

1 **Q. Are you the same David L. Taylor that presented direct testimony in the revenue**
2 **requirement portion of this case?**

3 A. Yes, I am.

4 **Purpose of Testimony**

5 **Q. What is the purpose of this portion of your testimony?**

6 A. I will present PacifiCorp's functionalized Class Cost of Service Study based on
7 twelve month future test period ending March 31, 2006. This future test year
8 corresponds with the Company's Fiscal Year 2006 (FY06). I will also describe any
9 differences between this cost study and the studies filed previously with the Utah
10 Commission.

11 **Summary of Results**

12 **Q. Please identify Exhibit UP&L __ (DLT-6) and explain what it shows.**

13 A. Exhibit UP&L __ (DLT-6) is the summary table from PacifiCorp's Fiscal Year 2006
14 Class Cost of Service Study for the State of Utah. It is based on PacifiCorp's annual
15 results of operations for the State of Utah presented in the testimony of Mr. Weston.
16 It summarizes, both by customer group and by function, the results of the Fiscal Year
17 2006 cost study. Page 1 presents results at the Company's March 2006 Rate of
18 Return assuming current rate levels. Page 2 shows the results using the return
19 provided by the \$111 million requested price increase.

20 **Q. Please identify Exhibit UP&L __ (DLT-7) and explain what it shows.**

21 A. Exhibit UP&L __ (DLT-7) shows the cost of service results in more detail by class
22 and by function. Page 1 summarizes the total cost of service summary by class and
23 pages 2 through 6 contain a summary by class for each major function.

1 **Changes in Cost of Service Study**

2 **Q. Are there any differences between this cost study and the study filed previously**
3 **with the Utah Commission in Docket 03-2035-02?**

4 A. Yes. There are three areas of differences. First, the filing is based on a future test
5 period while the previous cases were filed using historical test periods. Second, cost
6 of service results are shown for a proposed new class of customers, Schedule No. 8.
7 Mr. Griffith will be introducing proposed Schedule No. 8 in the Rate Design Filing in
8 this docket. Third, the methodology used in this study for the classification and
9 allocation of generation and transmission costs is consistent with the Revised
10 Protocol allocation methodology I discussed in my direct testimony in the revenue
11 requirement phase of this case.

12 **Q. How were the class loads developed for the forecasted test period?**

13 A. The forecasted number of customers and class energy usage, as well as the monthly
14 day and hour of system peak, for the Fiscal Year 2006 test period are based on the
15 Company's load forecast as described in Mr. Davis' direct testimony. Customer class
16 contributions to monthly system peaks are based on historical hourly load research
17 data which was matched against the forecasted hour of monthly system peaks and
18 then extrapolated to the forecasted class energy usage for the test period.

19 **Q. Please describe the cost of service for the proposed new Schedule No. 8.**

20 A. The cost of service study identifies a separate customer class which includes the test
21 period costs and revenues for the proposed Schedule No. 8. As Mr. Griffith will
22 describe in more detail in his direct testimony, the proposed Schedule No. 8 is for
23 general service customers, 1,000 kW and over, that take distribution voltage service.

1 These customers were previously served under Schedule No. 6. The forecasted test
2 year customers, energy usage, and contributions to Company peaks for the new
3 schedule were identified and separated from the remaining Schedule No. 6 customers.

4 **Revised Protocol**

5 **Q. How has the Revised Protocol methodology impacted the Cost of Service Study?**

6 A. The Revised Protocol methodology identifies four categories of Resources: Seasonal
7 Resources, Regional Resources, State Resources, and System Resources.

8 Additionally, the Revised Protocol uses three Embedded Cost Differential
9 Adjustments. Only the seasonally weighted allocation of the Seasonal Resources and
10 the Embedded Cost Differential Adjustments have an impact on the class COS study.

11 **Q. Is the classification of seasonal resources different from that of other resources?**

12 A. No. All resources are classified as 75 percent Demand and 25 percent Energy.

13 **Q. How are seasonal resources allocated differently from other resources?**

14 A. The allocation methodology for seasonal resources was described in the revenue
15 requirement portion of my testimony. The seasonal weightings for class allocations
16 work the same way as I described for states in the revenue requirement portion of my
17 testimony.

18 **Q. How are the Embedded Cost Differential Adjustments allocated to the customer
19 classes?**

20 A. The Embedded Cost Differential Adjustments, both costs and credits, are allocated on
21 Factor 10 (75% Demand and 25% Energy), the same basis as the underlying costs of
22 the resources.

1 **Q. Please identify Exhibit UP&L __ (DLT-8) and explain what it shows.**

2 A. As agreed to in the Stipulation on scheduling and test period issues filed on July
3 30, 2004, this exhibit provides informational cost of service results using
4 previously adopted methods. Page one of Exhibit UP&L __ (DLT-8) shows the
5 cost of service results calculated using the Utah Fiscal Year 2006 Results of
6 Operations under the rolled-in jurisdictional allocation method and using the cost
7 of service methodology used in previous cases. As required in the Stipulation,
8 page two of this exhibit shows the rolled-in cost of service results multiplied by
9 101.5 percent.

10 **Description of Procedures**

11 **Q. Please explain how the Cost of Service Study was developed.**

12 A. Using the March 2006 annual results of operations for the State of Utah filed by
13 Mr. Weston, the study employs a three-step process generally referred to as
14 functionalization, classification, and allocation. These three steps recognize the
15 way a utility provides electrical service and assigns cost responsibility to the
16 groups of customers for whom those costs were incurred.

17 **Q. Please describe functionalization and how it is employed in the Cost of
18 Service Study.**

19 A. Functionalization is the process of separating expenses and rate base items
20 according to utility function. The production function consists of the costs
21 associated with power generation, including coal mining, and wholesale
22 purchases. The transmission function includes the costs associated with the high
23 voltage system utilized for the bulk transmission of power from the generation

1 source and interconnected utilities to the load centers. The distribution function
2 includes the costs associated with all the facilities that are necessary to connect
3 individual customers to the transmission system. This includes distribution
4 substations, poles and wires, line transformers, service drops and meters. The
5 retail services function includes the costs of meter reading, billing, collections and
6 customer service. The miscellaneous function includes costs associated with
7 Demand Side Management, franchise taxes, regulatory expenses, and other
8 miscellaneous expenses.

9 **Q. Describe classification and explain how PacifiCorp uses it in the cost of**
10 **service study.**

11 A. Classification identifies the component of utility service being provided. The
12 Company provides, and customers purchase, service that includes at least three
13 different components; demand-related, energy-related, and customer-related.
14 Demand-related costs are incurred by the Company to meet the maximum demand
15 imposed on generating units, transmission lines, and distribution facilities.
16 Energy-related costs vary with the output of a kWh of electricity. Customer-
17 related costs are driven by the number of customers served.

18 **Q. How does PacifiCorp determine cost responsibility between customer**
19 **groups?**

20 A. After the costs have been functionalized and classified, the next step is to allocate
21 them among the customer classes. This is achieved by the use of allocation
22 factors that specify each class' share of a particular cost driver such as system
23 peak demand, energy consumed, or number of customers. The appropriate

1 allocation factor is then applied to the respective cost element to determine each
2 class' share of cost. A detailed description of PacifiCorp's functionalization,
3 classification and allocation procedures and the supporting calculations for the
4 allocation factors are contained in my workpapers.

5 **Q. How are generation and transmission costs apportioned among customer**
6 **classes?**

7 A. Production and transmission plant and non-fuel related expenses are classified as
8 75 percent demand related and 25 percent energy-related. For non-seasonal
9 resources, the demand-related portion is allocated using 12 monthly peaks
10 coincident with the PacifiCorp system firm peak. The energy portion is allocated
11 using class MWhs adjusted for losses to generation level. As previously
12 discussed, for Seasonal Resources the process is very similar. The only difference
13 is that prior to summing each class' twelve monthly Coincident Peaks or monthly
14 energy usage, the monthly values are weighted by the monthly portion of the total
15 annual energy generated or delivered to PacifiCorp by the Seasonal Resource.

16 **Q. Are distribution costs determined using the same methodology?**

17 A. No. Distribution costs are classified as either demand related or customer related.
18 In this study only meters and services are considered as customer related with all
19 other costs considered demand related. Distribution substations and primary lines
20 are allocated using the weighted monthly coincident distribution peaks.
21 Distribution line transformers and secondary lines are allocated using the
22 weighted NCP method. Services costs are allocated to secondary voltage delivery
23 customers only. The allocation factor is developed using the installed cost of new

1 services for different types of customers. Meter costs are allocated to all
2 customers. The meter allocation factor is developed using the installed costs of
3 new metering equipment for different types of customers.

4 **Q. Please explain how customer accounting, customer service, and sales**
5 **expenses are allocated.**

6 A. Customer accounting expenses are allocated to classes using weighted customer
7 factors. The weightings reflect the resources required to perform such activities as
8 meter reading, billing, and collections for different types of customers. Customer
9 service expenses are allocated on the number of customers in each class.

10 **Q. How are administrative & general expenses, general plant and intangible**
11 **plant allocated by PacifiCorp?**

12 A. Most general plant, intangible plant, and administrative and general expenses are
13 functionalized and allocated to classes based on generation, transmission, and
14 distribution plant. Employee pensions and benefits have been assigned to
15 functions and classes on the basis of labor. Costs that have been identified as
16 supporting customer systems are considered part of the retail services function and
17 have been allocated using customer factors. Coal mine plant is allocated on the
18 energy factor.

19 **Q. Are costs and revenues associated with wholesale and non-tariff contracts**
20 **included in the cost of service study?**

21 A. No costs are assigned to wholesale contracts. The revenues from these
22 transactions are treated as revenue credits and are allocated to customer groups
23 using appropriate allocation factors. Other electric revenues are also treated as

1 revenue credits. Revenue credits reduce the revenue requirement that is to be
2 collected from firm retail customers.

3 **Special Contracts**

4 **Q. Have you included cost of service results for the Utah special contracts?**

5 A. Yes. Consistent with both the treatment in the last case and the Revised Protocol,
6 the loads and revenues associated with service to special contract customers are
7 included as part of the jurisdictional allocation and included in the revenue
8 requirement. The loads and revenues for the special contract customers, with the
9 exception of partial requirements service, are also included in the Cost of Service
10 Study.

11 **Q. How does the study treat the economic curtailments associated with the
12 service to US Magnesium?**

13 A. During the base test period (12 months ending March 2004) US Magnesium was
14 subject to economic curtailment during the months of June through September.
15 The current contract between US Magnesium and PacifiCorp expires December
16 31, 2004. On a going-forward basis, any curtailment provisions are contingent on
17 the new contract approved by the Utah Commission. Since any changes to the
18 contract are unknown at this time, the Cost of Service Study and the Revenue
19 Requirement calculations are based on the current contract provisions. The
20 current treatment is that US Magnesium's contributions to system peak and
21 energy consumption during the June through September curtailment periods are
22 removed from the study. Additionally, any buy through purchased power costs
23 and the corresponding revenue during the economic curtailment periods are also

1 removed.

2 **Partial Requirements Service**

3 **Q. Does the Cost of Service Study include results for partial requirements or**
4 **back-up service customers?**

5 A. No. Cost of service results were not calculated for customers taking partial
6 requirements or back-up service customers. This includes one special contract
7 customer and customers taking service on Schedule No. 31.

8 **Q. Why are these customers removed from the cost of service study?**

9 A. Partial requirements or back-up service customers are not included in the
10 embedded cost of service study because they do not lend themselves well to this
11 type of analysis. These customers usually have very sporadic loads from year to
12 year producing volatile cost of service results depending on whether or not service
13 is required during the hour of monthly system peak. It is the Company's practice
14 to derive prices for this type of service from the prices and costs for full
15 requirements service.

16 **Work Papers**

17 **Q. Have you included your workpapers?**

18 A. Yes. Work papers showing the complete functionalized results of operations and
19 class cost of service detail are included as Exhibit UP&L __ (DLT-9). Also
20 included in the workpapers is a detailed narrative describing the Company's
21 functionalization, classification and allocation procedures.

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

23 A. Yes it does.