



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

3 A. My name is C. Craig Paice. My business address is 825 NE Multnomah, Suite  
4 2000, Portland, Oregon 97232, and I am currently employed as a Regulatory  
5 Consultant in the Regulation Department.

6 **Q. Briefly describe your educational and professional background.**

7 A. I received a Bachelor of Science Degree in Business Management from Brigham  
8 Young University in 1976. I have also attended various educational, professional  
9 and electric industry seminars during my career with the Company. I have been  
10 employed by PacifiCorp since the merger in 1989. Prior to that time, I was  
11 employed by Utah Power & Light Company beginning in 1978 holding various  
12 positions in the accounting, customer service, and regulatory areas.

13 **Q. What are your responsibilities?**

14 A. My primary responsibilities are to prepare, present, and explain the results of the  
15 Company's cost of service studies to regulators and interested parties in  
16 jurisdictions where PacifiCorp provides retail electric service.

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

18 A. Yes, I have previously filed testimony on behalf of the Company in the states of  
19 California and Utah.

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

21 A. I will present the Company's functionalized class cost of service study based on  
22 the historical twelve-month period ending June 30, 2008.

1 **Class Cost of Service Summary**

2 **Q. Please identify Exhibit No.\_\_(CCP-2) and explain what it shows.**

3 A. Exhibit No.\_\_(CCP-2) is the summary table from PacifiCorp's class cost of  
4 service study for the State of Washington. The cost of service study is based on  
5 PacifiCorp's annual results of operations for the State of Washington presented in  
6 the direct testimony of Company witness Mr. R. Bryce Dalley. The study  
7 summarizes, both by customer group and by function, the results of the cost of  
8 service study. Page 1 presents results at the Company's June 2008 earned rate of  
9 return. Page 2 presents the results using the rate of return provided by the \$38.5  
10 million requested price increase.

11 **Q. Please identify Exhibit No.\_\_(CCP-3) and explain what it shows.**

12 A. Exhibit No.\_\_(CCP-3) shows the cost of service results in more detail by class  
13 and by function. Page 1 summarizes the total cost of service summary by class  
14 and pages 2 through 6 contain a summary by class for each major function.

15 **Cost of Service Methodology**

16 **Q. Does the cost of service study filed in this case follow the methodology**  
17 **presented in the Company's 2008 Washington general rate case (Docket UE-**  
18 **080220) ("2008 Rate Case").**

19 A. Yes, the methodology used in development of the cost of service study is the  
20 same as used in the 2008 Rate Case (i.e. West Control Area allocation method  
21 initially approved in Docket UE-061546) with a few exceptions. Several  
22 modifications were made to the cost of service study to develop results for an  
23 additional level of service for Schedule 48T offered to any customer whose

1 demand exceeds 30,000 kW (with primary delivery voltage service from a  
2 company-owned distribution substation dedicated to only that customer) as  
3 discussed in Company witness Mr. William R. Griffith's direct testimony.

4 **Q. Please describe modifications made to the cost of service study.**

5 A. Based on discussion with engineering and field personnel, an analysis was  
6 performed to determine differing service characteristics between a customer  
7 qualifying for this level of service under Schedule 48T (>30,000 kW with  
8 company-owned dedicated substation) and all other Schedule 48T customers. The  
9 analysis showed that a customer qualifying for this level of service under  
10 Schedule 48T was responsible for only the following Distribution Plant account  
11 costs:

- 12 • a direct assigned portion of Accounts 362 (Station Equipment) and 370  
13 (Meters).
- 14 • an allocated portion of Account 361 (Structures and Improvements) using  
15 distribution allocation factor F20.

16 Other Schedule 48T customers are responsible for:

- 17 • allocated primary demand-related portions of Accounts 360 through 367.
- 18 • allocated portions of Accounts 368-370.

19 The cost of service study reflects these findings and develops two new distribution  
20 allocation factors, F20A and F60A. Factor F20A allocates substation and primary  
21 line Accounts 360, 362 (non-assigned), and 364-367. Factor F60A allocates meters  
22 Account 370 (non-assigned). These new factors were developed the same as  
23 allocation factors F20 and F60 but exclude the Schedule 48T service level described

1 above. This analysis appropriately reflects cost causation associated with this level  
2 of service for Schedule 48T. A description of cost of service procedures, including  
3 these revisions, is contained in Exhibit No.\_\_(CCP-5), Tab 1, Pages 8-9.

#### 4 **Description of Procedures**

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

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

9 **Q. Please describe functionalization and how it is employed in the cost of service  
10 study?**

11 A. Functionalization is the process of separating expenses and rate base items  
12 according to five utility functions – production, transmission, distribution, retail  
13 and miscellaneous.

- 14 • The production function consists of the costs associated with power  
15 generation, including coal mining, and wholesale purchases.
- 16 • The transmission function includes the costs associated with the high voltage  
17 system utilized for the bulk transmission of power from the generation source  
18 and interconnected utilities to the load centers.
- 19 • The distribution function includes the costs associated with all the facilities  
20 that are necessary to connect individual customers to the transmission system.  
21 This includes distribution substations, poles and wires, line transformers,  
22 service drops and meters.
- 23 • The retail services function includes the costs of meter reading, billing,

1 collections and customer service.

- 2 • The miscellaneous function includes costs associated with demand-side  
3 management (DSM), regulatory expenses, and other miscellaneous expenses.

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

5 A. Classification identifies the component of utility service being provided. The  
6 Company provides and customers purchase service that includes at least three  
7 different components: demand-related, energy-related, and customer-related  
8 components. Demand-related costs are incurred by the Company to meet the  
9 maximum demand imposed on generating units, transmission lines, and  
10 distribution facilities. Energy-related costs vary with the output of a kilowatt hour  
11 of electricity. Customer-related costs are driven by the number of customers  
12 served.

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

14 A. After the costs have been functionalized and classified, the next step is to allocate  
15 them among the customer classes. This is achieved by the use of allocation  
16 factors that specify each class' share of a particular cost driver, such as west  
17 control area peak demand, energy consumed, or number of customers. The  
18 appropriate allocation factor is then applied to the respective cost element to  
19 determine each class' share of cost. A detailed description of PacifiCorp's  
20 functionalization, classification and allocation procedures and the supporting  
21 calculations for the allocation factors are contained in my work papers.

1 **Q. How are generation and transmission costs classified between demand**  
2 **energy components?**

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

11 **Q. Please identify Exhibit No.\_\_(CCP-4) and explain what it shows.**

12 A. Exhibit No.\_\_(CCP-4) shows the peak credit calculation that determined the  
13 demand and energy classification percentages used for generation and  
14 transmission costs in the study. In the calculation, one-half of the fixed costs of  
15 an SCCT plus the expected operating costs for 200 hours become the numerator.  
16 The denominator is the total cost, both fixed and variable, of a CCCT consistent  
17 with the Company's resource planning and avoided cost calculations. This  
18 calculation produces a 12 percent demand-related classification with the  
19 remaining 88 percent the energy-related classification of costs. In the Company's  
20 2008 Rate Case, the peak credit calculation resulted in the same classification  
21 split.

22 The demand-related portion is allocated using class loads coincident with  
23 PacifiCorp's highest 100 summer (April-October) and highest 100 winter

1 (November-March) hourly retail west control area peak loads, consistent with the  
2 Company's past practice. The energy-related portion is allocated using class  
3 annual megawatt hours adjusted for losses to generation level.

4 **Q. How are the distribution costs classified and allocated?**

5 A. Distribution costs are classified as either demand-related or customer-related. In  
6 this study only meters and services are considered as customer-related, with all  
7 other costs considered demand-related. Distribution substations and primary lines  
8 are allocated using the maximum rate schedule peaks (also identified as class non-  
9 coincident peaks). Distribution line transformers are allocated using the weighted  
10 non-coincident peak (NCP) method. The costs of secondary lines are also  
11 allocated using the weighted NCP method, but are only allocated to residential  
12 and small general service customers where line transformers are jointly used by  
13 more than one customer. Services costs are allocated to secondary voltage  
14 delivery customers only. The allocation factor is developed using the installed  
15 cost of new services for different types of customers. Meter costs are allocated to  
16 all customers. The meter allocation factor is developed using the installed costs  
17 of new metering equipment for different types of customers.

18 **Q. Please explain how customer accounting and customer service expenses are**  
19 **allocated.**

20 A. Customer accounting expenses are allocated to classes using weighted customer  
21 factors. The weightings reflect the resources required to perform such activities  
22 as meter reading, billing, and collections for different types of customers. DSM  
23 expenditures are allocated on the same basis as generation costs. Other customer



1 service expenses are allocated on the number of customers in each class.

2 **Q. How are administrative and general expenses, general plant and intangible**  
3 **plant allocated by PacifiCorp?**

4 A. Most general plant, intangible plant, and administrative and general expenses are  
5 functionalized and allocated to classes based on generation, transmission, and  
6 distribution plant. Employee pensions and benefits have been assigned to  
7 functions and classes on the basis of labor. Costs identified as supporting  
8 customer systems are considered part of the retail services function and have been  
9 allocated using customer factors. Coal mine plant is allocated consistent with  
10 generation and transmission resources.

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

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

18 **Partial Requirements Service**

19 **Q. Does the cost of service study include results for partial requirements**  
20 **service?**

21 A. No. The partial requirement customer served by PacifiCorp in the state of  
22 Washington is not included in the embedded cost of service study because they do  
23 not lend themselves well to this type of analysis. This customer usually has very

1 sporadic loads from year to year, producing volatile cost of service results  
2 depending on whether or not service is required during the west control area peak  
3 hours. The Company's practice is to derive prices for this type of service from  
4 the prices and costs for full requirements service. Revenue from partial  
5 requirement service is allocated back to other classes as a revenue credit.

6 **Work papers**

7 **Q. Have you included your work papers?**

8 A. My work papers are included as Exhibit No. \_\_\_(CCP-5). Tab 1 of this exhibit is  
9 a detailed narrative describing the Company's functionalization, classification and  
10 allocation procedures. Tab 2 is the complete functionalized results of operations.  
11 Tab 3 shows the functionalization factors used in this case. Tabs 4 through 5  
12 show the class cost of service detail.

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

14 A. Yes.