

1 **Q. Please state your name, business address and present position with Rocky**
2 **Mountain Power (the Company), a division of PacifiCorp.**

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

6 **Qualifications**

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

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

14 **Q. Please describe your present duties.**

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

18 **Q. Have you been a witness in other regulatory proceedings?**

19 A. I have previously provided cost of service testimony in the states of Utah, Wyoming,
20 California, Oregon, and Washington.

21 **Purpose of Testimony**

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

23 A. I will present PacifiCorp's functionalized Class Cost of Service Study based on the

24 twelve month forecasted test period ending June 30, 2010.

25 **Summary of Results**

26 **Q. Please identify Exhibit RMP___(CCP-1) and explain what it shows.**

27 A. Exhibit RMP___(CCP-1) is the summary table from PacifiCorp's Twelve Months
28 Ending June 2010 Class Cost of Service Study for the State of Utah. It is based on
29 PacifiCorp's annual results of operations for the State of Utah as presented in the
30 testimony of Mr. Steven R. McDougal. It summarizes, both by customer group and
31 by function, the results of the cost study for the twelve months ending June 2010.
32 Page 1 presents the results at the Company's June 2010 Rate of Return assuming
33 current rate levels. Page 2 shows the results using the return provided by the \$66.9
34 million revised protocol mitigation cap price increase.

35 **Q. Please identify Exhibit RMP___(CCP-2) and explain what it shows.**

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

39 **Changes in Cost of Service Study**

40 **Q. Are there any methodology differences between this cost study and the study**
41 **previously filed with the Utah Commission in Docket No. 08-035-38?**

42 A. No. The cost of service employs the Revised Protocol methodology filed in the
43 previous docket. However, the following enhancements were made to data supporting
44 calculation of three cost allocation factors:

- 45 • Revision in development of the weighted distribution substation peaks used to
46 create the substation and primary line cost allocation factor (F20).

- 47 • Revision in the calculation of the customer advances factor (F50) used to
48 allocate Customer Advances for Construction, Account 252.
- 49 • Revision in derivation of the meter allocation factor (F60) and account 902
50 weighted customers (F41) to recognize the Company's current deployment of
51 automated meter reading in the state of Utah.

52 **Q. Please describe the revision made regarding derivation of weighted distribution**
53 **substation peaks data.**

54 **A.** The substation and primary lines allocation factor, F20, uses twelve monthly
55 coincident distribution peaks multiplied by a weighting factor based on the number of
56 distribution substations that peak in each of the twelve months of the actual period.
57 The actual measured substation monthly peak loads received from the Distribution
58 Engineering Department were adjusted so that substations with duplicate peaks
59 received a value equal to a fractional share of one (1) and substations with less than
60 twelve months of data were eliminated. These adjustments were recommended in the
61 rebuttal testimony of Company witness, Mr. Lowell E. Alt, Jr., in Docket No. 07-035-
62 93.

63 **Q. Please describe the revision made in the calculation of the factor (F50) used to**
64 **allocate Account 252, Customer Advances for Construction.**

65 **A.** Contributions in Aid of Construction based on revenue class data were used in
66 previous cost of service studies to calculate factor F50. Recently, the Company has
67 been able to develop this data by rate schedule. The cost of service filed in this docket
68 shows the derivation of factor F50 using Contributions in Aid of Construction by rate
69 schedule rather than by revenue class for all schedules except street lighting.

70 **Q. Please describe the update made to reflect the Company's new automated meter**
71 **reading deployment?**

72 **A.** The account 902 weighting factor, which is used within the Cost of Service Study to
73 allocate class meter reading costs was updated to reflect cost reductions achieved for
74 customers along the Wasatch Front whose meter reading is now automated. The
75 average weighted cost of meter installations used to allocate meters by class was also
76 updated to reflect the slightly higher equipment costs of radio frequency (RF) meters
77 for customers who are read remotely. Both of these updates to the cost of service
78 model will allow the benefits as well as the costs of automated meter reading to be
79 more accurately apportioned among the classes.

80 **Cost of Service Model Concerns**

81 **Q. Please explain how the parties' concerns with the Company's Cost of Service**
82 **(COS) model expressed in Docket No. 08-035-38 are being addressed.**

83 **A.** The Stipulation in Cost of Service and Rate Spread – Phase II in Docket No. 08-035-
84 38 called for a work group to address the mechanics of the COS model and to hold at
85 least three substantive work group meetings within 90 days of stipulation approval.
86 The first of these meetings was held on June 11, 2009 with interested parties, and
87 additional meetings will be held as determined necessary by the work group to
88 address these issues.

89 **Description of Procedures**

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

91 **A.** Using the results from Mr. McDougal's Exhibit RMP___(SRM-2), the study employs
92 a three-step process referred to as functionalization, classification, and allocation.

93 These three steps recognize the way a utility provides electrical service and assigns
94 cost responsibility to the groups of customers for whom those costs were incurred.

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

97 A. Functionalization is the process of separating expenses and rate base items according
98 to five utility functions - production, transmission, distribution, retail and
99 miscellaneous.

- 100 • The production function consists of the costs associated with power generation,
101 including coal mining, and wholesale purchases.
- 102 • The transmission function includes the costs associated with the high voltage
103 system utilized for the bulk transmission of power from the generation source and
104 interconnected utilities to the load centers.
- 105 • The distribution function includes the costs associated with all the facilities that
106 are necessary to connect individual customers to the transmission system. This
107 includes distribution substations, poles and wires, line transformers, service drops
108 and meters.
- 109 • The retail services function includes the costs of meter reading, billing,
110 collections and customer service.
- 111 • The miscellaneous function includes costs associated with Demand Side
112 Management, franchise taxes, regulatory expenses, and other miscellaneous
113 expenses.
- 114

115 **Q. Describe classification and explain how it is used by PacifiCorp in the Cost of**
116 **Service Study.**

117 A. Classification identifies the component of utility service being provided. The
118 Company provides and customers purchase service that includes at least three
119 different components: demand-related, energy-related, and customer-related.
120 Demand-related costs are incurred by the Company to meet the maximum demand
121 imposed on generating units, transmission lines, and distribution facilities. Energy-
122 related costs vary with the output of a kWh of electricity. Customer-related costs are
123 driven by the number of customers served.

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

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

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

134 A. The forecasted number of customers and class energy usage, as well as the monthly
135 day and hour of system peak, for the twelve month test period ending June 2010 are
136 based on the Company's load forecast as described in Dr. Peter C. Eelkema's direct
137 testimony. Customer class contributions to monthly system peaks are based on

138 historical hourly load research data which was matched against the forecasted hour of
139 monthly system peaks and then extrapolated to the forecasted class energy usage for
140 the test period.

141 **Q. How are generation and transmission fixed costs apportioned among customer**
142 **classes?**

143 A. The seasonally weighted demand allocation factor, first introduced by Company
144 witness Mr. David L. Taylor in Docket No. 06-035-21, is employed in the current
145 analysis. Production and transmission fixed costs are classified 75 percent demand
146 and 25 percent energy with the demand component of Factor 10 developed using
147 twelve monthly weighted coincident peak demands. In lieu of all twelve monthly load
148 values receiving an equal weight, each monthly value is assigned a different
149 weighting factor. Monthly weighting factors are calculated by dividing each month's
150 system coincident retail peak by the annual system retail peak. For the twelve months
151 ending June 2010, the system retail peak is forecasted to be 9,513 MW during July
152 2009. So the month of July receives a weighting of 1.00 (9,513/9,513). The forecasted
153 system retail peak in January 2010 is forecasted to be 8,649 MW, therefore it receives
154 a weighting of 0.909 (8,649/9,513). The twelve monthly class coincident peaks are
155 multiplied by the monthly weighting factors and summed to calculate the weighted
156 allocation factor.

157 **Q. Are the factors used to allocate Net Power Costs (NPC) calculated the same as**
158 **those used in Docket No. 08-035-38?**

159 A. Yes. Since monthly class coincident peak and energy loads are included in the Cost of
160 Service Study and Net Power Costs are calculated and summarized by month in the

161 NPC study, PacifiCorp recommends that fuel and other NPC components be allocated
162 on a monthly basis. Factors F85 through F96 are used in the Cost of Service Study to
163 allocate monthly net power costs. A detailed description of factor development is
164 contained in Exhibit RMP____(CCP-3).

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

166 A. Distribution costs are classified as either demand related or customer related. In this
167 study, only meters and services are considered as customer related with all other costs
168 considered demand related. Distribution substations and primary lines are allocated
169 using the weighted monthly coincident distribution peaks. Distribution line
170 transformers and secondary lines are allocated using the weighted non-coincidental
171 peak method. Meter costs are allocated to all customers. The meter allocation factor is
172 developed using the installed costs of new metering equipment for different types of
173 customers.

174 **Q. How are services costs allocated to customers?**

175 A. Services costs continue to be allocated to secondary voltage delivery customers using
176 an allocation factor based on the installed cost of new services for different customer
177 types. The cost of new services reflects the most recent cost data available and
178 represents costs that we are seeing today.

179 **Q. Were there concerns with how services costs were being allocated in the Cost of**
180 **Service Study?**

181 A. Yes. The consultant for the Committee of Consumer Service (CCS) filed direct
182 testimony in Docket No. 07-035-93 questioning the Company's current method of
183 allocating service costs assuming a single service drop per average customer

184 regardless of class. Based on the data available in the Company's billing records, the
185 cost of service study allocates these costs in the same way that customers are billed,
186 using a single service per average customer. Company records do not contain data
187 regarding the number of customers per service drop and unless an alternate allocation
188 method is proposed and deemed reasonable, the cost of service study will continue to
189 allocate these costs assuming a single service per average customer.

190 **Q. Please explain how customer accounting, customer service, and sales expenses**
191 **are allocated.**

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

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

198 A. Most general plant, intangible plant, and administrative and general expenses are
199 functionalized and allocated to classes based on generation, transmission, and
200 distribution plant. Employee pensions and benefits have been assigned to functions
201 and classes on the same basis as labor costs. Costs that have been identified as
202 supporting customer systems are considered part of the retail services function and
203 have been allocated using customer factors. Coal mine plant costs are allocated using
204 the energy factor.

205

206 **Q. How are costs and revenues associated with wholesale contracts and other**
207 **electric revenues treated in the Cost of Service Study?**

208 A. No costs are assigned to wholesale contracts and other electric revenues. The
209 revenues from these transactions are treated as revenue credits and are allocated to
210 customer groups using the appropriate allocation factors. Revenue credits reduce the
211 revenue requirement that is to be collected from firm retail customers. This is
212 consistent with the treatment of these revenues in the interjurisdictional results of
213 operations.

214 **Special Contracts**

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

216 A. Yes. Consistent with both the treatment in the last case and the Revised Protocol, the
217 loads and revenues associated with service to special contract customers are included
218 as part of the jurisdictional allocation and included in the revenue requirement. The
219 loads and revenues for special contract customers are also included in the Cost of
220 Service Study.

221 **Partial Requirements/Back-up/Electric Furnace Service**

222 **Q. Does the Cost of Service Study include results for partial requirements, back-up**
223 **service and electric furnace customers?**

224 A. No. Cost of service results were not calculated for these categories of customers,
225 which includes one special contract customer and those customers taking service on
226 Schedule 21 and Schedule 31.

227 **Q. Why are these customers removed from the Cost of Service Study?**

228 A. Partial requirements, back-up service and electric furnace customers are not included

229 in the embedded Cost of Service Study because they do not lend themselves well to
230 this type of analysis. These customers usually have very sporadic loads from year-to-
231 year producing volatile cost of service results depending on whether or not service is
232 required during the hour of monthly system peak. It is the Company's practice to
233 derive prices for partial requirements and back-up service from the prices and costs
234 for full requirements service.

235 **Workpapers**

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

237 A. Yes. Workpapers showing the complete functionalized results of operations and class
238 cost of service detail are included as Exhibit RMP___(CCP-3). Also included in the
239 workpapers is a detailed narrative describing the Company's functionalization,
240 classification and allocation procedures.

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

242 A. Yes, it does.