

1 **Q. Please State your name, business address and position with PacifiCorp (“the**
2 **Company.”)**

3 A. My name is Karl D. Anderberg. My business address is 825 NE Multnomah, Suite
4 300, Portland, Oregon 97232, and I am currently employed as the Cost of Service
5 Manager in PacifiCorp’s Regulation Department.

6 **Qualifications**

7 **Q. Please briefly describe your education and business experience.**

8 A. I received a Bachelor of Science Degree in Accounting from the University of Utah in
9 1978. In addition, I have attended various educational, professional and electric
10 industry seminars during my career at the Company. I am a licensed Certified Public
11 Accountant in the State of Utah. I joined the Company in 1985, and have held
12 various accounting and regulatory positions prior to assuming my current
13 responsibilities.

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

15 A. My primary responsibilities are managing and overseeing the development and
16 reporting of the class cost of service studies in the six jurisdictions in which
17 PacifiCorp provides retail electric service.

18 **Q. Have you appeared as a witness in previous regulatory proceedings?**

19 A. Yes. I have previously appeared as a witness in Oregon and Washington.

20 **Purpose of Testimony**

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

22 A. I will present PacifiCorp’s functionalized Class Cost of Service Study based on the
23 twelve month future test period ending September 30, 2007. I will describe the

24 differences between this cost study and the previous cost study filed with the Utah
25 Commission (Docket No. 04-35-42).

26 **Summary of Results**

27 **Q. Please identify Exhibit UP&L___(KDA-1) and explain what it shows.**

28 A. Exhibit UP&L___(KDA-1) is the summary table from PacifiCorp's Twelve Months
29 Ending September 2007 Class Cost of Service Study for the State of Utah. It is based
30 on PacifiCorp's annual results of operations for the State of Utah as presented in the
31 testimony of Mr. Weston. It summarizes, both by customer group and by function,
32 the results of the cost study for the twelve months ending September 2007. Page 1
33 presents the results at the Company's September 2007 Rate of Return assuming
34 current rate levels. Page 2 shows the results using the return provided by the \$197.2
35 million requested price increase.

36 **Q. Please identify Exhibit UP&L___(KDA-2) and explain what it shows.**

37 A. Exhibit UP&L___(KDA-2) shows the cost of service results in more detail by class
38 and by function. Page 1 summarizes the total cost of service summary by class and
39 pages 2 through 6 contain a summary by class for each major function.

40 **Changes in Cost of Service Study**

41 **Q. Are there any differences between this cost study and the study filed previously**
42 **with the Utah Commission in Docket No. 04-035-42?**

43 A. Yes. There are two differences. First, the allocation of generation costs and net
44 power costs have been modified to reflect the impact of seasonal cost and load
45 differences in the cost of service study. This is based on Proposal #9 from the
46 December 15, 2005 Utah Cost of Service and Rate Design Taskforce Report to the

47 Utah Public Service Commission. Mr. Taylor discusses the background and the
48 reasons for both of these changes in his direct testimony.

49 Second, a new factor has been created to allocate the Committee of Consumer
50 Services (CCS) Regulatory Expenses. The new factor allocates the CCS Regulatory
51 expenses of \$657,000 to rate schedules 1, 10, 23 and 25 which are the customer
52 groups represented by the CCS.

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

54 A. The forecasted number of customers and class energy usage, as well as the monthly
55 day and hour of system peak, for the twelve month test period ending September 2007
56 are based on the Company's load forecast as described in Mr. Klein's direct
57 testimony. Customer class contributions to monthly system peaks are based on
58 historical hourly load research data which was matched against the forecasted hour of
59 monthly system peaks and then extrapolated to the forecasted class energy usage for
60 the test period.

61 **Description of Procedures**

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

63 A. Using the September 2007 annual results of operations for the State of Utah filed by
64 Mr. Weston, the study employs a three-step process generally referred to as
65 functionalization, classification, and allocation. These three steps recognize the way a
66 utility provides electrical service and assigns cost responsibility to the groups of
67 customers for whom those costs were incurred.

68

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

71 A. Functionalization is the process of separating expenses and rate base items according
72 to utility function. The production function consists of the costs associated with
73 power generation, including coal mining, and wholesale purchases. The transmission
74 function includes the costs associated with the high voltage system utilized for the
75 bulk transmission of power from the generation source and interconnected utilities to
76 the load centers. The distribution function includes the costs associated with all the
77 facilities that are necessary to connect individual customers to the transmission
78 system. This includes distribution substations, poles and wires, line transformers,
79 service drops and meters. The retail services function includes the costs of meter
80 reading, billing, collections and customer service. The miscellaneous function
81 includes costs associated with Demand Side Management, franchise taxes, regulatory
82 expenses, and other miscellaneous expenses.

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

85 A. Classification identifies the component of utility service being provided. The
86 Company provides, and customers purchase, service that includes at least three
87 different components; demand-related, energy-related, and customer-related.

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

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

93 A. After the costs have been functionalized and classified, the next step is to allocate
94 them among the customer classes. This is achieved by the use of allocation factors
95 that specify each class' share of a particular cost driver such as system peak demand,
96 energy consumed, or number of customers. The appropriate allocation factor is then
97 applied to the respective cost element to determine each class' share of cost. A
98 detailed description of PacifiCorp's functionalization, classification and allocation
99 procedures and the supporting calculations for the allocation factors are contained in
100 my workpapers.

101 **Q. How are generation and transmission costs apportioned among customer**
102 **classes?**

103 A. Mr. Taylor addresses the allocation of Generation and Transmission costs in his
104 testimony.

105 **Q. Please identify the new monthly weighted factors used to allocate generation**
106 **fixed costs and net power costs.**

107 A. Factor F10, Coincident Peak, System, has been modified to reflect the class monthly
108 CP weightings. Factors F85 to F96 have been developed to allocate monthly net
109 power costs.

110 **Q. How are distribution costs allocated?**

111 A. Distribution costs are classified as either demand related or customer related. In this
112 study only meters and services are considered as customer related with all other costs
113 considered demand related. Distribution substations and primary lines are allocated
114 using the weighted monthly coincident distribution peaks. Distribution line

115 transformers and secondary lines are allocated using the weighted non-coincidental
116 peak method. Services costs are allocated to secondary voltage delivery customers
117 only. The allocation factor is developed using the installed cost of new services for
118 different types of customers. Meter costs are allocated to all customers. The meter
119 allocation factor is developed using the installed costs of new metering equipment for
120 different types of customers.

121 **Q. Please explain how customer accounting, customer service, and sales expenses**
122 **are allocated.**

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

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

129 A. Most general plant, intangible plant, and administrative and general expenses are
130 functionalized and allocated to classes based on generation, transmission, and
131 distribution plant. Employee pensions and benefits have been assigned to functions
132 and classes on the basis of labor. Costs that have been identified as supporting
133 customer systems are considered part of the retail services function and have been
134 allocated using customer factors. Coal mine plant is allocated on the energy factor.

135 **Q. How are costs and revenues associated with wholesale contracts and other**
136 **electric revenues treated in the cost of service study?**

137 A. No costs are assigned to wholesale contracts and other electric revenues. The

138 revenues from these transactions are treated as revenue credits and are allocated to
139 customer groups using the appropriate allocation factors. Revenue credits reduce the
140 revenue requirement that is to be collected from firm retail customers. This is
141 consistent with the treatment of these revenues in the interjurisdictional results of
142 operations.

143 **Special Contracts**

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

145 A. Yes. Consistent with both the treatment in the last case and the Revised Protocol, the
146 loads and revenues associated with service to special contract customers are included
147 as part of the jurisdictional allocation and included in the revenue requirement. The
148 loads and revenues for the special contract customers, with the exception of partial
149 requirements service, are also included in the Cost of Service Study.

150 **Partial Requirements Service**

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

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

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

157 A. Partial requirements or back-up service customers are not included in the embedded
158 cost of service study because they do not lend themselves well to this type of analysis.
159 These customers usually have very sporadic loads from year to year producing
160 volatile cost of service results depending on whether or not service is required during

161 the hour of monthly system peak. It is the Company's practice to derive prices for
162 this type of service from the prices and costs for full requirements service.

163 **Workpapers**

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

165 A. Yes. Workpapers showing the complete functionalized results of operations and class
166 cost of service detail are included as Exhibit UP&L__(KDA-3). Also included in the
167 workpapers is a detailed narrative describing the Company's functionalization,
168 classification and allocation procedures.

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

170 A. Yes it does.