#### **BEFORE THE**

#### PUBLIC SERVICE COMMISSION OF UTAH

)

In the Matter of the Application of Rocky Mountain Power for Authority to Increase its Retail Electric Utility Service Rates in Utah and for Approval of its Proposed Electric Service Schedules and Electric Service Regulations

Docket No. 10-035-124

Direct Testimony of

**Maurice Brubaker** 

on Cost of Service and Revenue Allocation Issues

On behalf of

**Utah Industrial Energy Consumers** 

Project 9424 June 2, 2011



BRUBAKER & ASSOCIATES, INC. Chesterfield, MO 63017

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#### Direct Testimony of Maurice Brubaker

#### 1 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

- 2 A Maurice Brubaker. My business address is 16690 Swingley Ridge Road, Suite 140,
- 3 Chesterfield, MO 63017.

#### 4 Q WHAT IS YOUR OCCUPATION?

- 5 A I am a consultant in the field of public utility regulation and president of Brubaker &
- 6 Associates, Inc., energy, economic and regulatory consultants.

#### 7 Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

- 8 A I am appearing on behalf of the Utah Industrial Energy Consumers ("UIEC").
- 9 Members of UIEC purchase substantial quantities of electricity from Rocky Mountain
- 10 Power Company ("RMP") in Utah, and are vitally interested in the outcome of this
- 11 proceeding.

#### 12 Q PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

13 A This information is included in Appendix A to my testimony.

#### 14 Q WHAT SUBJECTS ARE ADDRESSED IN YOUR TESTIMONY?

15 A My testimony addresses cost of service and revenue allocation issues.

## 16 Q HAVE YOU REVIEWED THE COST OF SERVICE AND RATE DESIGN 17 TESTIMONY SUBMITTED BY RMP?

A Yes. I have reviewed the testimony, exhibits and relevant workpapers supporting the
testimonies of RMP witnesses Thornton, Paice and Griffith.

#### 20 Class and Jurisdictional Loads

21 Q IN HIS TESTIMONY, RMP WITNESS THORNTON PRESENTS A "CALIBRATION"

OF THE CLASS LOADS TO THE JURISDICTIONAL LOADS. ARE YOU FAMILIAR
 WITH THE EVOLUTION OF THIS CALIBRATION ADJUSTMENT?

A Yes. In RMP's previous Utah rate case, Case No. 90-035-23, there was an extensive discussion pointing out the discrepancies between the sum total of the class loads used in the class cost of service study and the monthly jurisdictional loads used to allocate RMP's costs among its various jurisdictions. The Commission directed the formation of a work group or groups to study this and other issues pertaining to cost of service. 30

#### Q DID YOU PARTICIPATE IN THOSE WORK GROUPS?

A Yes. I participated in the combined Work Groups I - II: "Load Research and
 Peak-Hour Forecasting" in which this and other load research and cost of service
 issues were considered.<sup>1</sup>

### 34 Q DO YOU CONCUR IN THE GENERAL DESCRIPTION OF THE CALIBRATION 35 PROCESS PROVIDED BY MR. THORNTON IN HIS DIRECT TESTIMONY?

36 A I agree that he has accurately described the steps to calibration that RMP preferred 37 and incorporated in the final report. (I would note, however, that many of the 38 numbers that Mr. Thornton uses in his testimony are actually related to the 12-month 39 period ended June 2011, and not to the ordered July 2011-June 2012 test year.)

#### 40 Q DO YOU AGREE WITH THIS APPROACH TO CALIBRATION?

41 А No. As discussed in the work group, UIEC believes that calibration should be done 42 on a monthly basis with the goal of achieving a 2% (or smaller) differential for every 43 month. RMP's approach results in monthly deviations of as much as 5% in this 44 instance, and allows positive differences between jurisdictional and class loads in 45 some months to be offset against negative differences in other months. For example, 46 positive differences averaging 150 MW in six months could be offset by negative 47 differences averaging 150 MW in the remaining six months. This netting process masks the extent of the actual differences between the summation of class loads and 48 49 jurisdictional loads.

# 50QAS A RESULT OF DISCUSSIONS IN THE WORK GROUP, IS RMP PLANNING TO51MAKE ANY CHANGES TO ITS LOAD RESEARCH PROGRAM?

52 А Yes. As a result of the work group process and the review of the statistical accuracy of the load research data, RMP is re-designing its sampling process in order to 53 54 achieve a higher degree of accuracy in its load research. RMP's current sample 55 design is to achieve a ± 10% accuracy, with 90% confidence, of the contribution of 56 the sampled customer class to the average of the 12 monthly jurisdictional peaks. 57 The new sample design will be to meet the same accuracy standard, with the same 58 degree of confidence, in each of the six highest peak months, and for the annual 59 class peak.

## 60 Q IS RMP ALSO PLANNING TO MODIFY ITS APPROACH TO WEATHER 61 NORMALIZING CLASS USAGE INFORMATION?

A Yes. RMP's weather adjustment for class sales currently is applied only to energy, and not to class hourly demands. RMP indicated during the work group process that it is exploring acquisition and implementation of software that will allow it to weather normalize class loads on an hourly basis. Developing the ability to adjust class loads on an hourly basis to recognize temperature sensitivity and differences between "normalized" temperatures and actual temperatures should materially increase the accuracy of the projected class load data.

<sup>1</sup>I also participated in Work Group III" "Consistency of Allocation Factors Between JAM and Class COS."

# Q DO YOU BELIEVE THAT THE WEIGHTED 12CP METHOD USED TO ALLOCATE GENERATING AND TRANSMISSION FIXED COSTS GIVES ADEQUATE WEIGHTING TO SUMMER PEAK LOADS?

72 А No. The weighted 12CP method weights the loads from each month in proportion to 73 the relationship between the magnitude of the monthly peak load and the annual 74 peak load. In my opinion, this does not place sufficient emphasis on the summer 75 peak loads because the importance of monthly peaks is not adequately measured by 76 the relationship of the load to the peak load. For example, under the weighted 77 coincident peak method, the low load months of October and April receive a 78 weighting equal to 80% of the summer peak loads even though loads in these months 79 would not drive capacity additions.

## 80 Q WHAT IS THE SEASONAL RELATIONSHIP OF THE MONTHLY WEIGHTINGS IN 81 THE COST OF SERVICE STUDY?

A In the cost of service study, the weightings for the five summer months of May
through September average 93% while the weightings for the seven non-summer
months of October through April average 84%, resulting in a summer/winter ratio of
111%.

#### 86 Q HOW DOES THIS COMPARE TO THE SEASONAL PRICE RELATIONSHIPS IN

#### 87 THE TARIFFS THAT CONVEY PRICE SIGNALS TO RMP'S CUSTOMERS?

88 A RMP Exhibit WRG-5 is a summary of the tariff pricing. For residential customers, the
 89 summer/winter price ratio for kilowatthours in the 401-1,000 kWh per month block is

90 119% and in the over 1,000 kWh block, the summer rates are 147% of the winter91 rates.

92 In Schedule 6, the summer to winter ratio in the demand charges is 125%,93 and in the energy charge it is 109%.

94 For Schedule 9, the ratio of the summer to the winter demand charges is
95 147%, and the ratio of the summer energy charges to the winter energy charges is
96 133%.

97 The price signals sent by these tariffs are more consistent with the summer 98 peaking nature of the RMP load shape than is the weighted 12CP method. In my 99 view, the rate differentials are a more accurate indication of costs than the underlying 100 cost allocation in the class cost of service study.

# 101QWHAT IS YOUR RECOMMENDATION FOR REVENUE ALLOCATION IN THIS102CASE?

A For the reasons noted above, namely the planned improvements in the accuracy of the sample load research program, the implementation of the ability to weather adjust class loads on an hourly basis, and the under-emphasis on summer loads in the class cost of service study, it is my recommendation that whatever increase is found appropriate for RMP in this case be applied as an equal percentage across-the-board increase to all customer classes.

#### 109 Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

110 A Yes, it does.

#### **Qualifications of Maurice Brubaker**

1	Q	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.		
2	А	Maurice Brubaker. My business address is 16690 Swingley Ridge Road, Suite 140,		
3		Chesterfield, MO 63017.		
4	Q	PLEASE STATE YOUR OCCUPATION.		
5	А	I am a consultant in the field of public utility regulation and President of the firm of		
6		Brubaker & Associates, Inc. (BAI), energy, economic and regulatory consultants.		
7	Q	PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND		
8		EXPERIENCE.		
9	А	I was graduated from the University of Missouri in 1965, with a Bachelor's Degree in		
10		Electrical Engineering. Subsequent to graduation I was employed by the Utilities		
11		Section of the Engineering and Technology Division of Esso Research and		
12		Engineering Corporation of Morristown, New Jersey, a subsidiary of Standard Oil of		
13		New Jersey.		
14		In the Fall of 1965, I enrolled in the Graduate School of Business at		
15		Washington University in St. Louis, Missouri. I was graduated in June of 1967 with		
16		the Degree of Master of Business Administration. My major field was finance.		
17		From March of 1966 until March of 1970, I was employed by Emerson Electric		
18		Company in St. Louis. During this time I pursued the Degree of Master of Science in		
19		Engineering at Washington University, which I received in June, 1970.		

Appendix A Maurice Brubaker Page 1 20 In March of 1970, I joined the firm of Drazen Associates, Inc., of St. Louis, 21 Missouri. Since that time I have been engaged in the preparation of numerous 22 studies relating to electric, gas, and water utilities. These studies have included 23 analyses of the cost to serve various types of customers, the design of rates for utility 24 services, cost forecasts, cogeneration rates and determinations of rate base and 25 operating income. I have also addressed utility resource planning principles and 26 plans, reviewed capacity additions to determine whether or not they were used and 27 useful, addressed demand-side management issues independently and as part of 28 least cost planning, and have reviewed utility determinations of the need for capacity 29 additions and/or purchased power to determine the consistency of such plans with 30 least cost planning principles. I have also testified about the prudency of the actions 31 undertaken by utilities to meet the needs of their customers in the wholesale power 32 markets and have recommended disallowances of costs where such actions were 33 deemed imprudent.

I have testified before the Federal Energy Regulatory Commission (FERC),
various courts and legislatures, and the state regulatory commissions of Alabama,
Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia,
Guam, Hawaii, Illinois, Indiana, Iowa, Kentucky, Louisiana, Michigan, Missouri,
Nevada, New Jersey, New Mexico, New York, North Carolina, Ohio, Pennsylvania,
Rhode Island, South Carolina, South Dakota, Texas, Utah, Virginia, West Virginia,
Wisconsin and Wyoming.

The firm of Drazen-Brubaker & Associates, Inc. was incorporated in 1972 and
assumed the utility rate and economic consulting activities of Drazen Associates, Inc.,
founded in 1937. In April, 1995 the firm of Brubaker & Associates, Inc. was formed. It

includes most of the former DBA principals and staff. Our staff includes consultants
with backgrounds in accounting, engineering, economics, mathematics, computer
science and business.

Brubaker & Associates, Inc. and its predecessor firm has participated in over 700 major utility rate and other cases and statewide generic investigations before utility regulatory commissions in 40 states, involving electric, gas, water, and steam rates and other issues. Cases in which the firm has been involved have included more than 80 of the 100 largest electric utilities and over 30 gas distribution companies and pipelines.

53 An increasing portion of the firm's activities is concentrated in the areas of 54 competitive procurement. While the firm has always assisted its clients in negotiating 55 contracts for utility services in the regulated environment, increasingly there are 56 opportunities for certain customers to acquire power on a competitive basis from a 57 supplier other than its traditional electric utility. The firm assists clients in identifying 58 and evaluating purchased power options, conducts RFPs and negotiates with 59 suppliers for the acquisition and delivery of supplies. We have prepared option 60 studies and/or conducted RFPs for competitive acquisition of power supply for 61 industrial and other end-use customers throughout the Unites States and in Canada, 62 involving total needs in excess of 3,000 megawatts. The firm is also an associate 63 member of the Electric Reliability Council of Texas and a licensed electricity 64 aggregator in the State of Texas.

In addition to our main office in St. Louis, the firm has branch offices in
Phoenix, Arizona and Corpus Christi, Texas.

Appendix A Maurice Brubaker Page 3

## CERTIFICATE OF SERVICE (Docket No. 10-035-124)

I hereby certify that on this 2nd day of June 2011, I caused to be emailed, a true and

#### correct copy of the foregoing Direct Testimony of Maurice Brubaker on Cost of Service

#### and Revenue Allocation Issues to:

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