Rocky Mountain Power Docket No. 09-035-<u>15</u> Witness: Gregory N. Duvall

#### BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF UTAH

-

#### ROCKY MOUNTAIN POWER

Direct Testimony of Gregory N. Duvall

March 2009

т	

2

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

A. My name is Gregory N. Duvall, my business address is 825 NE Multnomah St.,
Suite 600, Portland, Oregon 97232, and my present title is Director, Long Range
Planning and Net Power Costs.

#### 6 Qualifications

#### 7 Q. Briefly describe your educational and professional background.

8 I received a degree in Mathematics from University of Washington in 1976 and a Α. 9 Master of Business Administration degree from University of Portland in 1979. I 10 was first employed by Pacific Power in 1976 and have held various positions in 11 resource and transmission planning, regulation, resource acquisitions and trading. From 1997 through 2000 I lived in Australia where I managed the Energy Trading 12 13 Department for Powercor, a PacifiCorp subsidiary at that time. After returning to 14 Portland, I was involved in direct access issues in Oregon, was responsible for 15 directing the analytical effort for the Multi-State Process ("MSP"), and currently 16 direct the work of the integrated resource planning group, the load forecasting 17 group, the market assessment group, and the net power cost group in the 18 Company.

#### 19 **Purpose of Testimony**

20

#### Q. What is the purpose of your testimony?

A. My testimony describes the Company's proposed Energy Cost Adjustment
Mechanism ("ECAM"), including the need for this kind of a mechanism, costs
that would be recovered by the mechanism, and how the proposed mechanism

Page 1 - Direct Testimony of Gregory N. Duvall

#### 24 would be administered.

#### 25 Energy Cost Adjustment Mechanism

26	Q.	Please briefly describe the proposed Energy Cost Adjustment Mechanism.
27	A.	The proposed ECAM is a rate mechanism designed to allow the Company to
28		collect or credit the differences between the actual net power costs ("NPC")
29		incurred to serve customers in Utah and the amount collected from customers in
30		Utah through rates set in general rate cases. On a monthly basis, the Company
31		will compare the actual system net power costs ("Actual NPC") to the net power
32		costs embedded in rates from the most recent general rate case ("Base NPC"), and
33		defer the differences in a balancing account. An ECAM rate will be calculated
34		annually to collect from or credit to customers the accumulated balance over the
35		subsequent year.

#### 36 Q. Why is the Company proposing an ECAM at this time?

37 The Company's NPC represent a large proportion of the Company's total revenue A. 38 requirement. They are subject to a high degree of volatility largely outside of the 39 Company's control. Some of the factors causing this volatility include changes in 40 retail load, hydro conditions, wind generation, market prices, third party wheeling 41 expenses, natural gas and coal fuel expenses. Because the Company depends on 42 both the electricity and natural gas markets to balance its system and meet the 43 load requirement, fluctuations in the markets invariably impact the Company's 44 NPC. Coal expenses, which were previously relatively stable, are affected by changes in commodity costs due to contract re-openers, and even the captive mine 45 46 costs may change significantly in today's environment due to the rapid changes in

Page 2 - Direct Testimony of Gregory N. Duvall

the costs of mining equipment and supplies. An ECAM would provide safeguards
to customers and give the Company an opportunity to recover the NPC that are
prudently incurred to serve those customers.

Please describe the volatility of the wholesale power and natural gas

50

#### 51 markets?

**O**.

52 RMP Exhibit (GND-1) shows the historic natural gas prices at Henry Hub and A. 53 Opal, along with the wholesale electricity prices for Mid-Columbia and Palo 54 Verde separated by heavy and light load hours from January 1, 2005 through February 10, 2009. Over this period, gas prices have ranged from below 55 56 \$1/mmbtu to over \$15/mmbtu. Over the last 12 months, gas prices at Henry Hub 57 have gone from about \$5/mmbtu to \$13/mmbtu and back to less than \$5/mmbtu. while Opal has gone from less than \$1/mmbtu to over \$10/mmbtu and back to 58 59 about \$3/mmbtu. Over the same time, electricity has varied widely from less than 60 zero during light load hours to about \$150/MWh and back down.

#### 61 Q. Does the Company expect the volatility of NPC will continue?

62 Α. Yes, it certainly could, given the current economic conditions and uncertainties 63 regarding environmental legislation. The volatility in fuel and wholesale electric 64 prices is compounded by the variability in the Company's load – also caused by 65 economic conditions. Small fluctuations in load, combined with fuel and 66 wholesale power volatility, can lead to significant changes in NPC. In addition, 67 the composition of the Company's resource portfolio is shifting to wind and 68 natural gas fired generation, both of which increase the volatility of the NPC 69 because of the high volatility of wholesale natural gas and power market prices

Page 3 - Direct Testimony of Gregory N. Duvall

70

. . . .

and the intermittent nature of wind resources.

71	Q.	Why are general rate cases no longer adequate to capture NPC?
72	A.	Although the Company's general rate cases in Utah utilize forecast test period
73		under the Commission's rules and requirements, static test period data cannot
74		accurately reflect the volatility in NPC that we are currently experiencing.
75		For example, in Docket 08-035-38, I explained in my direct testimony that
76		the Company's system NPC at that time were increasing sharply at a rate of \$40
77		to \$50 million every six months. The Company had not experienced rising NPC
78		of the magnitude since the Western energy crisis. And since then, the market
79		prices have plummeted due to significant changes in the world-wide economies.
80		The reduction in NPC is equally unexpected. Referring to RMP
81		Exhibit(GND-1), it can be seen that the rising trend continued through July
82		2008. Then, in August 2008, natural gas and wholesale power prices began a
83		precipitous drop. If the Company had a rate case with a test period ending June
84		30, 2008, the wholesale power and natural gas costs in that period would not at all
85		be representative of current costs – to the detriment of customers.
86		During a period of NPC volatility, establishing a fixed level of NPC in a
87		rate case virtually ensures that customers will either over pay or under pay the
88		cost of the energy they are using.
89	Q.	Is the Company proposing a symmetrical mechanism for NPC recovery?
90	A.	Yes. The Company wants to recover its prudent and reasonable NPC – nothing
91		more or less. Thus, we are proposing an ECAM mechanism that is applied
92		symmetrically to safeguard customers when the NPC that the Company actually

-

Page 4 - Direct Testimony of Gregory N. Duvall

93 incurs are lower.

# 94Q.Does the ECAM shift the risk of NPC increases away from the Company and95onto the customer?

A. No. Based on the historic data presented in RMP Exhibit \_\_\_\_(GND-1), a
symmetrical tracker is as much a safeguard for customers as it is for the
Company. For example, a rate case where NPC are based on \$100-150/MWh
prices for electricity would not serve customers well if actual prices turned out to
be less than \$80/MWh. Or, if actual hydro generation were 500,000 megawatthours greater than the normalized amount included in rates and market prices
were \$100/MWh, NPCs would be overstated by \$50 million total Company.

103 The proposed ECAM will recover from customers only actual NPC and 104 will pass through to customers any Actual NPC reductions. While this creates 105 symmetry, a desirable feature of an adjustment mechanism, it does not shift from 106 the Company to customers the risks of prudent acquisition and reasonable pricing. 107 The Company retains that risk. The Commission, Commission staff and parties 108 will have the opportunity to assess the prudence and reasonableness of the NPC in 109 the annual reconciliation filing on December 15 of each year and importantly as 110 part of any general rate cases.

111The critical focus here, however, is not about risk assignment, but one of112fairness and balanced outcomes. The proposed ECAM will facilitate the long113held regulatory principle of customers paying the prudently incurred cost of the114service they receive.

#### Page 5 - Direct Testimony of Gregory N. Duvall

----

#### 115

116

Q.

### acquisitions if an ECAM is in place?

117	A.	No. The Company has expressed in numerous settings its goal to minimize
118		resource costs by acquiring existing resources such as the Chehalis plant, building
119		new plants or making purchases in the open market. We believe that properly
120		priced plant additions over time will be less volatile for customers than open
121		market power purchases regardless of whether they are recovered through an
122		ECAM or other mechanism. Customers obtain immediate benefit through an
123	•	ECAM because net power cost savings will flow through immediately. In
124		addition, Senate Bill 75, which just passed in the 2009 General Session of the
125		Utah legislature (the "2009 Session"), will allow the Company to recover the
126		capital costs of a major plant addition through a single item rate case. The
127		approval of both of these mechanisms will provide the proper matching of both
128		the fixed and variable cost and benefits of any new generation resource with the
129		prices customers pay.
130	Q.	What types of costs would be included in the ECAM?
131	A.	The ECAM rate will be calculated using all components of NPC as traditionally
132		defined in the Company's general rate cases and modeled by the Company's

• • •

Does the Company have less of an incentive to make prudent resource

- 133 production dispatch model GRID. Specifically, Base NPC and Actual NPC will
- include amounts typically booked to the following FERC accounts:

135	Account 447 – Sales for resale, excluding on-system wholesale sales and
136	other revenues that are not modeled in GRID
137	Account 501 – Fuel, steam generation; excluding fuel handling, start up
138	fuel/gas <sup>1</sup> , diesel fuel, residual disposal and other costs that

<sup>&</sup>lt;sup>1</sup> Start up fuel is accounted for separate from the primary fuel for steam power generation plants. Start up

Page 6 - Direct Testimony of Gregory N. Duvall

139 140 141 142 143 144		are not modeled in GRID Account 503 – Steam from other sources Account 547 – Fuel, other generation Account 555 – Purchased power, excluding BPA residential exchange credit pass-through if applicable Account 565 – Transmission of electricity by others
145		The mechanism addresses power cost expenses and does not include any
146		costs associated with fixed cost recovery (i.e., capital investment in rate base).
147		However, as previously noted, Senate Bill 75 allows utilities to include in rates
148		the revenue requirement of individual major plant additions. This will assure a
149		better match between new resource fixed costs and net variable power costs. If
150		NPC recovery is updated regularly but other fixed costs are not, a mismatch will
151		be created between the variable and fixed costs associated with new resources.
152		This mismatch is particularly significant for renewable resources since they have
153		near-zero variable costs, are added with greater frequency than traditional
154		generation investments, and are depreciated more rapidly than traditional
155		generation investments.
156	Q.	How would Base NPC be calculated?
157	A.	Base NPC are computed using total company NPC from the most recent general
158		rate case. Initially, Base NPC would be set based on the Company's next general
159		rate case, anticipated to be filed later this year, including any adjustments
160		ultimately approved by the Commission in that case. The total Company monthly
161		NPC are divided by the monthly normalized MWh load used to determine the
162		NPC to express the costs on a per unit basis.

.

•

costs are not accounted for separately for natural gas plants, and therefore all fuel for natural gas plants is included in the determination of both Base NPC and Actual NPC.

- - - -

## 163 Q. Do Actual NPC include adjustments prior to the comparison with Base 164 NPC?

165 Yes. Adjustments will be made to NPC as booked to be consistent with the Α. 166 Company's production dispatch model, to remove prior period accounting entries, 167 and to include applicable Commission-adopted adjustments reflected in the most 168 recent general rate case. Actual NPC will not be adjusted for hydro conditions 169 and forced outages because they give rise to the fluctuations in NPC that this 170 mechanism is designed to capture. Actual NPC will be subject to review by the 171 Commission and other parties annually when the Company files its applications 172 for recovery of the deferred NPC.

173 Please explain the balancing account and the calculation of the ECAM rate. Q. The balancing account and ECAM rate serve as a true-up mechanism to recover 174 Α. 175 or credit the differences between Base NPC and Actual NPC. On a monthly 176 basis, the Company will compare Actual NPC to Base NPC. Any differences in 177 the system per-unit cost will be multiplied by actual Utah MWh load in that 178 month and the product will be deferred in the balancing account. The monthly 179 under- or -over-recovery will accumulate in the balancing account and earn 180 interest at the Company's most recently approved rate of return on rate base in 181 Utah.

182On an annual basis the cumulative deferred balance in the balancing183account will be converted to the Schedule 94 ECAM rate expressed on a cents per184kilowatt-hour basis for projected Utah sales for the twelve months of the ECAM185recovery period. An example of the monthly deferral calculation is provided as

Page 8 - Direct Testimony of Gregory N. Duvall

186 RMP Exhibit (GND-2).

# 187 Q. When will the Company reconcile the ECAM costs and recoveries and 188 update the ECAM factors?

- 189 A. The Company proposes to file annual ECAM reconciliations and updated factors
- 190 on December 15 each year with a new ECAM rate effective February 15. The
- 191 first application addressing a deferred amount in the balancing account would be

.

•

- 192 made December 15, 2010.
- 193 Q. Does this conclude your testimony?
- 194 A. Yes.

· •