

1 **Q. Please state your name, business address and present position with**
2 **PacifiCorp (the Company).**

3 A. My name is Mark E. Tucker. My business address is 825 NE Multnomah St.,
4 Suite 2000, Portland, Oregon. I am currently employed as a Senior Cost of
5 Service and Pricing Analyst in the Regulation Department.

6 **Qualifications**

7 **Q. Briefly describe your education and business experience.**

8 A. I graduated magna cum laude with a B.A. in English Education from Western
9 Oregon University in 1992, and I received an MBA from Washington State
10 University in 2007. In addition, I have attended various educational, professional
11 and electric industry seminars during my career at the Company. I joined the
12 Company in 2001 and have been working in the Regulation Department since
13 2003.

14 **Q. What are your responsibilities in this proceeding?**

15 A. I am responsible for the development of the class cost of service study used in this
16 proceeding.

17 **Q. Have you testified in previous regulatory proceedings?**

18 A. Yes, I have previously filed testimony on behalf of the Company in the state of
19 Idaho.

20 **Purpose of Testimony**

21 **Q. What is the purpose of your testimony?**

22 A. I present the Company's functionalized class cost of service study based on the
23 historical twelve month period ending June 30, 2007, adjusted for known and

1 measurable changes through June 30, 2008 (June 2008 Pro Forma).

2 **Q. Please summarize your testimony.**

3 A. My testimony summarizes the results of the class cost of service study, and
4 indicates that these results are consistent with the results filed in the Company's
5 last general rate case, Docket UE-061546 (2006 Rate Case). The present study
6 utilizes the West Control Area allocation methodology approved in the 2006 Rate
7 Case.

8 **Washington Class Cost of Service**

9 Summary of Results

10 **Q. Please identify Exhibit No.__(MET-2).**

11 A. Exhibit No.__(MET-2) is the summary table from PacifiCorp's class cost of
12 service study for the State of Washington. It is based on PacifiCorp's annual
13 results of operations for the State of Washington presented in the testimony of Mr.
14 Dalley. It summarizes, both by customer group and by function, the results of the
15 cost of service study. Page 1 presents results at the Company's June 2008 Pro
16 Forma earned rate of return. Page 2 presents the results using the rate of return
17 provided by the \$34.9 million requested price increase.

18 **Q. Please explain the results of the cost of service study.**

19 A. Columns L and M of the cost of service summary tables show the total dollar and
20 percentage increases required by each customer class in order to reach their full
21 cost of service. Line 1 shows the Residential class needs an increase roughly
22 equal to the overall average of 14.6 percent in order to reach full cost of service.
23 As shown on lines 2 and 3, Small General Service and Large General Service <

1 1,000 kW customers require increases somewhat smaller than the overall average,
2 about 4 percent and 12 percent, respectively. Large General Service > 1,000 kW
3 and Agricultural Pumping Service customers require increases that are higher than
4 the overall average, 26.0 percent and 24.1 percent, respectively, as shown on lines
5 4 and 5. Street Lighting customers are shown on line 6; the cost of service results
6 indicate that these customers are currently paying slightly more than full cost of
7 service. Totals for the entire state are shown on line 7.

8 **Q. Are these results consistent with past results?**

9 A. Yes, these results are similar to the results of the cost of service study filed in the
10 2006 Rate Case. The cost of service summary filed in that case showed that the
11 Residential class required an increase just slightly above the overall average;
12 Small General Service and Large General Service < 1,000 kW required increases
13 below the average; and Large General Service > 1,000 kW and Agricultural
14 Pumping Service customers required increases higher than the average. This
15 shape is very similar to what we see in the current case.

16 **Q. Please identify Exhibit No.__(MET-3) and explain what it shows.**

17 A. Exhibit No.__(MET-3) shows the cost of service results in more detail.

18 **Q. Does the cost of service study filed in this case follow the methodology filed in**
19 **the 2006 Rate Case?**

20 A. Yes. The cost of service study presented in this docket follows the same
21 methodology that was used in the previous case.

1 **Description of Procedures**

2 **Q. Please explain how the cost of service study was developed.**

3 A. Using the annual results of operations for the State of Washington filed by Mr.
4 Dalley, the study employs the three-step functionalization, classification, and
5 allocation process.

6 **Q. How is the functionalization process employed in the cost of service study?**

7 A. Functionalization is the process of separating expenses and rate base items
8 according to utility function. The production function consists of the costs
9 associated with power generation, including coal mining, and wholesale
10 purchases. The transmission function includes the costs associated with the high
11 voltage system utilized for the bulk transmission of power from the generation
12 source and interconnected utilities to the load centers. The distribution function
13 includes the costs associated with all the facilities that are necessary to connect
14 individual customers to the transmission system. This includes distribution
15 substations, poles and wires, line transformers, service drops and meters. The
16 retail services function includes the costs of meter reading, billing, collections and
17 customer service. The miscellaneous function includes costs associated with
18 demand side management, regulatory expenses, and other miscellaneous
19 expenses.

20 **Q. Describe how the classification process is used in the cost of service study.**

21 A. Classification identifies the component of utility service being provided. The
22 Company provides, and its customers purchase, service that includes at least three
23 different components: demand-related, energy-related, and customer-related

1 components. Demand-related costs are incurred by the Company to meet the
2 maximum demand imposed on generating units, transmission lines, and
3 distribution facilities. Energy-related costs vary with the output of a kWh of
4 electricity. Customer-related costs are driven by the number of customers served.

5 **Q. How does PacifiCorp determine cost responsibility among customer classes?**

6 A. After the costs have been functionalized and classified, the next step is to allocate
7 them among the customer classes. This is achieved by the use of allocation
8 factors that specify each class' share of a particular cost driver, such as West
9 Control Area peak demand, energy consumed, or number of customers. The
10 appropriate allocation factor is then applied to the respective cost element to
11 determine each class' share of cost. A detailed description of PacifiCorp's
12 functionalization, classification and allocation procedures and the supporting
13 calculations for the allocation factors are contained in my workpapers.

14 **Q. How are generation and transmission costs classified between demand
15 energy components?**

16 A. All production and transmission plant and expenses, including fuel and purchased
17 power, are classified using a peak credit method where the cost of a current
18 peaking resource (Simple Cycle Combustion Turbine, or SCCT) is compared to
19 the cost of a current baseload resource (Combined Cycle Combustion Turbine, or
20 CCCT). In this method, the SCCT is deemed to provide benefits in addition to
21 pure peaking capability, and therefore only one-half of the fixed costs are
22 considered in determining the demand-related component. All other costs are
23 considered energy related.

1 **Q. Please identify Exhibit No. ___(MET-4) and explain what it shows.**

2 A. Exhibit No.__(MET-4) shows the peak credit calculation that determined the
3 demand and energy classification percentages used for generation and
4 transmission costs in the study. In the calculation, one-half of the fixed costs of
5 an SCCT plus the expected operating costs for 200 hours become the numerator.
6 The denominator is the total cost, both fixed and variable, of a CCCT consistent
7 with the Company's resource planning and avoided cost calculations. This
8 calculation produces a 12 percent demand-related classification with the
9 remaining 88 percent the energy-related classification of costs. In the Company's
10 previous rate case, the peak credit calculation resulted in a classification split of
11 16 percent demand related and 84 percent energy related. This change indicates
12 that we are seeing a higher percentage of energy-related costs and a lower
13 percentage of demand-related costs in this case as compared to the previous case.

14 The demand-related portion is allocated using class loads coincident with
15 PacifiCorp's highest 100 summer (April-October) and highest 100 winter
16 (November-March) hourly retail West Control Area peak loads, consistent with
17 the Company's past practice. The energy-related portion is allocated using class
18 annual MWh's adjusted for losses to generation level.

19 **Q. How are distribution costs classified and allocated?**

20 A. Distribution costs are classified as either demand-related or customer-related. In
21 this study only meters and services are considered as customer-related, with all
22 other costs considered demand-related. Distribution substations and primary lines
23 are allocated using the maximum rate schedule peaks (also identified as class non-

1 coincident peaks). Distribution line transformers are allocated using the weighted
2 non-coincident peak (NCP) method. The costs of secondary lines are also
3 allocated using the weighted NCP method, but are only allocated to residential
4 and small general service customers where line transformers are jointly used by
5 more than one customer. Services costs are allocated to secondary voltage
6 delivery customers only. The allocation factor is developed using the installed
7 cost of new services for different types of customers. Meter costs are allocated to
8 all customers. The meter allocation factor is developed using the installed costs
9 of new metering equipment for different types of customers.

10 **Q. Please explain how customer accounting and customer service expenses are**
11 **allocated.**

12 A. Customer accounting expenses are allocated to classes using weighted customer
13 factors. The weightings reflect the resources required to perform such activities
14 as meter reading, billing, and collections for different types of customers. DSM
15 expenditures are allocated on the same basis as generation costs. Other customer
16 service expenses are allocated on the number of customers in each class.

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

19 A. Most general plant, intangible plant, and administrative and general expenses are
20 functionalized and allocated to classes based on generation, transmission, and
21 distribution plant. Employee Pensions and Benefits have been assigned to
22 functions and classes on the basis of labor. Costs identified as supporting
23 customer systems are considered part of the retail services function and have been

1 allocated using customer factors. Coal mine plant is allocated consistent with
2 generation and transmission resources.

3 **Q. Are costs and revenues associated with wholesale contracts included in the**
4 **cost of service study?**

5 A. No costs are assigned to wholesale contracts. The revenues from these
6 transactions are treated as revenue credits and are allocated to customer groups
7 using appropriate allocation factors. Other electric revenues are also treated as
8 revenue credits. Revenue credits reduce the revenue requirement that is to be
9 collected from firm retail customers.

10 **Partial Requirements Service**

11 **Q. Does the cost of service study include results for partial requirements service**
12 **customers?**

13 A. No. Cost of service results are not calculated for partial requirements service
14 customers. The Company has only one partial requirements customer in
15 Washington.

16 **Q. Why was the one partial requirements customer removed from the cost of**
17 **service study?**

18 A. Partial requirements customers are not included in the embedded cost of service
19 study because they do not lend themselves well to this type of analysis. These
20 customers usually have very sporadic loads from year to year, producing volatile
21 cost of service results depending on whether or not service is required during the
22 West Control Area peak hours. It is the Company's practice to derive prices for
23 this type of service from the prices and costs for full requirements service. The

1 revenues from partial requirements service are allocated back to other classes as
2 revenue credits.

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

4 A. Yes. My workpapers are included as Exhibit No.____(MET-5). Tab 1 of this
5 exhibit is a detailed narrative describing the Company's functionalization,
6 classification and allocation procedures. Tab 2 is the complete functionalized
7 results of operations. Tab 3 shows the functionalization factors used in this case.
8 Tabs 4 through 6 show the class cost of service detail.

9 **Q. Does this conclude your direct testimony?**

10 A. Yes.