

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Application of)	
Rocky Mountain Power for)	Docket No. 10-035-124
Authority to Increase Its Retail)	Surrebuttal Testimony
Electric Utility Service Rates in Utah)	Lori Smith Schell
And for Approval of Its Proposed)	For the Office of
Electric Service Schedules and)	Consumer Services
Electric Service Regulations)	

July 19, 2011

Surrebuttal Testimony on Issues Relating to Hedging
In Connection with Rocky Mountain Power’s General Rate Case

REDACTED

1 **Q. WHAT IS YOUR NAME, OCCUPATION AND BUSINESS ADDRESS?**

2 A. My name is Lori Smith Schell. I am the founder and President of
3 Empowered Energy, which has its business address at 174 North Elk Run,
4 Durango, Colorado, 81303.

5

6 **Q. HAVE YOU PREVIOUSLY TESTIFIED IN THIS DOCKET?**

7 A. Yes. I provided direct testimony in this docket on May 26, 2011 and
8 rebuttal testimony on June 30, 2011.

9

10 **Q. HAVE YOU PREPARED ANY NEW EXHIBITS IN SUPPORT OF YOUR**
11 **TESTIMONY?**

12 A. Yes, I have prepared Exhibit OCS-5.1SR Schell that illustrates the impact
13 of hedging on net power cost volatility under varying market conditions.

14

15 **Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

16 A. The purpose of my surrebuttal testimony is to respond the rebuttal
17 testimony of the Company's witnesses Mr. John A. Apperson, Mr. Stefan
18 A. Bird, Mr. Gregory N. Duvall, and Mr. Frank C. Graves.

19

20 **Q. PLEASE COMMENT ON THE TESTIMONY OF THE COMPANY'S**
21 **WITNESSES THAT YOUR HEDGING RECOMMENDATION IS FOR THE**
22 **COMPANY TO REPLACE SWAPS WITH OPTIONS.**

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23 A. My direct testimony clearly states at lines 295-297 that “[t]he options
24 pricing results presented in Exhibit OCS-5.3 are intended to illustrate the
25 potential costs to ratepayers of PacifiCorp’s hedging practices.” By
26 converting the Company’s Test Period natural gas and swap volumes into
27 an equivalent number of options, I was able to make clear the potential
28 costs of the Company’s hedging program at a variety of at-the-money
29 option premiums.

30

31 **Q. HOW DO YOU INTERPRET MR. APPERSON’S TESTIMONY THAT THE**
32 **ACTUAL COST OF OPTIONS PREMIUMS IN 2008 WOULD HAVE**
33 **BEEN HIGHER THAN YOUR ASSUMED OPTIONS PREMIUMS?**

34 A. This indicates to me that my assumptions were too conservative, and that
35 the potential cost of the Company’s hedging program may be even higher
36 than I estimated in my direct testimony.

37

38 **Q. CAN YOU COMMENT ON MR. APPERSON’S REBUTTAL TESTIMONY**
39 **AT LINES 391-392 WHERE HE STATES THAT THE COMPANY HAS**
40 **AVOIDED TRANSACTING ON THE NYMEX?**

41 A. The Company’s Confidential Filing Requirement R746-700-23-C.8 shows
42 that [REDACTED] of the Company’s [REDACTED] of natural gas swaps
43 are actually tied directly to the Henry Hub, the NYMEX pricing point. The

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44 Company also has [REDACTED] of related basis swaps, [REDACTED]
45 of which are tied to the NYMEX at the Henry Hub (southern Louisiana).
46 The use of basis swaps tied to the Henry Hub allows the Company to
47 enter into swaps at less liquid regional market hubs such as Opal
48 (southwestern Wyoming), AECO (southern Alberta), and Sumas (border
49 between Washington and British Columbia) and to hedge the
50 transportation differential between these regional market hubs and the
51 more liquid Henry Hub. The fact that [REDACTED] of the Company's basis swaps
52 are tied to the Henry Hub may indicate some understatement in Mr.
53 Graves' assertion at lines 428-431 of his rebuttal testimony that "natural
54 gas is a *somewhat correlated* product around the nation." (Emphasis
55 added.)

56

57 **Q. DID YOU PREVIOUSLY TESTIFY THAT THE COMPANY'S HEDGING**
58 **POLICY REDUCES VOLATILITY?**

59 A. The Company's hedging policy reduces the EXPOSURE to commodity
60 price volatility, but whether the end result is a reduction in the volatility of
61 net power costs will depend on the interaction of market conditions and
62 net hedging gains or losses.

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64 **Q. CAN YOU DEMONSTRATE HOW THE VOLATILITY OF NET POWER**
65 **COSTS IS AFFECTED BY MARKET CONDITIONS AND HEDGING**
66 **GAINS OR LOSSES?**

67 A. Exhibit OCS-5.1SR illustrates the potential impact of hedging on net
68 power costs for three different market conditions (i.e., rising, flat, and
69 falling commodity prices) over two time periods. The first time period is
70 assumed to have hedging gains and the second time period is assumed to
71 have hedging losses of equal magnitude. The top illustration for each
72 market condition shows the unhedged price direction and the direction in
73 which the hedging gains or losses will move the net power costs in each
74 period. The bottom illustration for each market condition compares the
75 unhedged price direction with the resultant hedged price direction.

76

77 **Q. WHAT DO YOU CONCLUDE FROM THE ILLUSTRATIVE EXAMPLES**
78 **SHOWN IN EXHIBIT OCS-5.1SR?**

79 A. Under circumstances that approximate the conditions leading up to the
80 Company's 2011 general rate case (Test Period net hedging losses
81 following a period of net hedging gains), hedging against exposure to
82 commodity price volatility actually results in increased net power cost
83 volatility for two out of three market price conditions.

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85 **Q. IS THERE A DIFFERENCE BETWEEN REDUCING NET POWER COST**
86 **VOLATILITY AND REDUCING EXPOSURE TO COMMODITY PRICE**
87 **VOLATILITY?**

88 A. Yes. As shown above, reducing exposure to commodity price volatility
89 may or may not reduce the volatility of net power cost. Mr. Bird testifies at
90 lines 322-324 of his rebuttal testimony that one of the goals of the
91 Company's risk management program is to "reduce net power cost
92 volatility." Mr. Duvall testifies at lines 2775-2777 of his rebuttal testimony
93 that "I demonstrated [in the ECAM docket] that the Company's hedging
94 program reduces NPC volatility caused by changes in market prices and
95 protects against high NPC outcomes." Mr. Duvall's testimony appears to
96 imply that reducing "changes in market prices" (*i.e.*, commodity price
97 volatility) necessarily reduces net power cost volatility. Exhibit OCS-5.1
98 SR demonstrates that this is not necessarily the case.

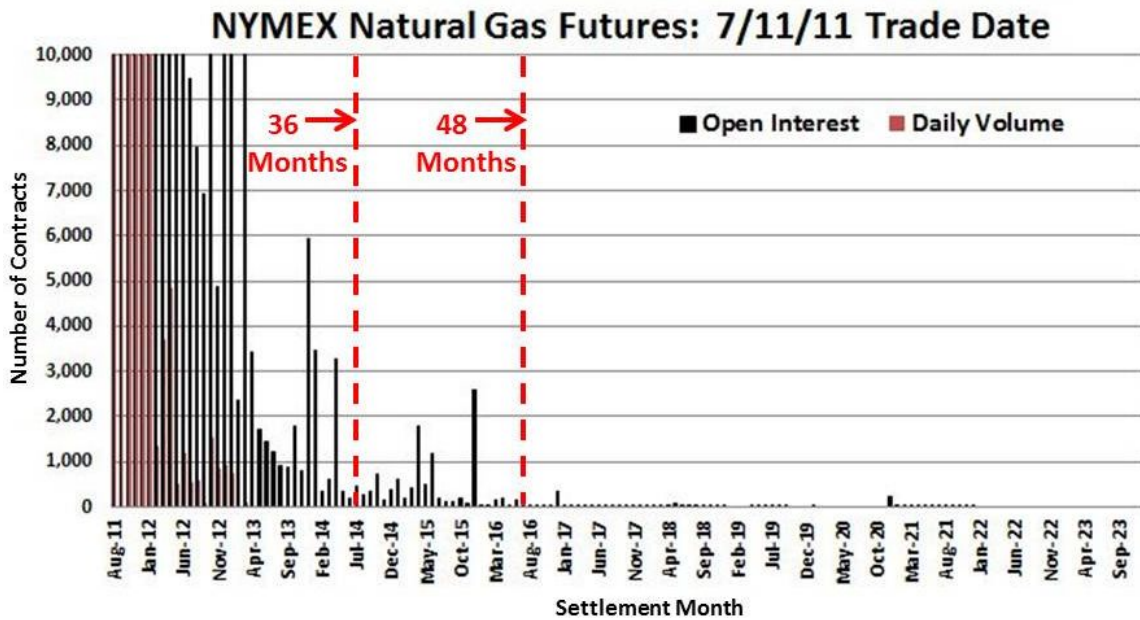
99

100 **Q. PLEASE COMMENT ON MR. GRAVES' TESTIMONY THAT NATURAL**
101 **GAS CONTRACTS ARE AVAILABLE WELL BEYOND THE**
102 **COMPANY'S HEDGING HORIZON.**

103 A. Mr. Graves at lines 287-289 of his rebuttal testimony claims that "natural
104 gas contracts available at Henry Hub and elsewhere are now available for
105 well beyond a four year horizon into the future. This shows that both

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106 buyers and sellers do value longer term price certainty.” While it is true
107 that NYMEX natural gas futures contract prices are now quoted 12 years
108 into the future, there are very few contracts traded beyond the first 36
109 months to support Mr. Graves’ assertion of how buyers and sellers “value
110 longer term price certainty.” The lack of liquidity for NYMEX natural gas
111 futures beyond 36 months is demonstrated in the graph below for the
112 7/11/2011 trade date. This graph includes all quoted settlement months
113 and is similar to the graph presented in my direct testimony, except that I
114 have limited the maximum value of the vertical axis to 10,000 contracts in
115 an attempt to show greater detail for settlement months beyond 48 months
116 out.



117

118 **Q. WHAT CONCLUSIONS DO YOU DRAW FROM MR. APPERSON’S**
119 **CONFIDENTIAL FIGURE 2, WHICH SHOWS THE NUMBER OF**

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120 **CREDITWORTHY COUNTERPARTIES WILLING TO ENTER INTO**
121 **NATURAL GAS HEDGES FOR DIFFERENT TIME PERIODS?**

122 A. Mr. Apperson's Confidential Figure 2 clearly supports my argument that
123 there is little market liquidity more than 36 months out given that (i) [REDACTED]
124 [REDACTED] of the Company's creditworthy trading partners are unwilling to
125 transact [REDACTED] and (ii) [REDACTED] can
126 only transact [REDACTED] with specific management approval.
127 This means that [REDACTED] of the Company's creditworthy trading
128 partners are unwilling on a routine basis to transact beyond 36 months
129 out.

130

131 **Q. DO YOU AGREE WITH MR. APPERSON'S CLAIM THAT BID-ASK**
132 **SPREADS ARE A MORE DIRECT MEASURE OF LIQUIDITY?**

133 A. Bid-ask spreads are a direct measure of liquidity, but only one among the
134 several measures discussed above. However, Mr. Apperson's statement
135 at lines 189-194 that "[t]he Company does not record nor has access to
136 comprehensive bid ask spread data" does not provide the Commission a
137 reliable source of bid-ask spread information on which to make a
138 judgment. Although Mr. Apperson indicates that the Company "has paid
139 as little as \$0 per MMBtu in bid ask spread" in Year 1, it is likely that this is

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140 an exceptional case, since consistent zero bid-ask spreads would quickly
141 drive profit-seeking businesses out of the commodity trading business.

142

143 **Q. PLEASE COMMENT ON MR. APPERSON'S DISCUSSION OF HOW**
144 **THE COMPANY'S CUSTOMERS HAVE BENEFITTED FROM THE**
145 **HERMISTON PLANT'S LONG-TERM NATURAL GAS SUPPLY**
146 **AGREEMENT.**

147 A. Per the response to OCS Data Request 36.1, the 15-year natural gas
148 supply agreement cited by Mr. Apperson is actually a collection of four
149 separate long-term gas agreements that were entered into in 1993 and
150 1994, long before the Company's risk management program was put into
151 place. Indeed, entering into a 15-year hedge would have been a violation
152 of the Company's risk management program.

153

154 **Q. WHAT DO YOU CONCLUDE?**

155 A. I conclude that market liquidity does not support a hedging horizon beyond
156 36 months and that none of the evidence provided by the Company has
157 demonstrated otherwise. I also conclude that there may be some
158 confusion about whether the goal of the Company's hedging program is to
159 reduce exposure to commodity price volatility or to reduce net power cost

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160 volatility. As demonstrated in my surrebuttal testimony, market conditions
161 may preclude accomplishing both goals simultaneously.

162

163 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

164 **A. Yes.**

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ILLUSTRATIVE IMPACT OF HEDGING ON NET POWER COST VOLATILITY

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