

1 Q. Please state your name.

2 A. My name is David L. Taylor. I am the Cost of Service Manager for PacifiCorp.

3 Q. Are you the same David L. Taylor that presented direct testimony in this case?

4 A. Yes I am.

5 Q. What is the purpose of your rebuttal testimony?

6 A. I will present an updated summary of the cost of service results that includes the  
7 stipulated revenue requirement adjustments in the case. Additionally I will rebut  
8 issues raised in direct testimony by Dr. Laura Nelson of the Division of Public  
9 Utilities, Mr. George Sterzinger and Mr. Anthony Yankel representing the  
10 Committee of Consumer Services, Dr. Charles Johnson representing the Salt Lake  
11 Community Action Program, Crossroads Urban Center and Utah Legislative  
12 Watch, Mr. Joseph Herz for the United States Executive Agencies.

13 Q. Please identify Exhibit UP&L\_\_1R (DLT-1R) and explain what it shows.

14 A. Exhibit UP&L\_\_1R (DLT-1R) is the summary table from PacifiCorp's year end  
15 September 2000 Class Cost of Service Study for the State of Utah. The  
16 Company's Cost of Service Study has been updated to include the revenue  
17 requirement adjustments incorporated in the stipulation between the Company, the  
18 Division, and the Committee and approved by the Commission on July 26, 2001.  
19 Page 1 presents results at the Company's year-end September 2000 Earned Rate  
20 of Return. Page 2 presents the results at the stipulated 11.0 percent Return on  
21 Equity.

22 Q. Please identify the specific areas of your rebuttal.

23 A. I will rebut the following specific issues:

1 Dr. Nelson's opposition to PacifiCorp's use of labor as the basis for the class  
2 allocation of A&G expenses.

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4 Mr. Sterzinger's suggestion that PacifiCorp present the unbundled cost-of-service  
5 results in a unit cost format and his opposition to the Revenue Credit Method used  
6 by the Company in the cost-of-service study.

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8 Mr. Anthony Yankel's modification to the load data for the irrigation class.

9

10 Mr. Herz's opposition to the use of a weighted demand allocation factor and lower  
11 than expected residential demands.

12

13 Dr. Johnson's characterization of low-income customers contributing less to the  
14 PacifiCorp peak than non low-income customers.

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16

17 **REBUTTAL ISSUES**

18 **Use of Labor to Allocate A&G Expenses**

19 Q. Why does Dr. Nelson oppose the Company's use of labor as the basis for class  
20 allocation of the costs for certain accounts?

21 A. Dr. Nelson opposes the use of labor because it is a change from the plant-based  
22 allocation used in previous cases. Dr. Nelson further argues that plant is used to  
23 allocate A&G expenses in the jurisdictional allocation.

24 Q. Do you agree with Dr. Nelson that class allocation should follow the procedures  
25 used in the jurisdictional allocation?

26 A. Generally yes. However, there are times when a procedure that works well for  
27 jurisdictional allocation may need to be refined for class allocation. In the  
28 company's study, only those accounts that clearly reflect costs associated with the  
29 company workforce are allocated using labor.

1 Q. Does the choice between plant and labor have a significant impact on the final  
2 results of the cost of service study?

3 A. No. Using plant rather than labor will produce a minor shift in cost responsibility  
4 between customer classes, about ¼ percent between residential and large  
5 industrial, less for most other classes. However, this shift is not large enough to  
6 alter the Company's revenue allocation or pricing design proposals.

7 **Functionalized Unit Costs**

8 Q. What is Mr. Sterzinger's proposal regarding unit cost data based upon results  
9 from the cost of service study?

10 A. He suggests that the Commission require the Company to present an analysis of  
11 the cost of service at the functional level by relevant billing unit.

12 Q. Does the Company prepare functional cost of service by billing unit?

13 A. Yes. The Company's cost of service model already includes spreadsheets that  
14 calculate functional unit costs by earned and target rates of return for each rate  
15 schedule; this model was made available to all rate case parties. A copy of the  
16 Functional Unit Costs is provided here as Exhibit UP&L\_\_.2R (DLT-2R).

17 **Classification/Allocation of Sales for Resale Revenue**

18 Q. Mr. Sterzinger recommends changing the classification of Sales for Resale  
19 revenue to be consistent with the classification used in the inter-jurisdictional  
20 allocation. Do you agree with this conclusion?

21 A. No. As I mentioned previously, there are times when a procedure that works well  
22 for jurisdictional allocation can benefit from a refinement when it is used for class

1 allocation. The cost of service treatment of Sales for Resale revenue is an  
2 example of this.

3 In the inter-jurisdictional allocation firm Sales for Resale revenues are allocated  
4 on the SG factor (the factor used to allocate generation capacity). Non-firm Sales  
5 for Resale revenues are allocated on the SE (energy) factor. Because a significant  
6 portion of firm sales consist of energy related costs, the Large Customer Group  
7 (LCG) and the Utah Industrial Energy Consumers (UIEC) have noted in previous  
8 cases, that sales-for-resale revenues were not allocated to customer classes on the  
9 same basis as the costs of making those sales thereby disadvantaging large  
10 industrial customers.

11 The same argument can be made for purchased power expenses. Firm purchased  
12 power expenses are also allocated on the SG factor in the inter-jurisdictional  
13 allocation even though there is a significant energy component to those purchases.  
14 Of course, the large industrials did not argue that a larger portion of purchased  
15 power expenses should be classified and allocated on the basis of energy. The  
16 Company's response was that it would be inappropriate to reclassify and  
17 reallocate the Sales for Resale revenue credit if you do not reclassify and  
18 reallocate the purchased power expense that has a similar cost basis. To address  
19 this issue the Company proposed that both sales for resale revenues and purchased  
20 power expense be classified and allocated in a consistent manner. While  
21 purchased power goes into the pool of total Company resources that is used to  
22 support total Company sales, including Sales for Resale, the magnitude of sales  
23 for resale and purchased power are generally about the same. Therefore if both

1 the Sales for Resale revenue credit and purchased power expense are split  
2 between demand and energy the same then classes are neither benefited nor  
3 disadvantaged by the allocation.

4 This particular issue was raised in Docket No. 97-035-01 and addressed by the  
5 Company and the Division at that time. The issue of classification and allocation  
6 of sales for resale revenue was also addressed by the Allocation Taskforce arising  
7 from that case. In the final report of the Allocation Taskforce, the Division  
8 supported the Company's procedure as being reasonable. Quoting from the  
9 Allocations Task Force Report to the Utah Public Service Commission dated  
10 December 16, 1999:

11 Early in the task force discussions, parties agreed with the principle that  
12 the sales for resale revenue should be allocated on the same basis as the  
13 cost of making the sales. The issue then became how this principle would  
14 be implemented. The Division's analysis in the last rate case was based on  
15 1997 data. For task force discussion, the Division updated their analysis  
16 using 1998 data (see Appendix). In the meantime, the Company had  
17 slightly changed the way the sales for resale revenue were allocated in the  
18 class cost of service study. The net result was that both the Division's  
19 1998 analysis and the Company's 1998 cost study results were very similar  
20 (60/40 versus 63/37 demand/energy split respectively). The Division now  
21 believes that the Company's current method is reasonable since the results  
22 are close and neither method is entirely accurate.

23  
24 Q. Mr. Sterzinger also criticizes the allocation of Sales for Resale revenue stating  
25 "Since Special Contracts are not assigned capacity costs related to making the  
26 Sales for Resale and do not pay a fully-allocated share of capacity costs, they  
27 should receive none of the revenue associated with wholesale sales." Is this  
28 statement accurate?

1 A. No, it is not. The special contracts included in the cost of service study are  
2 allocated a full share of embedded costs, including the cost of making wholesale  
3 sales, just like any other rate schedule. Because they are allocated their share of  
4 the costs associated with the sales for resale revenue credit, they are entitled to  
5 their allocated share of the revenue credits as well.

6 **Adjustment to Irrigation Class Loads**

7 Q. Mr. Anthony Yankel criticizes the Company's load research for the irrigation  
8 class and suggests an alternative method for estimating the class' contribution to  
9 the twelve monthly system coincident peaks and the weighted distribution peak.  
10 Is his suggestion appropriate?

11 A. No. Mr. Yankel suggests using the change in billing demand from one year to  
12 another to estimate the change in contribution to system coincident peak over the  
13 same time period. He then input his new loads into the cost of service study and  
14 determined that the irrigation class was paying in excess of cost of service. His  
15 approach is wrong for two reasons.

16 First, the approach is conceptually flawed. Using the change in billing demand  
17 from one year to another to estimate the change in contribution to system  
18 coincident peak over the same time period is inappropriate. An individual  
19 customer, or a customer class, can have significant swings in their contribution to  
20 system peak while their billing demands, or non-coincident peaks, remain  
21 relatively flat. This is because billing demand is driven in large part by the  
22 electrical equipment a customer owns. The contribution to the system peak is  
23 driven by when that equipment is operated. The more frequently the equipment

1 operates and the longer it runs the more likely that piece of equipment will be  
2 consuming electricity during the hour of system peak. This is particularly the case  
3 for irrigation customers.

4 Let's use a farmer with a 100 horsepower pump (approximately 75 kW) as an  
5 example. As Mr. Yankel reminds us there are many things, like temperature or  
6 rain fall, that affect how much water the farmer needs to pump onto his crops.  
7 However, whether the farmer needs to irrigate his crops every day of the month or  
8 only a few hours, he must turn on the pump and the billing demand will be 75  
9 kW. The more the pump runs, however, the more likely the pump will be running  
10 during the hour of system peak. In the case of our one pump, the contribution to  
11 system peak will either be 0 or 75 kW depending on whether or not it pumps  
12 during the hour of system peak. Multiply that by a hundred irrigators and their  
13 collective billing demand will be 7,500 kW. As individual pumps run longer,  
14 more of them will be pumping during the hour of system peak and their collective  
15 contribution to system peak will be greater.

16 In the comparison of the December 1998 and the September 2000 test periods, as  
17 Mr. Yankel points out, energy consumption for the irrigation class increased  
18 significantly more than did billing demand. This means that the pumps were  
19 running longer and were more likely to be running during the hours of system  
20 peak. As a result, It is expected that their contribution to system peak would  
21 increase by a larger percentage than their billing demands.

22 The second reason his adjustment to the irrigation class loads is wrong is that he  
23 understated the change in billing demand. Mr. Yankel's calculation compares the

1 billing demands for only one month from each year rather than using all twelve  
2 months. The sum of the twelve monthly billing demands increased from 365,210  
3 kW in 1999 to 499,015 kW for the September 2000 test period. Using all 12  
4 months produces a 37 percent increase in billing demand rather than the 21  
5 percent increase Mr. Yankel calculated using just one month. This results in a  
6 smaller peak load adjustment. Cost of service results that incorporate Mr.  
7 Yankel's load adjustment, as corrected, indicate that the irrigation class, although  
8 now closer to cost of service, is still earning below the state average return.  
9 The load adjustment should be completely rejected because it is conceptually  
10 flawed. Further, the improvement in cost of service results for the irrigation class  
11 that Mr. Yankel claims from this adjustment is overstated.

## 12 **Weighted Demand Allocation Factor**

13 Q. Mr. Herz concludes that the weighted demand / energy allocation factor is  
14 inappropriate because a portion of demand related costs are allocated according to  
15 energy use. Would you explain the reason why the Company uses this factor in  
16 the cost of service study?

17 A. PacifiCorp classifies production and transmission plant and non-fuel related  
18 expenses as 75 percent demand related and 25 percent energy related. The  
19 Company's goal is to supply the lowest total cost generation resources to meet our  
20 customers' needs. There are two objectives related to this:

- 21 1) To meet the maximum demands imposed upon the system, and
- 22 2) To provide energy throughout the year.

23



1 The configuration of the Company's generating units and purchased power  
2 agreements is designed to meet both of these objectives at the lowest total cost. If  
3 the Company was concerned exclusively with meeting peak demand it could  
4 invest in low capital cost generation resources specifically designed to meet  
5 peaking requirements. This strategy would result in higher overall costs due to  
6 the high operating costs required to meet the customers' energy requirements. As  
7 such, the Company's base load generating plants were installed and are currently  
8 operated not only to meet peak load requirements, but also to generate low cost  
9 kilowatt hours.

10 At the time of the Pacific Power / Utah Power merger, several studies were  
11 presented arguing different classifications positions. The PacifiCorp Inter-  
12 jurisdictional Taskforce on Allocation (PITA) participants agreed that the studies  
13 were inconclusive and that a reasonable and generally accepted solution was  
14 necessary. The 75/25 factor was selected, and approved by the Commission, as a  
15 reasonable basis to split the impact of changing classification methods from the  
16 pre-merger methods used by Pacific Power and Utah Power.

17 Q. In Mr. Herz's testimony, he states that the 75/25 demand/energy factor "results in  
18 an inequitable distribution of demand or fixed costs between the customer  
19 classes." Do you agree with this statement?

20 A. No. For the reasons stated above, I do not.

21 **Understated Residential Loads**

22 Q. Mr. Herz increases the load of the residential class by 10 percent. Does he  
23 provide justification for this adjustment?

1 A. Mr. Herz gives no analysis or support for his adjustment. His only justification is  
2 that “residential coincident demand inputs were lower than I expected would be  
3 the case.”

4 Q. Is there an explanation for this situation?

5 A. Yes, at least in part. In the previous case, 1998 Company load data results  
6 indicated the occurrence of four winter month evening system peaks. The current  
7 test year indicates two winter month evening peaks. As discussed in the last case,  
8 there is a significant impact on the residential class from evening versus morning  
9 peaks.

#### 10 **Lower Costs to Serve Low-Income Customers**

11 Q. Does the data presented by Dr. Johnson support his claim that low-income  
12 customers use less electricity than other residential customers?

13 A. No, it does not. Dr. Johnson’s claim is based on the comparison of the average  
14 annual energy consumption for a 12-month period. I believe this conclusion is  
15 erroneous. When comparing usage by individual energy groups using this same  
16 data, we find that almost one-half of the low-income customers have average  
17 energy consumption that is higher than non low-income customers. Clearly, the  
18 data is too minimal in quantity and narrow in depth to provide a basis for his  
19 claim.

20 Q. Dr. Johnson infers that low-income customers contribute less to the PacifiCorp  
21 peak than non low-income customers. Does he have any basis for his conclusion?

22 A. No. Dr. Johnson’s finding is based on a number of simplifying assumptions to  
23 support his conclusion. While he earlier assumed that usage is different, he now

1           assumes that the load shape of lower income customers is exactly the same as  
2           other customers. He also assumes that low-income customers' demand would be  
3           lower by exactly the same percentage as their energy. Last, he fails to account for  
4           the fact that any customer related expenses would be spread over fewer kWh,  
5           thereby increasing the average cost per kWh for these customers. Assumptions  
6           and inadequate data do not provide a sound foundation upon which to base  
7           customer rates.

8    Q.     Does this conclude your rebuttal testimony?

9    A.     Yes it does.