

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Application of)	Docket No. 09-035-15
Rocky Mountain Power for)	Direct Testimony
Approval of its Proposed Energy)	Lori Smith Schell
Cost Adjustment Mechanism)	For the Office of
)	Consumer Services

November 16, 2009

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1 **INTRODUCTION**

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

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

6

7 **Q. PLEASE DESCRIBE EMPOWERED ENERGY.**

8 A. Empowered Energy is a Colorado-based independent consulting firm that
9 provides market and regulatory analysis of natural gas, power, and
10 emissions markets. Empowered Energy provides industry expertise and
11 quantitative skills to analyze these markets. Empowered Energy also
12 works with end-users and energy providers to evaluate how the costs and
13 benefits of emerging technologies are impacted by changes in natural gas,
14 power, and emissions markets.

15

16 **Q. HAVE YOU PREPARED AN EXHIBIT SUMMARIZING YOUR**
17 **QUALIFICATIONS AND EXPERIENCE?**

18 A. Yes. I have attached Appendix I, which is a summary of my regulatory
19 experience and qualifications.

20

21 **Q. ON WHOSE BEHALF ARE YOU APPEARING?**

Redacted

22 A. Empowered Energy is a subcontractor to GDS Associates, Inc. (GDS) for
23 work done in this proceeding. GDS was retained by the Utah Office of
24 Consumer Services (OCS) to review Rocky Mountain Power's natural gas
25 risk management policies and procedures. Accordingly, I am appearing
26 on behalf of the OCS.

27

28 **Q. HAVE YOU PREPARED ANY EXHIBITS IN SUPPORT OF YOUR**
29 **TESTIMONY?**

30 A. Yes. I have prepared Exhibit OCS 2.1, which is attached to this testimony.

31

32 **PURPOSE**

33 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

34 A. The purpose of my testimony is to discuss the stated goals of PacifiCorp
35 Energy's Risk Management Policy and to show that, with respect to
36 natural gas, PacifiCorp Energy is generally in compliance with the hedging
37 targets stated in its Risk Management Policy. The Risk Management
38 Policy applies to hedging of both natural gas and electricity, and to each of
39 PacifiCorp's three main divisions: PacifiCorp Energy, Pacific Power, and
40 Rocky Mountain Power.

41

42 **ANALYSIS**

43 **Q. DOES PACIFICORP ENERGY HAVE A WRITTEN RISK MANAGEMENT**
44 **POLICY?**

Redacted

45 A. Yes.

46

47 **Q. HAVE YOU REVIEWED PACIFICORP ENERGY'S RISK MANAGEMENT**
48 **POLICY?**

49 A. Yes.

50

51 **Q. CAN YOU BRIEFLY DESCRIBE PACIFICORP ENERGY'S RISK**
52 **MANAGEMENT POLICY?**

53 A. PacifiCorp Energy has a written Risk Management Policy that applies to
54 the energy commodity risks associated with its commercial and trading
55 operations, excluding coal which is managed by PacifiCorp Energy's
56 mining operations. The Risk Management Policy lays out the tasks of
57 identification, measurement, and management of energy commodity risks
58 and describes the organizational structure that supports these tasks. The
59 risk management practices that guide PacifiCorp Energy's energy
60 commodity hedging efforts are identified in the Risk Management Policy
61 and include compliance and enforcement.

62

63 **Q. DOES PACIFICORP ENERGY HAVE CLEARLY DEFINED HEDGING**
64 **TARGETS?**

65 A. Yes. PacifiCorp Energy's hedging targets are contained in its Risk
66 Management Policy. PacifiCorp has [REDACTED]

67 [REDACTED]

Redacted

68 [REDACTED]

69 [REDACTED]

70 Forward Months Minimum Maximum

71 [REDACTED]

72 [REDACTED]

73 [REDACTED]

74 [REDACTED]

75

76 **Q. WHAT IS THE PURPOSE OF PACIFICORP ENERGY'S RISK**
77 **MANAGEMENT POLICY AND HEDGING PRACTICES?**

78 A. With respect to energy commodity risk, PacifiCorp Energy's Risk
79 Management Policy specifies that one goal of its Commercial and Trading
80 group is to [REDACTED]

81 [REDACTED] However, Rocky Mountain Power's
82 witness Graves acknowledges in his Supplemental Direct Testimony (lines
83 624-626) that "risk management is not something that can or should be
84 done to 'beat the market' or to 'lower expected costs.' It is done solely to
85 limit the range of potential price movements around the expected value..."

86 The focus on [REDACTED] is clarified in PacifiCorp Energy's
87 "Commodity Price Risk Management Presentation to Utah Public Service
88 Commission Technical Conference" of May 18, 2009, where both the
89 opening list of "Key Messages" and the "Summary" start with the
90 statement that "[t]he purpose of the company's risk management policy

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91 and hedge practice [REDACTED]

92 [REDACTED]

93

94 **Q. WILL COMPLIANCE WITH HEDGING TARGETS LIKE THOSE**
95 **SPECIFIED IN PACIFICORP ENERGY'S RISK MANAGEMENT POLICY**
96 **MEET THIS PURPOSE?**

97 A. Yes.

98

99 **Q. IS PACIFICORP ENERGY GENERALLY IN COMPLIANCE WITH ITS**
100 **NATURAL GAS HEDGING TARGETS?**

101 A. Yes.

102

103 **Q. HOW DID YOU DETERMINE THAT PACIFICORP ENERGY IS**
104 **GENERALLY IN COMPLIANCE WITH ITS NATURAL GAS HEDGING**
105 **TARGETS?**

106 A. One source of information I relied on was transaction-specific data
107 provided by Rocky Mountain Power in response to Division of Public
108 Utilities Data Request 4.14(d) and (e) in this docket. This information,
109 combined with responses to OCS Data Requests 3.1 and 3.2 in Utah
110 Docket No. 09-035-21, was used and analyzed as one method to
111 determine that compliance with PacifiCorp Energy's natural gas hedging
112 targets had generally been satisfied. The results of my analysis are
113 illustrated in Exhibit OCS 2.1, which compares [REDACTED]

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114 [REDACTED]
115 [REDACTED]
116 [REDACTED]
117 [REDACTED]
118 [REDACTED]

119 [REDACTED] As seen in
120 Exhibit OCS 2.1, based on the data provided and this analysis of it,
121 PacifiCorp Energy is generally in compliance with its specified hedge
122 targets with respect to natural gas.

123

124 **Q. IS THERE VARIABILITY IN THE PERCENTAGE OF NATURAL GAS**
125 **HEDGED VOLUMES?**

126 A. Yes. Because of the dynamic nature of natural gas markets, electricity
127 markets, generation unit availability, and customer demand, all having
128 their own volatility, forecasts of future natural gas requirements will
129 change over time. Some refer to this as the operational risk associated
130 with financial hedging. Consequently, [REDACTED]

131 [REDACTED] I have
132 based my analysis on a specific natural gas forecast made at a specific
133 point in time, whereas PacifiCorp Energy is hedging against natural gas
134 requirements that change in real time.

135

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136 **Q. WHAT OTHER SOURCES OF INFORMATION DID YOU RELY ON TO**
137 **CONFIRM YOUR FINDINGS OF COMPLIANCE?**

138 A. I relied on four additional sources of information, including: (i) PacifiCorp's
139 annual 10-K filings to the Securities and Exchange Commission ("SEC") at
140 the end of calendar years 2006, 2007, and 2008; (ii) Rocky Mountain
141 Power's data responses in Utah Docket No. 09-035-21; (iii) PacifiCorp
142 Energy's May 19, 2009, Technical Conference Presentation; and, (iv) an
143 on-site visit to PacifiCorp on September 26-28, 2009.

144

145 **Q. WHAT DID PACIFICORP REPORT IN ITS ANNUAL 10-K REPORTS TO**
146 **THE SEC WITH RESPECT TO NATURAL GAS HEDGED VOLUMES?**

147 A. As of December 31, 2008, PacifiCorp reported (at page 11) that it "had
148 economically hedged...94% of its forecasted financial exposure for 2009"
149 and "85% of its forecasted financial exposure [for 2010]." As of December
150 31, 2007, PacifiCorp reported (at page 8) that it "had economically
151 hedged...97% of its financial exposure for 2008" and "84% of its
152 forecasted financial exposure [for 2009]." As of December 31, 2006,
153 PacifiCorp reported (at page 7) that it "had economically hedged 100.0%
154 of its forecasted...financial exposure for calendar 2007" and "100.0% of its
155 financial exposure [for calendar 2008]."

156

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157 **Q. ARE THE NATURAL GAS HEDGE PERCENTAGES REPORTED BY**
158 **PACIFICORP IN ITS 10-K REPORTS CONSISTENT WITH THE HEDGE**
159 **TARGETS IN PACIFICORP ENERGY’S RISK MANAGEMENT POLICY?**

160 A. Yes.

161

162 **Q. WHAT SPECIFIC INFORMATION REGARDING HEDGED VOLUMES**
163 **DID PACIFICORP PROVIDE IN RESPONSE TO DATA REQUESTS?**

164 A. In response to OCS Data Request 3.5 in Utah Docket No. 09-035-21,
165 Rocky Mountain Power stated that [REDACTED]

166 [REDACTED]

167 [REDACTED]

168 [REDACTED]

169 [REDACTED]

170 [REDACTED]

171

172 **Q. WHAT SPECIFIC INFORMATION REGARDING HEDGED VOLUMES**
173 **DID PACIFICORP ENERGY PROVIDE IN ITS MAY 19, 2009,**
174 **TECHNICAL CONFERENCE PRESENTATION?**

175 A. PacifiCorp Energy’s presentation specified [REDACTED]

176 [REDACTED]

177 [REDACTED]

178 [REDACTED]

179 [REDACTED]

Redacted

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184

185 **Q. WHAT SPECIFIC INFORMATION REGARDING HEDGED VOLUMES**
186 **DID YOU OBTAIN DURING YOUR SITE VISIT TO PACIFICORP?**

187 A. During my on-site visit, I had the opportunity to observe how PacifiCorp
188 Energy's natural gas trader was provided each morning with a month-by-
189 month synopsis of the [REDACTED] hedging time horizon, including a color-
190 coded indicator of whether each time period was or was not in compliance
191 with the hedging targets. Because of the dynamic nature of natural gas
192 forward price curves and resultant physical natural gas requirements, what
193 was in compliance one day might be out of compliance the next.
194 Depending on market conditions, PacifiCorp Energy would then transact
195 to bring any out-of-compliance time periods into compliance, or request a
196 limited-term waiver if market conditions were deemed unfavorable for
197 hedging at that time.

198

199

CONCLUSIONS

200

201

200 **Q. WHAT DO YOU CONCLUDE FROM YOUR DATA ANALYSES AND**
201 **REVIEW OF OTHER DATA SOURCES?**

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202 A. I conclude that, with respect to natural gas, PacifiCorp Energy is generally
203 in compliance with the hedging targets stated in its Risk Management
204 Policy. The combined effect of the [REDACTED] hedging time horizon and
205 the [REDACTED] hedging targets contributes to accomplishing the goal of

206 [REDACTED]

207 [REDACTED]

208

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

210 A. Yes.

Confidential, Subject to Protective Order in Docket No. 09-035-15

Appendix 1

Lori Smith Schell, Ph.D.

Empowered Energy, 174 N. Elk Run, Durango, Colorado 81303

EDUCATION: Pennsylvania State University, 1988
Ph.D., Operations Research and Mineral Economics

University of Washington, 1979
B.A., Economics (Honors); Mortar Board and Phi Beta Kappa

RELEVANT EXPERIENCE:

EMPOWERED ENERGY

2002-Present

President and founder of this Colorado-based independent energy consulting firm specializing in power, natural gas, emissions and renewable energy markets.

- Expert witness in multi-state Appalachian natural gas royalty litigation, including issues of prudence of long-term natural gas hedges, affiliate sales, spin-down of gathering and transportation facilities, post-production deductions and underlying cost-of-service, and natural gas liquids valuation and make-up volumes.
- Provided analytical support in Staff prudence review of natural gas and purchased power procurement practices of two western U.S. electric utilities.
- Direct fuels procurement and negotiate fuels supply and transportation contracts for a large state university in Colorado; similar work done for university in eastern U.S.
- Expert witness in Alberta electric rate case dealing with cost allocation between regulated and retail rates; instrumental in \$14.8 million rate reduction. Participated in two subsequent, related rate cases that were ultimately settled.

TRIGEN ENERGY CORPORATION

1999-2002

A New York-based combined heat & power company with 37 operating units specializing in energy efficiency, on-site cogeneration, trigeneration, and district energy systems.

***Director, Energy Risk Management, Project Advisory Group* 2000-2002**

***Director, Fuels Management, Division of Operating Assets* 1999-2000**

- As head of Risk Management Committee, developed and implemented corporate-wide risk management policy for electricity, fuels, and emissions allowances; responsible for related hedging and controls, mark-to-market determinations, and FAS 133 effectiveness tests.
- Directed commodity market analyses and issued electricity and primary energy forecasts for budgeting and hedging; electricity focus on NYISO, PJM, and Cinergy/Entergy.
- Supported business development and existing operating assets with commodity and basis market analyses, forecasts, and in-depth natural gas pipeline and LDC tariff rate assessment.
- Provided contractual support and oversight for electricity and primary energy purchases and sales for all Trigen operating units.

AIR PRODUCTS AND CHEMICALS, INC.**1993-1999**

A Pennsylvania-based Fortune 300 producer of industrial gases and chemicals, with production costs dominated by volatile electricity and natural gas prices.

Manager, Regulatory Affairs & Market Analysis, Corporate Energy **1995-1999**
Senior Principal Energy Analyst, Corporate Energy **1993-1994**

- Assessed potential benefits of renegotiating long-term natural gas supply agreement for a 120-MW Florida QF cogen facility; managed facility's daily natural gas supply and transportation (including capacity release) with the goal of optimizing commodity and regulatory costs.
- Responsible for intervening, testifying, and being cross-examined at the Federal Energy Regulatory Commission (FERC) in proceedings directly impacting natural gas pipeline transportation costs to flagship Air Products facilities. Major cases addressed (i) market power and market-based rates, and (ii) appropriate pricing of pipeline expansions.
- Demonstrated cost-shifting impact of zone-gate rates and the inappropriateness of such rates on Koch Gateway's network pipeline system for a nine-member industrial coalition. Maintained coalition's direction and consensus while negotiating a 20 percent discount to settle the case.
- Underwent oral cross-examination to defend several rounds of written testimony analyzing and critiquing the market power analysis of Koch Gateway in the first major market power case brought before the FERC. Administrative Law Judge's initial decision in favor of opposing intervenors was ultimately upheld by the D.C. Circuit Court.
- Advocated interruptible transportation rate design changes applicable to Tennessee Gas Pipeline through written testimony at the FERC.
- Opposed incremental AFUDC calculations for expansion capacity by Florida Gas Transmission through written testimony at the FERC.
- Directed FERC interventions in four natural gas pipeline restructuring proceedings.

BENJAMIN SCHLESINGER AND ASSOCIATES, INC.**1988-1993**

Boutique natural gas consulting firm providing project and market analysis from exploration and production downstream to the burnertip.

Project Manager/Senior Economist**1988-1993**

- Provided contractual, regulatory, and deliverability risk evaluation (wellhead-to-burnertip) for a dozen project-financed natural gas-fired QF cogeneration units developed under PURPA.
- Performed market valuation to support buy-out of a major international gas supply contract.
- Multi-client research relating existing natural gas spot markets to (developing) futures market.