87 Because capital lease obligations are viewed as direct debt and reflected as
88 a liability on a utility's balance sheet, PPAs directly increase the utility's financial
89 leverage. As a result, the utility must add additional equity to its balance sheet in
90 order to restore its capital structure ratios to the levels they were before the
91 agreement. Since the cost of equity exceeds the cost of debt, this rebalancing of
92 the utility's capital structure imposes additional costs. These costs must be
93 considered in the proper calculation of the avoided costs associated with the PPA.

94 **Q. Do QF PPAs that don't meet the accounting definition for capital lease
95 treatment still impact investors' assessment of PacifiCorp's financial
96 leverage?**

97 A. Yes. The accounting standards simply reflect the longstanding perception of
98 investors that the fixed obligations of PPAs diminish a utility's creditworthiness
99 and financial flexibility. The implications of purchased power commitments have

100 been repeatedly cited by major bond rating agencies in connection with
101 assessments of utility financial risks.

102 In reviewing its evaluation of the credit implications of PPAs, for example,
103 S&P recently reaffirmed its position that such agreements are “debt-like in
104 nature” and that the increased financial risk must be considered in evaluating a
105 utility’s credit risks.¹ As the rating agency explained,

106 [P]urchased power agreements typically result in the assumption of
107 fixed costs representing the portion of the purchase price that is linked
108 to the capacity component of the total payment. These fixed capacity
109 payments are similar to debt service payments incurred by a utility that
110 constructs debt-financed power generation facilities. Therefore, whe-
111 ther a utility builds its own generation plants, or enters into a long-
112 term power purchase agreement with a fixed-cost component, that
113 utility is taking on financial risk.²

114 When evaluating PacifiCorp’s financial risks, investors likewise recognize
115 that the company’s contractual payment obligations to QFs are fixed obligations
116 with debt-like characteristics. Unless PacifiCorp takes action to offset this
117 additional financial risk, the resulting greater leverage lowers PacifiCorp’s
118 creditworthiness and places downward pressure on its debt ratings. QF PPAs thus
119 potentially increase investors’ required rate of return for the company’s debt and
120 equity securities.³

¹ Standard & Poor’s Corporation, “‘Buy Versus Build’: Debt Aspects of Purchased-Power Agreements,” *Utilities & Perspectives*, May 12, 2003.

² Standard & Poor’s Corporation, *RatingsDirect*, November 6, 2003.

³ Apart from the immediate impact that the fixed obligation of purchased power costs has on the utility’s financial risk, higher fixed charges also reduce ongoing financial flexibility, and the utility may face other uncertainties, such as potential replacement power costs in the event of supply disruption.

121 **Q. Is it appropriate to consider these financial implications in an economic**
122 **evaluation of QF power?**

123 A. Yes. To assess the true cost of entering into a PPA, it is necessary to recognize the
124 financial risks inherent in the fixed obligations associated with the PPA. S&P, for
125 example, has emphasized the importance of recognizing the financial realities
126 associated with purchased power commitments in any economic analyses of
127 competitive options.⁴ The rating agency has similarly noted, “Utilities need to
128 take these ‘financial externalities’ into account so that . . . options are evaluated on
129 a level playing field.”⁵ It recently confirmed that an evaluation of the financial
130 risks associated with purchased power commitments is necessary “to allow for
131 more meaningful comparisons.”⁶

132 **Q. What other considerations confirm the need to fully consider the financial**
133 **impact of PPAs?**

134 A. As noted earlier, investors are keenly aware of the impact that purchased power
135 can have on a utility’s investment risks. In 1993, S&P observed that the financial
136 impact of purchased power directly influences credit standing and financial
137 flexibility:

138 Over the past few years, several ratings have been lowered due to
139 purchased power obligations. In other cases, S&P did not raise
140 ratings. Still others are lower than they might otherwise be owing to
141 purchased power liabilities.⁷

142 In the wake of recent turmoil in the electric power industry, bond rating

⁴ Standard & Poor’s Corporation, *CreditWeek*, November 1991.

⁵ Standard & Poor’s Corporation, *CreditWeek*, May 24, 1993.

⁶ Standard & Poor’s Corporation, *Utilities & Perspectives*, May 12, 2003.

⁷ Standard & Poor’s Corporation, *CreditWeek*, May 24, 1993.

143 agencies and investors are continuing to scrutinize debt levels. For those firms
144 with higher leverage, this intense focus has led not only to ratings downgrades,
145 but also to reduced access to capital, increased capital costs, and reduced
146 operational flexibility due to impaired access to power markets.

147 **Q. Have regulators recognized that it is necessary to consider the impact that**
148 **purchased power contracts have on utility finances when evaluating supply**
149 **options?**

150 A. Yes. Perhaps the first to consider and quantify debt equivalence for avoided cost
151 determination was the Florida Public Service Commission (“Florida PSC”). In
152 reviewing the Standard Offer Contract for Florida Power & Light Company
153 (“FPL”), the Florida PSC concluded, “We find it is appropriate to include an
154 equity adjustment when determining FPL’s proposed standard offer contract
155 payments.”⁸ The Florida PSC recognized that QF PPAs reduce a utility’s
156 financial flexibility:

157 Buying power increases the utility’s fixed charges, which, in turn, can
158 reduce financial flexibility. Standard & Poor’s (S&P) notes that,
159 “regardless of whether a utility buys or builds, adding capacity means
160 incurring risk.” . . . In including this equity adjustment, FPL is
161 reflecting the cost, in the form of less financial flexibility, that is
162 imposed on electric utilities with purchased power contracts.⁹

163 More recently, in a memorandum regarding a proposed standard offer
164 contract for FPL, the FPSC’s Division of Economic Regulation concluded that “it
165 is appropriate for FPL to make an equity adjustment as proposed in the

⁸ Florida Pub. Serv. Comm’n, *Order No. PSC-99-1713-TRF-EG*, Docket No. 990249-EG (Sept. 2, 1999).

⁹ *Id.*

166 determination of capacity payments in its Standard Offer Contract.”¹⁰

167 Other states have also recognized the reality of imputed debt from
168 purchased power obligations. Perhaps the closest to the situation in Utah is the
169 California Public Utilities Commission (CPUC), which accepted debt equivalence
170 as a valid factor in the 2004 cost of capital determination and, in a subsequent
171 rulemaking, considered debt equivalence in evaluating power purchase
172 alternatives, including QFs. The CPUC adopted the S&P approach to quantifying
173 debt equivalence in its rules.

174 Last December, the CPUC held that debt equivalence should be integrated
175 into its resource planning rules.¹¹ In its order, the CPUC quoted testimony from
176 San Diego Gas & Electric Company observing that “it is essentially undisputed
177 that the credit analysts treat the utilities’ long-term non-debt obligations, such as
178 PPAs, as if they are in fact debt when they assess a utility’s debt capacity.” (Page
179 142.) Significantly, San Diego Gas & Electric is a subsidiary of Sempra Energy,
180 whose representative recently argued in a workshop before this Commission that
181 debt equivalence should not be taken into account.

182 **Q. Has San Diego Gas & Electric more recently argued for the acceptance of**
183 **debt equivalence?**

184 A. Yes. San Diego Gas & Electric sponsored testimony by Charles A. McMonagle
185 last May in connection with the CPUC’s determination of its cost of capital for a
186 2006 test year.¹² Through its witness, the company took the position that debt

¹⁰ *Memorandum*, Docket No. 031093-EQ (Feb. 5, 2004).

¹¹ CPUC, Decision 04-12-048 (Dec. 16, 2004).

¹² Testimony of Charles A. McMonagle (May 9, 2005).

187 equivalence should be considered in setting the cost of capital in its September
188 2005 hearing. Mr. McMonagle stated, “As acknowledged by many participants in
189 the test year 2005 cost of capital proceeding (A.04-05-021), S&P is the only
190 rating agency to publish a quantitative approach for measuring the credit risk
191 associated with the debt-like characteristics of PPAs.”¹³

192 **Q. Does Dr. Powell recognize that the implicit debt associated with QF PPAs**
193 **should be considered in pricing QFs?**

194 A. Yes. Dr. Powell eloquently articulates why avoided costs should be measured as
195 accurately as possible. He supports PacifiCorp’s proposed treatment of QF PPAs
196 that are regarded as capital leases resulting in direct debt on PacifiCorp’s balance
197 sheet. However, he expresses concern that it may be “problematic” to calculate
198 the costs for those QF PPAs classified as operating leases rather than financial
199 leases. He recommends that a risk factor of only 15% be used in calculating the
200 debt equivalence of QF PPAs treated as operating leases. He also proposes that
201 PacifiCorp cooperate with the Division in updating 1994 studies that found the
202 effect of purchased power on cost of capital to be ambiguous.

203 **Q. Is there any uncertainty about whether investors consider PPAs to be**
204 **equivalent to debt?**

205 A. No. Dr. Powell quotes recent statements by the two leading credit rating agencies,
206 Moody’s and S&P, stating that PPAs are considered to be equivalent to debt.¹⁴
207 These rating agencies play a key role in capital markets by advising investors on

¹³ *Id.* at p. 10.

¹⁴ Fitch, the other recognized rating agency, has made similar statements confirming its treatment of PPA obligations as equivalent to debt.

208 the risk of securities issued by utilities. Their opinions are significant because
209 they represent how investors are likely to regard PPAs when deciding whether to
210 make capital available to utilities like PacifiCorp. Based on these quotations and
211 on my experience with investors, I agree with Dr. Powell that there is no
212 substantive dispute that investors regard PPAs as equivalent to debt. The only
213 possible uncertainty is how to quantify that impact.¹⁵

214 **Q. Do the 1994 studies cited by Dr. Powell serve to undermine the validity of**
215 **considering the debt equivalence of PPAs?**

216 A. No. These studies are based on empirical data from the 1980s and early 1990s
217 that predate the current investor consensus about the impact of PPAs on utility
218 financial leverage. Since rating agencies did not express concerns about the
219 implicit leverage associated with PPAs until after 1990, the impacts were not yet
220 reflected in the capital costs in the cited studies. As noted by Dr. Powell, “these
221 studies pre-date the California energy crisis and the Enron debacle”¹⁶

¹⁵ Dr. Powell cites the statement by Curtis Moulton that appeared in the 2004 Electric Power supply Association white paper. This is not a recent statement of S&P’s policies. His quoted statement was based on a letter to Mr. John Stauffacher of Destec Energy, dated December 30, 1991 (p. 4 at fn. 11). I worked with Mr. Stauffacher extensively on QF issues for over two decades. Destec Energy was absorbed into the Natural Gas Clearing House in 1997 and, later in 1998, into Dynegy, Inc. It is my understanding that Mr. Stauffacher retired from Dynegy several years ago.

¹⁶ At p. 12. Apparently, the EIA report is based on the Lawrence Berkely Laboratory Study cited by Dr. Powell. There seems to have been only one set of empirical analyses that are the basis of both the Lawrence Berkeley Laboratory and EIA studies discussed by Dr. Powell. The EIA report states:

Chapter 3 provides summary results of the impacts of power purchases from nonutility generators on a utility’s cost of capital. This Appendix provides details that include a discussion of the methodological approach, specification and measurement issues, data sources and regression results.

(Page 62.) This discussion continues in a footnote:

The results presented in this Appendix are based on the work performed at

222 PPA's have become increasingly significant feature in the utility landscape
223 over the last decade, in part due to the passage of the Energy Policy Act of 1992.
224 As documented earlier in this testimony, the financial community, investors, the
225 accounting profession, and regulators now recognize the implicit impact of PPA's
226 on debt and expressly incorporate a resulting debt equivalent when evaluating a
227 utility's financial position.

228 Empirical studies such as the 1994 studies cited by Dr. Powell can at best
229 provide indirect evidence on the financial cost of QF PPA's. Moreover, the
230 inherent statistical difficulty of controlling for all other relevant factors
231 complicates making inferences from cross-section and time series data on the
232 utility industry, particularly in the recent period of turmoil and transition.

233 Fortunately, we do not have to make indirect inferences about investors'
234 evaluation of the impact of PPA's on utilities' financial risk. There is direct
235 evidence from the definitive sources investors are known to rely upon. From the
236 customers' perspective, the concerns of investors are what ultimately impact the
237 rates customers have to pay. The recent citations from bond rating agencies
238 provided in Dr. Powell's testimony, as well as earlier in my testimony, confirm
239 that investors consider PPA's as equivalent to debt. Indeed, a specific
240 quantification for PacifiCorp is attached to Mr. Gutting's testimony as UAE

the Lawrence Berkeley Laboratory of the Department of Energy with funding provided by the Energy Information Administration, U.S. Department of Energy. Dr. Edward Kahn, the principal investigator, supported by Steven Soft and Timothy Belden [the authors of the March 1994 study cited by Dr. Powell], participated in the research and providing the results. All tables in this Appendix were also prepared in the Lawrence Berkeley Laboratory.

(Page 63.)

241 Exhibit 1.3 (SAG-3). This document is a May 5, 2005 S&P report on PacifiCorp
242 which on page 3 states:

243 PacifiCorp has sizable power purchase obligations, and as a
244 result, Standard & Poor's Ratings Services has added about \$570
245 million to the utility's balance sheet that predominantly reflects long-
246 term power purchase agreements (PPAs) and about \$46 million in
247 operating leases.

248 **Q. Does the fact that S&P is the only rating agency to explicitly quantify debt**
249 **equivalence create a problem for avoided cost calculations?**

250 A. No. Avoided cost calculation necessarily requires calculations based on
251 surrogates because any cost that is avoided will not actually be incurred. In my
252 opinion, relying on S&P is consistent with the conventions of avoided cost
253 calculations, which must use the best available data to estimate avoided costs.
254 There is no reason to believe that the debt equivalence effect imputed in the
255 capital markets departs from that quantified by S&P. Indeed, as noted above, both
256 the Florida PSC and the CPUC have accepted S&P's methodology in calculating
257 debt equivalence for avoided cost purposes.

258 **Q. Does Dr. Powell's observation that many factors impact the cost of capital**
259 **negate the necessity to consider the debt equivalent impact of PPAs?**

260 A. No. I could not agree more with Dr. Powell's observation about the complexity of
261 determining the cost of capital. In a rate case, the cost-of-capital determination
262 must consider the plethora of specific facts and circumstances that are significant
263 to investors. I would also agree with Dr. Powell's related observation that utility
264 construction can involve risks. Indeed, the 1994 studies cited by him rely on
265 empirical data that span the period during which nuclear plants were completed in
266 the post-Three Mile Island era. At that time, utility finances were weighed down

267 by unexpectedly huge construction budgets. The bulge in construction spending
268 was described in the EIA report:

269 Industry's investment activities, i.e., expenditures on new plant
270 construction and equipment, continue to decline. From a high of \$31.2
271 billion in 1982, the spending in 1992 totaled \$27.3 billion reflecting a
272 decline in real and absolute terms. Despite additions to capacity that
273 will be needed between now and the year 2010, levels of construction
274 expenditures may continue to decline in the foreseeable future.

275 (Pages 22-23). Indeed, a major fallout of that period was the 1992 passage of the
276 Energy Policy Act, as well as initiatives by FERC and state regulatory agencies to
277 expand the market for non-utility generation. And the policy worked as
278 documented in the EPSA white paper cited by Dr. Powell, reporting that
279 "approximately 70 percent of all new generation built since 1992 was built by
280 competitive power suppliers and combined heat and power generators."¹⁷ With
281 the increasing reliance on PPAs from non-utility generators since 1992 has come
282 elevated attention by rating agencies and the investors they serve on the debt
283 equivalence of these PPAs.

284 **Q. Why is it necessary to consider debt equivalence in calculating avoided cost?**

285 A. Avoided cost is an estimate of incremental changes in cost that result from
286 entering into a QF PPA. Fortunately, however, in this case we do not have to
287 consider all of the factors that may impact a utility's cost of capital. At issue is
288 simply the incremental effect of QF power on PacifiCorp in the foreseeable
289 future. It is clear that investors believe that QF PPAs effectively increase
290 PacifiCorp's financial leverage. For the company to maintain its relative risk
291 position, this increase in debt equivalence must be offset with additional equity.

¹⁷ Electric Power Supply Association at p. 1.

292 There is no doubt that other factors may impact PacifiCorp’s relative risk,
293 for good or ill, in the future. But the crux of an avoided cost is the identification
294 of the specific costs that can reasonably be expected to occur as a result of adding
295 QF power to the utility system.

296 **Q. Does Dr. Powell’s recommendation to use a “minimal risk factor of 15%” (p.**
297 **14) to calculate debt equivalence benefit PacifiCorp’s customers?**

298 A. No. Using a 15% risk factor will significantly understate the 50% risk factor that
299 is currently applied to PacifiCorp’s PPAs. Customers will ultimately make up the
300 difference between the effect of the actual risk factor and Dr. Powell’s “minimal”
301 factor.

302 With respect to the risk factor for PacifiCorp’s PPAs, S&P stated in the
303 report I referenced earlier and which was attached to Mr. Gutting’s testimony:

304 Standard & Poor’s uses a 50% risk factor in calculating off-
305 balance sheet debt associated with these PPAs. The passage of
306 SB 26 implies that a lower risk factor will be utilized for future
307 Utah PPAs that fall under the protection of the new legislation.

308 (Page 3.) There is no indication that S&P is considering lowering its risk factor
309 for debt equivalence for any PacifiCorp Utah PPAs except those falling under SB
310 26. My understanding is that the QF avoided costs for resources from 3 to
311 99 MWs under consideration in this docket may not be processed through SB 26
312 and therefore would not trigger the lower risk factor. Furthermore, there is no
313 reason to expect that S&P would assign even those PPAs that are afforded SB 26
314 protection the same “minimal” risk factor proposed by Dr. Powell.

315 I disagree with Dr. Powell’s characterization of the minimal 15% risk
316 factor as being a “more conservative” approach. If the risk factor is reduced from

317 that actually applied by S&P to PacifiCorp, the company's Utah customers will
318 pay more for QF power than avoided cost. Uneconomic QF projects will respond
319 to the false avoided cost price signal, thereby wasting society's scarce economic
320 resources.

321 The EPSA white paper cited by Dr. Powell (page 15) gives favorable
322 notice to the agreement between FPL and the Florida PSC to raise the risk factor
323 in the revised standard offer contract from 10% to 30% to reflect the actual risk
324 factor applied by S&P.¹⁸ The Florida PSC uses the same 30% risk factor that the
325 S&P applies to FPL's PPAs. In Utah, as in Florida, the best policy for calculating
326 debt equivalence for avoided cost purposes is to use the same risk factor that is
327 currently being used in the marketplace. Specifically, S&P uses a 50% risk factor
328 for PacifiCorp PPAs, and that is what the Commission should use for avoided cost
329 purposes.

330 To use a baseball analogy, avoided cost should be called straight down the
331 middle of the strike zone. Dr. Powell's suggestion of shading the debt
332 equivalence to the low side violates his worthy goal of "achieving the highest
333 degree of accuracy in avoided cost as possible." (Page 6.)

¹⁸ Electric Power Supply Association at p. 15. S&P originally indicated that it might apply a lower risk factor to QF PPAs. In recent years, it became apparent that the same 30% risk factor was being applied to QFs as was being applied to all of FPL's other PPAs. The change in 2004 kept the risk factor used in avoided cost aligned with that actually applied to the utility in the marketplace. The report concluded, "This case represents an innovative regulatory solution and could serve as a model sufficient to maintain the viability of PPAs as a supply option."

334 **Q. Does the evidence and philosophy presented in Dr. Powell’s testimony**
335 **confirm that recognition of debt equivalence is required to correctly apply**
336 **the avoided cost standard?**

337 A. Most affirmatively. Since there is no question that the obligations under a QF
338 PPA would result in debt equivalence, that fact must be considered in calculating
339 avoided cost. In addition, the risk factor currently applied to PacifiCorp should be
340 used in calculating the risk factor. Ignoring a known and measurable cost like
341 debt equivalence would thwart the goal of accurate avoided cost calculation so
342 effectively articulated by Dr. Powell.

343 **Q. Mr. Gutting suggests that QF development in Utah may have been limited by**
344 **the pricing methodology (p. 4). Is there any reason to ignore the financial**
345 **realities of debt equivalence to encourage the development of QF power in**
346 **Utah?**

347 A. No. I am personally and professionally committed to development of economic
348 QFs. QFs can play a role in increasing the efficiency of energy usage so urgently
349 needed in this country. However, a regulatory policy of “QF power at any price”
350 would harm customers and lead to economic distortions. Capital is a scarce
351 resource, which must be directed by the market into its most productive use if we
352 are to maximize economic welfare. If QF power is overpriced, capital will be
353 induced into projects having less benefit to society than alternatives that would be
354 starved for capital.

355 The lower contribution of QF power in Utah relative to other states, like
356 Texas, is not a symptom of regulatory failure in Utah. It merely reflects the

357 physical and economic realities within the state. The magnitude of QF
358 development in a state or region is a function of its industrial and resource base.
359 The Texas and Louisiana Gulf Coast, for example, has a vast concentration of
360 refineries and chemical plants where cogeneration (termed Combined Heat &
361 Power or CHP by Mr. Gutting) opportunities abound. These conditions have led
362 to the development of many QF projects generating huge amounts of power.
363 Similarly, the low utilization of hydro power in Texas relative to some other states
364 does not necessarily imply that utilities and their regulators have ignored hydro
365 development in Texas, but instead reflects geographic reality.

366 Compared with Texas and Louisiana, the industrial base of Utah and other
367 Mountain states has a low concentration of processes that lend themselves to
368 cogeneration. Using the same EIA data source cited by Mr. Gutting, I have
369 constructed Rebuttal Exhibit UP&L____(WEA-2R), which demonstrates the
370 relationship between manufacturing base and the quantity of QF capacity in
371 various regions of the United States.¹⁹ Overpricing QF power merely to increase
372 QF capacity in Utah would only harm customers and encourage wasteful
373 investment.

374 **Q. Do Mr. Gutting’s arguments for ignoring debt equivalence confirm that he**
375 **should “not purport to be an expert” (p. 22) on the debt equivalence issue?**

376 A. Yes. Mr. Gutting cites S&P’s favorable comments about SB 26 as a reason to
377 ignore debt equivalence. Yet in the same report that Mr. Gutting attaches to his
378 testimony, S&P states it may reduce the risk factor for those projects that go

¹⁹ In the chart, “manufacturing” is the installed capacity at nonutility generating facilities attributed to the manufacturing industry group.

379 through the SB 26 process. *The report does not say the risk factor would be zero*
380 *so that the debt equivalence issue disappears.* Rather, the very report cited by Mr.
381 Gutting confirms the reality and effect of debt equivalence on PacifiCorp. As
382 discussed above, my understanding is that the QF avoided costs for resources
383 from 3 to 99 MWs at issue in this docket would not likely go through the SB 26
384 process.

385 Mr. Gutting also discusses the possible purchase of PacifiCorp by
386 MidAmerican Energy Holdings. The benefits and strengths that MidAmerican
387 would bring to PacifiCorp do not negate the fundamental fact relevant for avoided
388 cost calculation: The addition of QF PPAs will increase the debt equivalence, and
389 that will have an associated incremental cost.

390 Finally, Mr. Gutting apparently confuses the debt equivalence associated
391 with PPAs deemed to be operating leases with the actions by the Financial
392 Accounting Standards Board (FASB) to recognize direct debt associated with
393 capitalized leases. He cites the Oregon Staff position that “the investment
394 community has required full financial disclosure for decades” (Page 23.)
395 The simple reason the investment community requires full disclosure of PPAs is
396 that investors consider the PPA obligations in assessing the leverage and financial
397 risk of utilities. Investors would not require disclosure unless the resulting
398 information was useful to them in making decisions on putting their money in
399 utility securities. The recent requirement by the FASB that PPAs that qualify as
400 capital leases be reflected on the balance sheets of utilities is confirmation by the
401 accounting profession that the off-balance sheet obligations matter.

402 **Q. Mr. Swenson suggests that the rating agencies need to agree with him that a**
403 **QF contract approved by a regulatory agency has no risk of non-recovery.**
404 **(Page 19.) Are rating agencies wrong to be concerned about non-recovery?**

405 A. No. Rating agencies have the awesome responsibility of advising investors who
406 are putting their money into utility securities. Pension funds, insurance
407 companies, universities, state and local governments, foundations, and individuals
408 rely on the assessments of rating agencies. Because the consequences of a flawed
409 risk assessment are so daunting, rating agencies are understandably cautious.

410 The recent experience of investors in the utility industry has confirmed the
411 wisdom of the agencies' caution. Regulatory decisions regarding the recovery of
412 purchased power expenses during the fall-out of the California crisis have cost
413 investors billions of dollars. Mr. Swenson's hope that in the future regulators will
414 "do the right thing" does not erase this painful memory for investors or rating
415 agencies. Hope is not a substitute for prudence in investing funds into utility
416 securities. The 1994 study Mr. Swenson cites encompasses the recent experience
417 of investors. (Page 20, cited also by Dr. Powell and discussed earlier.) Far from
418 being an "another artificial barrier to QF development" as claimed by Mr.
419 Swenson (page 20), imputed debt is a clear and present reality to investors. Since
420 the capital costs that PacifiCorp customers ultimately pay are determined by these
421 investor perceptions, imputed debt is a real cost and cannot properly be ignored in
422 pricing QF power.

423 **Q. Does this conclude your rebuttal testimony in this case?**

424 A. Yes, it does.