

**BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH**

**In the Matter of the Application ) Docket No. 98-2035-04  
of PacifiCorp and ScottishPower plc )  
for an Order Approving the Issuance ) PRE-FILED DIRECT TESTIMONY OF  
of PacifiCorp Common Stock ) BRUCE E. BIEWALD  
) FOR THE  
) COMMITTEE OF CONSUMER SERVICES**

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**June 18, 1999**

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Exhibit CCS-2.1 Resume of Bruce Edward Biewald

Exhibit CCS-2.2 US Electric Utilities Sorted by Average Residential  
Revenue per kWh

Exhibit CCS-2.3 Annual Bills Charged to Typical Standard Domestic  
Tariff Customers in the United Kingdom

1

## 1. Qualifications

### Q. 2 State your name, occupation and business address.

3 A. My name is Bruce Edward Biewald. My address is Synapse Energy  
4 Economics, Inc., 22 Crescent Street, Cambridge, Massachusetts, 02138.

### 5 Q. Please describe your current employment.

6 A. I am President of Synapse Energy Economics, Inc., a consulting company  
7 specializing in economic and policy analysis of electricity restructuring,  
8 particularly issues of consumer protection, market power, stranded costs,  
9 renewable energy, efficiency, environmental quality, and nuclear power.

### 10 Q. What are your qualifications with regard to energy policy?

11 A. I graduated from the Massachusetts Institute of Technology in 1981,  
12 where I studied energy use in buildings. I was employed for fifteen years at the  
13 Tellus Institute where, as Manager of the Electricity Program, I was responsible  
14 for studies on a broad range of electric system regulatory and policy issues. I  
15 have provided testimony on energy issues in more than 50 cases in 20 states,  
16 two Canadian provinces, and before the Federal Energy Regulatory  
17 Commission. I have co-authored more than one hundred reports, including  
18 studies for the Electric Power Research Institute, the U.S. Department of Energy,  
19 U.S. Environmental Protection Agency, the Office of Technology Assessment,  
20 the New England Governors' Conference, the New England Conference of  
21 Public Utility Commissioners, and the National Association of Regulatory Utility

1 Commissioners. My papers have been published in the *Electricity Journal*,  
2 *Energy Journal*, *Energy Policy*, *Public Utilities Fortnightly* and numerous  
3 conference proceedings, and I have made presentations on the economic and  
4 environmental dimensions of energy throughout the U.S. and internationally. My  
5 resume is provided here as Exhibit CCS-2.1.

6

1                                   **2. Summary and Recommendations**

2   **Q.     What is the purpose of your testimony in this case?**

3   A.     I have been asked to assist the Committee of Consumer Services  
4 (Committee) by reviewing and commenting upon the benchmarking analysis and  
5 projected savings filed by ScottishPower in this case.

6   **Q.     How does your testimony relate to that of the other witnesses for the**  
7 **Committee of Consumer Services?**

8   A.     My testimony complements that of Mr. Neil Talbot and Mr. Paul Chernick.  
9 We all support the conclusions and recommendations of Mr. Dan Gimble of the  
10 Committee.

11 **Q.     Please provide an overview of your analysis and this testimony.**

12 A.     I begin with a discussion of ScottishPower's expectation of large cost  
13 savings potential at PacifiCorp and contrast this with the "commitment" to pass  
14 \$10 million per year in corporate cost reductions on to PacifiCorp customers. I  
15 then address the two key areas of support that ScottishPower offers for its  
16 expectation of cost savings – its benchmarking analysis and its experience with  
17 Manweb in the United Kingdom.

18 The benchmarking analysis is a very abstract and limited exercise that deals with  
19 only a relatively small portion of PacifiCorp's costs in a rather superficial way.  
20 Thus, the analysis is not very useful. ScottishPower itself expresses a lack of

1 faith in its benchmarking analysis and declines to make a specific projection of  
2 savings or to guarantee any such savings on the basis of this analysis.

3 Mr. Richardson points to the experience with Manweb as support for his  
4 confidence that ScottishPower “can achieve significant efficiencies in  
5 PacifiCorp’s operations, and the resulting cost reductions will be captured  
6 through the ratemaking process to produce rates for customers that are lower  
7 than had the transaction not occurred” (Richardson Supplemental Testimony,  
8 pages 16 and 17). Specifically, Mr. Richardson points to reductions in bills for  
9 residential customers over a recent five-year period since ScottishPower  
10 acquired Manweb. ScottishPower did reduce costs at Manweb, but the situation  
11 faced in the UK by Manweb differs in important ways from that faced by  
12 PacifiCorp, most notably that Manweb was a government-owned and operated  
13 business in the process of being privatized. To the extent that Manweb may be  
14 relevant, it should be viewed in context. Based upon data from OFFER for bills  
15 to typical residential customers over the same five-year period used by Mr.  
16 Richardson, the reductions at Manweb (22%) are not exceptional, or even above  
17 average. Most of the Public Electricity Suppliers in Great Britain had even  
18 greater residential bill savings over this same five-year period, and the average  
19 for England and Wales as a whole was 23%.

20 **Q. What do you recommend in this case with regard to ScottishPower’s**  
21 **savings projections?**

22 A. While \$10 million per year of corporate cost savings is not insignificant, it  
23 should be viewed in the context of PacifiCorp as a \$2 billion per year company,  
24 and in the context of the risks associated with the merger discussed in Mr.

1 Talbot's testimony on behalf of the Committee. Moreover, before the \$10 million  
2 amount represents any real benefit to PacifiCorp customers, there would have to  
3 be a rate case, and even then realization of the savings could be elusive, since  
4 additional costs could offset the savings.

5 As for any additional cost savings, ScottishPower makes positive but  
6 unsubstantiated and noncommittal claims. I recommend that the Utah Public  
7 Service Commission (Commission) take a skeptical view toward cost savings  
8 that are not backed up by enforceable guarantees and specific mechanisms. I  
9 recommend that the Commission recognize the potential for PacifiCorp to reduce  
10 costs as a stand-alone company without the merger with ScottishPower. I also  
11 recommend that the Commission not approve the merger on the basis of  
12 ScottishPower's unsubstantiated and noncommittal claims.

13

1                   **3. ScottishPower’s Projection of Cost Savings**

2   **Q.     What level of cost savings does ScottishPower expect to achieve in**  
3 **operating PacifiCorp?**

4   A.     ScottishPower’s objective is that “PacifiCorp should be within the top ten  
5 major U.S. electric utilities with respect to non-generation operating costs as  
6 soon as possible” (MacRitchie Direct Testimony, page 4) and that the “current  
7 estimate is that it will take up to five years...” (MacRitchie Direct testimony, page  
8 13). In round numbers, it would appear that this would require a reduction in  
9 PacifiCorp’s non-production operating cost of about \$100 per customer, yielding  
10 a total savings of \$140 million per year (see ScottishPower’s response to Utah  
11 CCS data request 9.19).

12           ScottishPower also expects to realize savings in production costs, but it  
13 has not estimated these or set specific goals. ScottishPower has indicated  
14 savings of \$200 million. When asked about the basis for this figure,  
15 ScottishPower pointed to the \$140 million in potential cost savings identified in  
16 the benchmarking analysis of one category of costs, and stated that “It is not  
17 therefore unreasonable for ScottishPower to speculate that if it was to look  
18 across the whole company, to also include all the previously excluded costs,  
19 then there could indeed be the potential to save up to \$200 million.” (Response  
20 to Utah CCS data request 9.19).

21           There is also an expectation of a net savings of \$10 million in corporate  
22 costs.



1 **Q. What amount of savings has ScottishPower offered as a benefit of**  
2 **the merger?**

3 A. ScottishPower has offered only the \$10 million savings in corporate costs.  
4 The Company states that it “will commit to reflecting this reduction in PacifiCorp’s  
5 results of operations filed with the Commission” (Richardson Supplemental, Ex.  
6 SP\_\_\_(AVR-1), page 6) and that this amount “will be reflected in cost of service  
7 by the end of the third year after the transition closes” (Richardson Supplemental  
8 Testimony, page 2).

9 **Q. How does the \$10 million figure compare with the size of PacifiCorp?**

10 A. The \$10 million amount is very small in the context of a Company the size  
11 of PacifiCorp, with annual revenues of about \$2 billion.

12 **Q. Is it assured that the \$10 million savings will be reflected in**  
13 **electricity prices?**

14 A. No. The treatment of the \$10 million savings that is committed is not  
15 clear. According to Mr. Richardson’s Supplemental Testimony (April 16, 1999)  
16 ScottishPower has “committed to flow it through to customers through the  
17 ratemaking process” (page 1, line 13). This would require a rate case. It would  
18 also require that the net \$10 million reduction in corporate costs be achieved  
19 without shifting, or increasing other categories of costs offsetting the \$10 million  
20 reduction. ScottishPower has not offered to pass the \$10 million savings to  
21 customers in a merger-related rate reduction. It merely offers to recognize such  
22 savings in a rate case filing, if such a filing occurs and is far enough into the

1 future to include savings that are not expected until “the end of the third year  
2 following the closing of the transaction” (Mr. Green’s Direct Testimony, page 9).

3 In Utah, this would require a test year no earlier than 2002 for a filing no  
4 sooner than 2003. Given a typical rate proceeding, Utah consumers might see  
5 their share of the \$10 million from a 1999 transaction reflected in rates in 2004.  
6 However, given the relatively small and uncertain size of any Utah share of the  
7 proposed benefits, it is also possible that rates would increase if any of the risks  
8 described by Mr. Talbot come to pass or if PacifiCorp alleges underearnings.

9 **Q. What evidence does ScottishPower offer in support of its**  
10 **expectation that it will be able to significantly cut costs in PacifiCorp’s**  
11 **operation?**

12 A. The two areas of support offered by ScottishPower are its benchmarking  
13 analysis and its experience with transforming Manweb. I will address each of  
14 these in turn.

15

1                   **4. ScottishPower’s Benchmarking Analysis**

2   **Q.     Please describe the benchmarking analysis offered by**  
3   **ScottishPower in this case.**

4   A.     Mr. MacRitchie has presented ScottishPower’s “high-level preliminary  
5   estimates of the potential for operating cost savings” in PacifiCorp. The  
6   benchmarking analysis involved comparing 1996 cost data – excluding  
7   production, customer service and informational expenses and uncollectables –  
8   across roughly 144 U.S. companies. The comparison showed that “PacifiCorp’s  
9   operating costs per customer were higher than those experienced by many other  
10  utilities both in the Pacific Northwest and across the rest of the U.S.” and led  
11  ScottishPower to believe that “there is potential for reducing operating costs at  
12  PacifiCorp” (MacRitchie Direct Testimony, page 2).

13 **Q.     Is the ScottishPower benchmarking analysis a reasonable basis to**  
14 **predict savings in PacifiCorp’s operations?**

15 A.     It may have some value, but only in a very limited sense. It is a very  
16 superficial comparison – presented in a simple two-page table sponsored by Mr.  
17 MacRitchie. It excludes production costs and several categories of non-  
18 production costs (customer service, informational, and uncollectables). This  
19 leaves only about \$415 million to be included in the analysis, less than one fifth  
20 of PacifiCorp’s annual retail operating revenues.

21 The benchmarking analysis involves almost no effort to account for differences in  
22 the conditions of the different companies. For example, companies of widely

1 different sizes are compared, ranging from six thousand customers to 4.6 million  
2 customers. Companies in the benchmarking analysis also have very different  
3 amounts of distribution lines, one of the primary factors driving distribution  
4 system maintenance costs. The benchmarking analysis is done by expressing  
5 costs per customer – making no effort to account for the fact that industrial  
6 customers are larger and impose greater costs than residential customers.  
7 Companies in the benchmarking analysis have significantly different mixes of  
8 high and low usage customers.

9 Also, PacifiCorp has an extensive transmission system and mine-mouth coal  
10 generation, so one might reasonably expect its generation costs to be low and its  
11 transmission costs to be high, relative to a more typical company. Benchmarking  
12 comparisons, such as ScottishPower's, that focus exclusively upon non-  
13 production operating costs could thereby tend to overstate the potential for cost  
14 reduction in that area for PacifiCorp.

15 **Q. How do PacifiCorp's total residential prices compare with other**  
16 **companies in the U.S.?**

17 A. I have listed residential prices for 177 U.S. companies in Exhibit CCS-2.2,  
18 with PacifiCorp's state-specific prices indicated. The data source is the Edison  
19 Electric Institute's Typical Bills database for Winter 1998. PacifiCorp's prices are  
20 among the lowest, particularly for its sales in the Washington (#10), Wyoming  
21 (#14), and Oregon (#27) areas.

22 **Q. Does the price data presented in Exhibit CCS-2.2 have the same**  
23 **problem of comparing companies in different situations?**

1 A. Yes. It is a simple comparison of simple revenue per unit of sales, and  
2 does not involve any adjustments to account for differing conditions in which  
3 various companies operate. I offer these price data in order to show how  
4 PacifiCorp compares with other U.S. companies when all of the cost categories  
5 are included. These residential price data suggest that PacifiCorp is among the  
6 lower cost companies overall. This is similar to the conclusion reached by Mr.  
7 MacRitchie in his examination of non-production costs – but indicates that  
8 perhaps there is somewhat less room for cost reduction in the production area,  
9 at least on a percentage basis.

10 **Q. Are there other assessments that indicate that PacifiCorp is doing**  
11 **reasonably well on its own?**

12 A. Yes. A recent article in Public Utilities Fortnightly analyzed data for one  
13 hundred U.S. utilities and identified PacifiCorp as one of nineteen “efficient”  
14 utilities (“The Fortnightly 100: Which Utility Ranks the Highest,” by Forrester,  
15 Khawaja, Haeri, and Carter, September 1, 1998).

16 **Q. Does the benchmarking analysis account for PacifiCorp’s ability to**  
17 **realize cost savings on its own?**

18 A. No. The benchmarking simply compares PacifiCorp with other companies  
19 and indicates that there may be some room for improvement in reducing costs  
20 per customer. It makes no attempt to account for savings that PacifiCorp could  
21 achieve without the merger. PacifiCorp has already made some substantial  
22 employment reductions over the past few years, and with its renewed focus upon  
23 its core electric utility business can be expected to make gradual efficiency

1 improvements in the future. A true analysis of the “benefits of the merger” would  
2 compare scenarios with and without the proposed merger.

3 **Q. Does ScottishPower disagree with your view of the adequacy of the**  
4 **benchmarking analysis?**

5 A. I expect that ScottishPower would generally agree with my view that the  
6 benchmarking analysis is not adequate as a reliable estimate of future cost  
7 savings. ScottishPower has been careful to state that the benchmarking is  
8 “preliminary” and was used only to determine that “there is potential to reduce  
9 operating costs in PacifiCorp” (MacRitchie Direct Testimony, page 2). Mr.  
10 MacRitchie has stated that ScottishPower would conduct more detailed  
11 benchmarking as part of its overall process of “transforming the business” after  
12 the closing date of the merger (MacRitchie Rebuttal Testimony before the Public  
13 Utility Commission of Oregon, June 2, 1999, in UM 918).

14 **Q. What is your conclusion regarding the benchmarking analysis?**

15 A. I conclude that savings may be somewhat more difficult to achieve at  
16 PacifiCorp than would be suggested by ScottishPower’s preliminary  
17 benchmarking analysis, and that there has been no analysis whatsoever of  
18 incremental savings attributable to the merger, other than the claimed net  
19 savings of \$10 million in corporate costs discussed above.

20

1 **5. ScottishPower's Experience With Cost Reduction in the UK**

2 **Q. What evidence from the UK does ScottishPower point to in support**  
3 **of its expectation that it can reduce costs in PacifiCorp's operations?**

4 A. The primary example put forward by ScottishPower in support of its ability  
5 to transform a regulated electric utility business is Manweb, which ScottishPower  
6 acquired in 1995 (see MacRitchie direct testimony, page 6 and 8). Mr.  
7 Richardson provides a specific example of the average residential customer's bill  
8 in the Manweb service territory, which he points out declined by 25% in real  
9 terms between 1993/94 and 1998/99 (Richardson supplemental testimony, page  
10 15).

11 **Q. Please comment on the relevance of the Manweb experience to**  
12 **PacifiCorp.**

13 A. The situation at Manweb in 1995 was quite different from that currently  
14 faced by PacifiCorp. The distribution companies in the UK had been  
15 government organizations with well-known inefficiencies, and were in the  
16 process of being privatized. In contrast, PacifiCorp has been a privately- owned  
17 company subject to state price regulation and some degree of competition – and  
18 has already made substantial employment reductions over the past few years.  
19 Also, the geographic differences between Manweb and PacifiCorp are  
20 considerable. Manweb serves a fairly small and densely populated area in  
21 England while PacifiCorp serves a sprawling area including portions of five  
22 Western states that in total is larger than the entire UK. While the experience  
23 with Manweb has some relevance to what ScottishPower may do with  
24 PacifiCorp, the applicability is limited.

1 **Q. Is the 25% reduction in residential bills at Manweb an accurate**  
2 **figure?**

3 A. I am not certain. It does not agree with data from OFFER which shows a  
4 reduction of only 22% for Manweb between 1993/94 and 1998/99. I have not  
5 been able to establish the reason for this difference.

6 **Q. How does the amount of residential bill reduction for Manweb over**  
7 **this period compare with that experienced by customers of other electricity**  
8 **suppliers in the UK?**

9 A. The data published by OFFER showing a bill reduction for Manweb  
10 customers of 22% has analogous data for the other systems in the UK. These  
11 prices are summarized in Exhibit CCS-2.3. They show that most of the Public  
12 Electricity Suppliers in Great Britain had even greater average residential bill  
13 savings over this same five-year period, and that the average for England and  
14 Wales as a whole was 23%.

15 The Manweb experience is not exceptional, at least insofar as savings to  
16 residential customers is concerned.

17 **Q. Have you reviewed data on cost trends at Manweb and other**  
18 **systems in the UK?**

19 A. As far as I am aware, cost data analogous to the data on bill trends  
20 discussed above is not available. However, as discussed in Mr. Talbot's  
21 testimony, the trend in Manweb's returns on capital employed has been similar to



1 the trend for other Public Electricity Suppliers, supporting the idea that Manweb's  
2 costs have followed a trend similar to the other suppliers as well.

3 **Q. What has the trend been in ScottishPower's own residential prices in**  
4 **recent years?**

5 A. The data in Exhibit CCS-2.3 indicate that ScottishPower's current prices  
6 are among the highest in the UK, well above average – and that the bill  
7 reductions for residential customers have been lagging behind other companies.  
8 ScottishPower's typical residential bill decreased by only 18% over the recent  
9 five-year period during which the average decline for residential customers in  
10 Great Britain was 22%.

11 Similar data for the four-year period just prior to this (1989/90 to 1993/94) show  
12 that ScottishPower's average residential bill actually increased slightly in real  
13 terms (by 1%) while the general trend in Great Britain was downward (by 3%).

14 **Q. What do you conclude about ScottishPower's UK performance and**  
15 **its ability to transfer that performance to PacifiCorp?**

16 A. ScottishPower's performance, based upon the information described  
17 above, is adequate but not spectacular. Price reductions appear to be in line  
18 with what other UK providers have achieved. This does not indicate that the  
19 Commission and consumers in the U.S. should expect results that PacifiCorp  
20 could not achieve on its own.

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

1 A. Yes.

2