

Docket No. 20000-\_\_-ER-11  
Witness: C. Craig Paice

BEFORE THE WYOMING PUBLIC SERVICE  
COMMISSION

ROCKY MOUNTAIN POWER

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Direct Testimony of C. Craig Paice

December 2011

1 **Q. Please state your name, business address, and present position with**  
2 **PacifiCorp dba Rocky Mountain Power (“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 career  
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 with Utah Power & Light Company beginning in 1978 holding various  
12 positions in the accounting, customer service, and regulatory areas.

13 **Q. Please describe your current responsibilities.**

14 A. My primary responsibilities are to prepare, explain, and support 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 appeared as a witness in previous regulatory proceedings?**

18 A. Yes. I have testified for the Company in regulatory proceedings in California,  
19 Idaho, Oregon, Utah, Washington, and Wyoming.

20 **Purpose of Testimony**

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

22 A. I will present Rocky Mountain Power’s Embedded Cost of Service (COS) study  
23 for the state of Wyoming based on the 12 month forecast test period ending

1 March 31, 2013.

2 **Q. Please identify Exhibit No. RMP\_\_\_(CCP-1), and explain what it shows.**

3 A. Exhibit No. RMP\_\_\_(CCP-1) shows the summary of the results from the  
4 embedded class COS study. It is based on the Company's results of operations for  
5 the state of Wyoming which is presented in the testimony and exhibits of  
6 Company witness Mr. Brian S. Dickman. Page 1 of Exhibit No. RMP\_\_\_(CCP-1)  
7 presents the summary of the results at the Company's target rate of return based  
8 on the requested \$62.8 million revenue increase. Columns (C) and (D) show  
9 annualized present revenue, and the resulting earned rates of return on rate base  
10 (ROR) for each schedule, respectively. Column (E) lists the ROR index for each  
11 schedule, comparing each schedule's ROR against state average ROR. Column  
12 (F) displays the total cost of service results by rate schedule. Columns (L) and  
13 (M) display the required change in revenues for each customer class using the  
14 target rate of return based on the requested \$62.8 million revenue increase. Pages  
15 2 and 3 of Exhibit No. RMP\_\_\_(CCP-1) display the summary of the class COS  
16 results for Wyoming. Columns (C) and (D) of Page 2 show annualized present  
17 revenues, and the resulting earned ROR for each schedule, respectively. Column  
18 (E) lists the ROR index for each schedule. Column (F) displays the cost of service  
19 results by rate schedule at equal rates of return for the jurisdiction. Columns (G)  
20 through (K) show cost of service results for each function. Columns (L) and (M)  
21 display the required change in revenue to achieve rate of return equal to the state  
22 average rate of return. Finally, Page 3 shows target rate of return results based on  
23 the requested \$62.8 million revenue requirement increase and identifies non-

1 ECAM/ECAM<sup>1</sup> components for total cost of service, generation and transmission  
2 functions.

3 **Q. Please identify Exhibit No. RMP\_\_\_(CCP-2).**

4 A. Exhibit No. RMP\_\_\_(CCP-2), pages 1-6 contain the summary of the COS results  
5 by customer class for each major function, including ECAM related costs and  
6 revenues.

7 **Cost of Service Study Changes**

8 **Q. Are the methodologies used in this COS study the same as those used in the**  
9 **cost study filed with the Wyoming Public Service Commission in the 2010**  
10 **general rate case, Docket No. 20000-384-ER-10?**

11 A. Yes, the class COS study is based on the 2010 Protocol methodology and costs  
12 are allocated to customer groups using the same methodology employed in the  
13 2010 Wyoming general rate case, Docket No. 20000-384-ER-10. Additionally,  
14 the class COS study allocation methodology comports with the Wyoming Cost  
15 Allocation Collaborative consensus recommendation as explained in its report  
16 submitted to the Commission on October 31, 2011 (pages 10-11). A copy of this  
17 report is provided as Exhibit No. RMP\_\_\_(CCP-4).

18 **Description of Procedures**

19 **Q. Please explain how the COS study was developed.**

20 A. The class COS study is based on the 12 months ended March 31, 2013, forecast  
21 results of operations for the state of Wyoming. The study employs a three-step  
22 process generally referred to as functionalization, classification, and allocation.  
23 These three steps recognize the way a utility provides electrical service and

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<sup>1</sup> ECAM – Energy Cost Adjustment Mechanism.

1 assigns cost responsibility to the customer groups for whom those costs are  
2 incurred.

3 **Q. Please describe functionalization and how is it is employed in the COS study.**

4 A. Functionalization is the process of separating expenses and rate base items  
5 according to utility function. The production function consists of costs associated  
6 with power generation, including coal mining and wholesale purchases. The  
7 transmission function includes costs associated with the high voltage system  
8 utilized for the bulk transmission of power from the generation source and  
9 interconnected utilities to the load centers. The distribution function includes  
10 costs associated with all the facilities that are necessary to connect individual  
11 customers to the transmission system. This includes distribution substations, poles  
12 and wires, line transformers, service drops and meters. The retail function  
13 includes the cost of activities such as meter reading, billing, collections and  
14 customer service. The miscellaneous function includes the cost of any energy  
15 efficiency programs, as well as franchise and regulatory fees included in base  
16 prices.

17 **Q. Describe classification and explain how Rocky Mountain Power uses it in the  
18 COS study.**

19 A. Classification identifies the component of utility service being provided. The  
20 Company provides and customers purchase service that includes at least three  
21 different cost components: demand-related, energy-related, and customer-related.  
22 Demand-related costs are incurred by the Company to meet the maximum  
23 demand imposed on generating units, transmission lines, and distribution

1 facilities. Energy-related costs vary with the output of a kWh of electricity.  
2 Customer-related costs are driven by the number of customers served.

3 **Q. How does Rocky Mountain Power determine cost responsibility among**  
4 **customer groups?**

5 A. After the costs have been functionalized and classified, the next step is to allocate  
6 them among the customer classes. This is achieved by the use of allocation  
7 factors, which specify each class's share of a particular cost driver such as system  
8 peak demand, energy consumed, or number of customers. The appropriate  
9 allocation factor is then applied to the respective cost element to determine each  
10 class's share of cost.

11 **Q. How are generation and transmission costs allocated among customer**  
12 **classes?**

13 A. Production and transmission plant and non-fuel related expenses are classified as  
14 75 percent demand-related and 25 percent energy-related. The demand-related  
15 portion is allocated using 12 monthly peaks coincident with the Company's total  
16 system firm peak. The energy-related portion is allocated using annual class  
17 MWhs adjusted for losses to generation level.

18 **Q. Please describe how distribution costs are calculated and allocated.**

19 A. Distribution costs are classified as either demand-related or customer-related. No  
20 significant energy-related costs are associated with the distribution system. In this  
21 study, only meters and services are considered customer-related with all other  
22 costs considered demand-related. Service drop costs are allocated to secondary  
23 voltage delivery customers only. The allocation factor is developed using the

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

4 Demand-related distribution costs fall into two sub-classifications: those  
5 that vary with changes in overall distribution system load (system costs) and those  
6 that are established at the time customers are connected to the distribution  
7 network and seldom vary after that time (facilities costs). Distribution substations  
8 and primary lines contain both system and facilities cost components and are  
9 allocated using the “hybrid” method. Transformers and secondary lines are  
10 defined as facilities costs and allocated using the NCP methodology. This  
11 methodology recognizes that some distribution facilities are sized to meet the  
12 long-term expected maximum load of the individual customers served by those  
13 specific facilities. Since the cost responsibility for these dedicated facilities is  
14 incurred at the time a load is added to the system, that cost responsibility should  
15 be assigned on the basis of individual customer installed capacity, but because of  
16 a lack of detailed property records this cannot be done. As a surrogate for  
17 installed capacity, annual NCP estimates from load research data are used.

18 **Q. Please explain how customer accounting, customer service, and sales**  
19 **expenses are 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 as  
22 meter reading, billing, and collections for different types of customers. Customer  
23 service expenses are split between Demand Side Management (DSM)

1 expenditures and other customer service expenses. DSM expenditures are  
2 allocated based on 50 percent demand and 50 percent energy. Other customer  
3 service expenses are allocated based on number of customers.

4 **Q. How are administrative & general expenses, general plant and intangible  
5 plant allocated?**

6 A. Most general plant, intangible plant, and administrative and general expenses are  
7 functionalized and allocated to classes based on generation, transmission, and  
8 distribution plant. Costs identified as supporting customer systems are considered  
9 part of the retail function and have been allocated using customer factors.

10 **Q. How are costs and revenues associated with partial requirements customers  
11 treated in the Cost of Service Study?**

12 A. The costs for Schedule 33, Partial Requirements customers are removed from the  
13 embedded cost of service study. Generally, volatile load characteristics associated  
14 with partial requirements customers do not lend themselves well to an embedded  
15 cost of service analysis. Because of this, it has been the Company's standard  
16 practice to exclude them from the COS study and derive prices for partial  
17 requirement service based on the prices and costs for full requirement customers.  
18 Revenues from these schedules are treated as revenue credits and are allocated to  
19 other customer groups. Other electric revenues are also treated as revenue credits.  
20 Revenue credits reduce the revenue requirement to be collected from firm retail  
21 customers.

22 **Q. Please identify Exhibit No. RMP\_\_\_(CCP-3).**

23 A. Exhibit No. RMP\_\_\_(CCP-3) contains the complete functionalized results of

1 operations and class COS detail. It also includes a detailed narrative describing  
2 the Company's functionalization, classification and allocation procedures.

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

4 A. Yes.