

RECEIVED

2007 SEP 28 AM 9:50

IDAHO PUBLIC
UTILITIES COMMISSION

Before the
Idaho Public Utilities Commission

In the Matter of the Application of)
PacifiCorp DBA Rocky Mountain)
Power for Approval of Changes to)
its Electric Service Schedules)
_____)

Case No. PAC-E-07-05

Direct Testimony and Exhibits of

Kathryn E. Iverson

On Behalf of

Monsanto Company

September 28, 2007
Project 8819



BRUBAKER & ASSOCIATES, INC.

Before the
Idaho Public Utilities Commission

In the Matter of the Application of)
PacifiCorp DBA Rocky Mountain)
Power for Approval of Changes to)
its Electric Service Schedules)
_____)

Case No. PAC-E-07-05

Table of Contents to the
Direct Testimony of Kathryn E. Iverson

I. INTRODUCTION AND QUALIFICATIONS 1
II. PURPOSE OF TESTIMONY AND SUMMARY OF CONCLUSIONS..... 2
III. BACKGROUND ON THE TREATMENT OF MONSANTO IN COST STUDIES 5
IV. MODIFICATIONS TO ROCKY MOUNTAIN POWER CLASS COST STUDY 7
V. VALUATION OF MONSANTO INTERRUPTIBILITY 20

Appendix A

Exhibits:

- Exhibit 205 (KEI-1) – Response to Monsanto Data Request No. 9.6
- Exhibit 206 (KEI-2) – Idaho Coincident Peak and Energy Load From JAM Study
- Exhibit 207 (KEI-3) – Comparison of Peak Loads and Energy Used in JAM and Idaho COS Studies
- Exhibit 208 (KEI-4) – Adjustments to Load to Align with JAM Study
- Exhibit 209 (KEI-5) – Allocation of Revenue Reduction as a Result of the Rate Mitigation Cap
- Exhibit 210 (KEI-6) – Adjusted Total Cost of Service by Customer Class
- Exhibit 211 (KEI-7) – Value of Monsanto Interruptibility Based on Avoided Peakers
- Exhibit 212 (KEI-8) – Implied Avoided Capacity Cost of Operating Reserves and Economic Curtailment
- Exhibit 213 (KEI-9) – Value of Reserves Based on Cholla and Gadsby

**Before the
Idaho Public Utilities Commission**

**In the Matter of the Application of
PacifiCorp DBA Rocky Mountain
Power for Approval of Changes to
its Electric Service Schedules**

Case No. PAC-E-07-05

Direct Testimony of Kathryn E. Iverson

I. INTRODUCTION AND QUALIFICATIONS

1

2 **Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 **A My name is Kathryn E. Iverson; 17244 W. Cordova Court, Surprise, Arizona 85387.**

4 **Q WHAT IS YOUR OCCUPATION AND BY WHOM ARE YOU EMPLOYED?**

5 **A I am a consultant in the field of public utility regulation and employed by the firm of**
6 **Brubaker & Associates, Inc. (BAI), regulatory and economic consultants with**
7 **corporate headquarters in St. Louis, Missouri.**

8 **Q WOULD YOU PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND**
9 **EXPERIENCE?**

10 **A I have a Bachelor of Science Degree in Agricultural Sciences and a Master of**
11 **Science Degree in Economics from Colorado State University. I have been a**
12 **consultant in this field since 1984, with experience in utility resource matters, cost**
13 **allocation and rate design. More details are provided in Appendix A to this testimony.**

1 Q ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

2 A I am testifying on behalf of Monsanto Company, along with my colleague, Mr. Mike
3 Gorman.

4 **II. PURPOSE OF TESTIMONY AND SUMMARY OF CONCLUSIONS**

5 Q WHAT SUBJECTS DO YOU ADDRESS?

6 A I have been asked to review Rocky Mountain Power's (or, "Company's") request for
7 an increase in rates to serve Monsanto's Soda Springs facility. Mr. Gorman and I will
8 make recommendations to the Idaho Public Utilities Commission ("Commission") on
9 the adjustments to the Company's revenue requirement request as well as the
10 allocation of the overall net increase to Monsanto.

11 Q WHAT SPECIFIC AREAS DOES YOUR TESTIMONY COVER?

12 A My testimony provides the analysis on the class cost of service study used to allocate
13 costs among all Idaho customers, as well as the valuation of Monsanto's
14 interruptibility. Specifically, I provide testimony on ensuring that Monsanto does not
15 face additional costs through the fact that other customer class' loads are understated
16 in the Idaho class cost of service study ("Idaho COS"), as well as the proper treatment
17 of the revenue reduction associated with the rate mitigation cap. My testimony also
18 quantifies the impact of revenue requirements as discussed in Mr. Gorman's
19 testimony. In addition, I provide information as to the appropriate value of
20 Monsanto's interruptible products in the context of the general rate case, and the
21 appropriate credit to the firm demand charge.

1 Q ARE YOU SPONSORING ANY EXHIBITS IN CONNECTION WITH YOUR
2 TESTIMONY?

3 A Yes. I am sponsoring Exhibit 205 (KEI-1) through Exhibit 213 (KEI-9). These
4 exhibits were prepared either by me or under my supervision and direction.

5 Q WHAT PRICE DOES ROCKY MOUNTAIN POWER PROPOSE TO CHARGE
6 MONSANTO FOR SERVICE?

7 A The Soda Springs facility currently pays an overall average price of \$25.55 per MWH:

8 Total Firm Revenues: \$48,668,727
9 Less: Non-Firm kW Credit: (\$13,019,289)
10 Net Revenues: \$35,649,438
11 Divided by 1,395,545.2 MWH = \$25.55 per MWH

12 In its filed case, Rocky Mountain Power originally proposed to increase Monsanto
13 rates by 33% to \$33.96 per MWH:

14 Total Firm Revenues: \$60,411,081
15 Less: Non-Firm kW Credit: (\$13,019,289)
16 Net Revenues: \$47,391,792
17 Divided by 1,395,545.2 MWH = \$33.96 per MWH

18 Q WOULD YOU PLEASE SUMMARIZE YOUR FINDINGS AND CONCLUSIONS?

19 A My findings and conclusions are as follows:

20 **Cost of Service and Revenue Requirements:**

- 21 • Rocky Mountain Power has filed two revisions to its Idaho COS study in
22 response to requests by Monsanto. The cost study reflecting both of these
23 changes should be the starting point for any further modifications.
- 24 • The class coincident peaks and energy loads included in the Idaho COS study
25 are understated when compared with the loads used in the JAM study to
26 allocate costs to the Idaho jurisdiction. If the loads in the Idaho COS study do

1 not wholly reflect the JAM study loads, then customers such as Monsanto will
2 be forced to pick up more than their fair share.

3 • The Idaho COS study should be adjusted in order to align the monthly loads to
4 the JAM study loads.

5 • While I agree with the Company's determination of the dollar amount of the
6 reduction to its revenue requirement as a result of the rate mitigation cap, I do
7 not agree with the Company's approach to distributing the reduction.

8 • The rate mitigation cap exists to mitigate (that is, lessen) the impact of moving
9 to the Revised Protocol method. Distribution costs are not affected by the
10 choice of allocation methodology since these costs are situs and directly
11 assigned to their respective jurisdictions.

12 • The Company proposes to lower the rate of return across all functions in order
13 to reflect the revenue reduction stemming from the rate mitigation cap. I
14 recommend this reduction be allocated to classes on the basis of their
15 generation and transmission rate base. This will better distribute the
16 mitigation dollars to the classes impacted by the transition from to the Revised
17 Protocol method.

18 • My testimony includes the estimated impact of revenue requirement
19 adjustments for return on equity, severance costs, pension expenses, SO2
20 allowances and 2007 plant additions.

21 • As a result of the modifications to the cost study and the revenue requirement
22 adjustments, the firm revenue requirement to serve Monsanto is \$53.1 million,
23 or an increase of 9.2% in firm rates.

24 **Valuation of Monsanto Interruptibility:**

25 • Monsanto has been an exemplary interruptible customer since 1951. As a
26 reliable customer, it allows Rocky Mountain Power to avoid or defer incurring
27 capacity costs for generation. It also provides opportunities to reduce fuel or
28 purchased power expenses during high cost periods.

29 • Based on its current products of operating reserves, economic curtailment and
30 system integrity, the avoided peaker cost indicates a value of \$20 million for
31 Monsanto.

32 • Price stability and rate certainty have been consistent priorities for Monsanto's
33 management. Valuations methods which produce widely swinging or erratic
34 values year-to-year cannot be considered either stable or certain.

35 • The Company has offered its valuation of Monsanto's product under two
36 methods: the Front Office model and the GRID model. These models do not
37 adequately consider the avoided capacity costs associated with avoiding or
38 deferring generation.

- 1 • Furthermore, the models support conflicting conclusions on the value of
2 Monsanto and demonstrate wide swings in values. The Front Office model, in
3 particular, focuses exclusively on valuing Monsanto's reserves on the basis of
4 its least-profitable gas units.
- 5 • The results of the Company's "lost profit" reserve valuation in this case are
6 simply not robust and do not reflect a sound basis on which to value
7 Monsanto's interruptibility. Results can be greatly manipulated merely by
8 including – or excluding – certain resources. I recommend the Commission
9 place no weight on the Company's reserve valuations.
- 10 • The anticipated benefits of using interruptibility as a hedge against market
11 price increases is entirely missing from the Company's filing. A proper
12 reflection of the value would alleviate the double-digit increase to Monsanto
13 and help keep its rates affordable.
- 14 • I recommend the value of Monsanto's interruptible products be set at not less
15 than \$18 million for purposes of setting rates in this case.
- 16 • The impact of an increase in firm rates, together with the interruptible
17 valuation results in a net price of \$25.27 per MWH to Monsanto.

18 **Q HOW IS YOUR TESTIMONY ORGANIZED?**

19 **A** My testimony will first discuss the treatment of Monsanto loads in the cost study.
20 Next, I discuss the allocation of costs to Monsanto as a firm customer with revisions
21 to the Company cost study and adjustment for various revenue requirement issues.
22 Third, my testimony will address the quantification of valuing Monsanto's
23 interruptibility and how Rocky Mountain Power's proposed models fail to account for a
24 proper level of avoided capacity costs.

25 **III. BACKGROUND ON THE**
26 **TREATMENT OF MONSANTO IN COST STUDIES**

27 **Q DOES MONSANTO RECEIVE FIRM SERVICE FROM ROCKY MOUNTAIN**
28 **POWER?**

29 **A** Only a very small portion (9 MW) of Monsanto's total 180 MW is served under firm
30 rates. The vast majority of Monsanto's load is interruptible and is charged a lesser

1 demand charge. For cost allocation purposes Monsanto is treated as though it were
2 100% firm, although in reality Monsanto is primarily an interruptible customer.

3 **Q IF MONSANTO IS PRIMARILY AN INTERRUPTIBLE CUSTOMER, THEN HOW**
4 **DOES ROCKY MOUNTAIN POWER DETERMINE THE COSTS TO SERVE THE**
5 **LOAD?**

6 A Rocky Mountain Power adjusts Monsanto's test period loads to reflect what Monsanto
7 would have consumed had it been a firm customer. Then once the cost to serve
8 Monsanto as a firm customer is established, Rocky Mountain Power deducts from the
9 firm rate a credit for the interruptibility. The current credit is \$6.36 per kW-month.
10 Applied to 2,047,058 kW-months this results in a \$13.0 million credit. My testimony
11 will discuss the valuation credit in Section V.

12 **Q WHAT ADJUSTMENTS MUST ROCKY MOUNTAIN POWER MAKE TO**
13 **MONSANTO'S ACTUAL METERED LOADS FOR TREATMENT IN ITS COST**
14 **STUDIES?**

15 A Metered loads reflect "buy through" or "replacement" energy at times. Metered loads
16 also reflect the fact that one or more furnaces were curtailed or interrupted at times.
17 Consequently, Rocky Mountain Power must first deduct any "replacement" energy
18 taken by Monsanto from the actual metered loads. It then adds back the
19 curtailment/interrupted energy to arrive at a total firm load for Monsanto.

20 **Q WHAT IS MEANT BY "REPLACEMENT" ENERGY?**

21 A During times of economic curtailment, Monsanto may elect to buy through rather than
22 physically curtail its electric phosphorous furnace load. Under this option, Monsanto
23 can buy-through by paying Rocky Mountain Power for replacement energy at an

1 adjusted index price. This price is meant to directly compensate Rocky Mountain
2 Power for the costs associated with acquiring the replacement energy from another
3 entity. Monsanto may not buy-through during interruptions called for operating
4 reserves or system integrity.

5 **Q HAS THE COMPANY PROPERLY ACCOUNTED FOR MONSANTO'S LOADS IN**
6 **ITS ORIGINAL FILING?**

7 A No. Rocky Mountain Power acknowledges that it did not deduct 67 MW of buy-
8 through in the coincident peaks of September, November and December in its
9 originally filed Idaho COS.¹ Correction of this error has been made in a revised
10 Exhibit 30 provided as Attach Monsanto 9.6 to the Company's response to Monsanto
11 Data Request 9.6. I have attached this response and the summary pages of the
12 revised Idaho COS study as **Exhibit 205 (KEI-1)**.

13 **IV. MODIFICATIONS TO ROCKY MOUNTAIN**
14 **POWER CLASS COST STUDY**

15 **Q WHAT ARE THE RESULTS OF THE IDAHO CLASS COST STUDY AS**
16 **ORIGINALLY FILED BY ROCKY MOUNTAIN POWER?**

17 A Table 1 presents the results of Rocky Mountain Power's cost study:

¹Response to Monsanto Data Request 9.6 a.

TABLE 1

**Rocky Mountain Power Results of Class Cost of Service
as Initially Filed in Case No. PAC-E-07-05**

	<u>Present Revenue</u>	<u>Increase (Decrease) to Equal ROR</u>	<u>Percentage Change</u>
Residential	\$ 51,015,604	\$ 3,681,443	7.2%
General Service	34,512,075	(1,635,836)	-4.7%
Irrigation	39,404,679	3,876,845	9.8%
Other	977,444	221,661	22.7%
Agrium	3,998,852	580,053	14.5%
Monsanto	<u>48,668,727</u>	<u>11,742,384</u>	<u>24.1%</u>
Total	\$178,577,381	\$18,466,550	10.3%

Source: Exhibit No. 28

1 As the above results illustrate, the Company's filed class cost of service results in an
2 increase to Monsanto's firm rates of 24.1%.

3 **Q HAS THE COMPANY PROVIDED ANY UPDATES TO ITS COST STUDIES SINCE**
4 **IT INITIALLY FILED ITS GENERAL RATE CASE?**

5 **A** Yes, it has provided two updates. First, it was discovered that the power supply costs
6 presented in the Company's rate case were incorrect due to a categorization error in
7 which one of the Company's systems did not differentiate gas purchases from gas
8 sales. A revised Exhibit 30 (Idaho COS) was provided in the Company's response to
9 Monsanto Data Request 7.2.

10 Second, as explained earlier Rocky Mountain Power overstated Monsanto's
11 coincident peaks in its originally filed Exhibit 30. A corrected Idaho COS study was
12 provided in the Company's response to Monsanto Data Request 9.6. The results of
13 these two corrections are shown in Table 2:

TABLE 2

Rocky Mountain Power Results of Class Cost of Service

**As Corrected for Gas Categorization Error
and the Overstatement of Monsanto Loads**

	<u>Present Revenue</u>	<u>Increase (Decrease) to Equal ROR</u>	<u>Percentage Change</u>
Residential	\$ 51,015,604	\$ 3,842,580	7.5%
General Service	34,512,075	(1,535,457)	-4.4%
Irrigation	39,404,679	3,739,469	9.5%
Other	977,444	224,339	23.0%
Agrium	3,998,852	585,019	14.6%
Monsanto	<u>48,668,727</u>	<u>9,358,982</u>	<u>19.2%</u>
Total	\$178,577,381	\$16,214,931	9.1%

Source: Response to Monsanto Data Request No. 9.6. See also Exhibit 205 (KEI-1)

1 Based on this corrected cost study, the overall change in Monsanto's net rate would
2 be 26% compared to the 33% as originally filed, assuming no change in the
3 interruptibility credit:

4 Total Firm Revenues: \$58,027,709
5 Less: Non-Firm kW Credit: (\$13,019,289)
6 Net Revenues: \$45,008,420
7 Divided by 1,395,545.2 MWH = \$32.25 per MWH

8 **Q WHAT MODIFICATIONS HAVE YOU MADE TO THE IDAHO CLASS COST OF**
9 **SERVICE STUDY?**

10 A I have made two modifications to the Company's Idaho COS. First, I have adjusted
11 class coincident peaks and energy of most non-contract classes to better align Idaho

1 COS total loads with those in the JAM study. Second, I have applied the revenue
2 reduction stemming from the rate mitigation cap to all customer classes based on
3 their share of generation and transmission rate base. This is an alternative to Rocky
4 Mountain Power's approach which lowered the rate of return on all functions.
5 Lastly, as detailed in Mr. Gorman's testimony, there are five other adjustments to
6 Rocky Mountain Power's revenue requirement which must also flow through the cost
7 study. I have made separate adjustments to account for the estimate of these
8 proposals. Other parties may have further revenue requirement adjustments that
9 could also ultimately impact the cost to serve each class and would then need to also
10 be incorporated in the JAM study and in the Idaho COS.

11 **Alignment of Loads Between the JAM Study and the Idaho COS Study**

12 **Q PLEASE EXPLAIN THE LEVEL OF IDAHO LOADS USED IN ROCKY MOUNTAIN**
13 **POWER'S JAM STUDY.**

14 **A Exhibit 206 (KEI-2)** details the coincident peaks and energy loads employed by
15 Rocky Mountain Power in its JAM study. Page 1 provides the coincident peaks by
16 month starting with the metered loads at input and page 2 details the energy loads.
17 Replacement (or buy-through) amounts are shown in column 2 on each page, and
18 the addition of curtailments are shown in column 3. The fourth column shows the
19 temperature adjustments made in order to normalize load for weather. The total 12
20 CP for Idaho is 5,784 MW, and the total MWH load is 3,689,647 MWH. These
21 amounts were used in the JAM study for purposes of allocating costs to the Idaho
22 jurisdiction.

1 Q HOW DO THESE AMOUNTS COMPARE TO THE LOADS ASSUMED IN THE
2 IDAHO CLASS COST STUDY?

3 A A comparison of the JAM study monthly loads to the Idaho COS study is provided in
4 Exhibit 207 (KEI-3). The total coincident peaks of the Idaho COS are 2.1% lower
5 than the peaks used in the JAM study and the energy loads are 2.5% lower than the
6 energy used in the JAM study.²

7 Q ARE THE DIFFERENCES IN LOADS BETWEEN THE JAM STUDY AND IDAHO
8 COS STUDY MORE NOTICEABLE IN CERTAIN SEASONS?

9 A Yes. Almost the entire difference for the peaks occurs in the June, July, August time
10 frame. When we look at just those three months, the Idaho COS loads are 6.8% less
11 than the loads used for the same months in the JAM study. This is a critical
12 discrepancy as those three months are used in the development of allocation factors
13 applicable to seasonal resources:

14 The costs of Seasonal Resources are allocated using seasonal factors
15 because they are designed to be used more intensively at certain
16 times of the year. (Exhibit 30, Tab 1, page 7)

17 Q WHY ARE THE TOTAL LOADS SO DIFFERENT BETWEEN THE JAM STUDY
18 AND THE IDAHO CLASS COST STUDY?

19 A Rocky Mountain Power explains this discrepancy in their response to IIPA Data
20 Request 1.3:

21 The state load data that is used for jurisdictional allocation will not
22 reconcile to the sum of the class loads used in the cost of service
23 study because they are calculated differently. Because the metering
24 points and the treatment of losses are different between the two
25 calculations, the numbers will not match.

²See Response to IIPA Data Request 1.3. Rocky Mountain Power's comparison of JAM study loads and Idaho COS loads was made before it was discovered that Monsanto's coincident peaks were overstated in the Idaho COS.

1 Q WHICH CLASSES ARE CONTRIBUTING TO THE DEVIATION OF LOADS
2 BETWEEN THE JAM STUDY AND THE IDAHO COS STUDY?

3 A We know for certain this deviation is not from the two special contract loads –
4 Monsanto and Agrium. These customers are metered with interval demand meters
5 and consequently their loads are known with certainty for all 8,760 hours of the year.
6 The deviation of loads thus lies with other customer classes. The load for the majority
7 of all other classes comes from either load research sample data, historical load
8 research, or data from a prior year. Schedule 8 and 9 are taken from census data.³

9 Q ROCKY MOUNTAIN POWER CLAIMS THAT THE DIFFERENCES IN LOADS
10 BETWEEN THE JAM STUDY AND THE IDAHO CLASS COST STUDY ARE ONLY
11 1.5% AND 2.6% IN TOTAL. DOES THIS DIFFERENCE REALLY MATTER?

12 A Yes, it most certainly does for customers who are allocated a large share of the Idaho
13 jurisdictional costs. Costs are allocated to the Idaho jurisdiction based on the monthly
14 peaks and energy loads of the JAM study, and then those allocated costs are
15 transferred into the Idaho COS study. If the loads in the Idaho COS study do not
16 wholly reflect the full JAM study loads, then customers such as Monsanto and Agrium
17 are forced to pick up more than their fair share.

18 For example, Monsanto's share of the total 12 CP of the JAM study is 36.2%
19 (2,093,891 ÷ 5,783,958 kW). However, because the coincident peaks in the Idaho
20 COS study are understated, Monsanto picks up 37.0% (2,093,891 ÷ 5,660,775), a
21 higher share of the 12 CP.

22 The energy discrepancy impacts Monsanto even more so. Monsanto's share
23 of the total energy load included in the JAM study is 39.54% (1,458,945 ÷ 3,689,647

³Response to Data Request IIPA 1-2.

1 MWH). Since the energy loads in the Idaho COS study are so understated,
2 Monsanto picks up a full percentage point more of costs allocated on the basis of
3 energy; Monsanto's energy allocator in the Idaho COS is 40.56% (1,458,945 ÷
4 3,596,569).

5 As a result of these discrepancies, Monsanto is being allocated more costs
6 than are warranted based on the costs stemming from the JAM study. Furthermore,
7 the Company proposes to increase rates for Monsanto and Agrium equal to their full
8 cost of service results. Thus, it is even more important that these contract customers'
9 costs not be unfairly raised as a result of understating the loads of the non-contract
10 customers.

11 **Q HOW CAN THIS PROBLEM BE RECTIFIED?**

12 A The loads of the customer classes other than special contract, Schedule 8 and
13 Schedule 9 should be adjusted either up or down in order to align Idaho COS study
14 monthly peaks and energy sales to the amounts employed in the JAM study. In order
15 to determine these monthly adjustments, I have compared the non-contract/Schedule
16 8/9 loads of the JAM study against the non-contract/Schedule 8/9 loads of the Idaho
17 class cost study. Adjustment factors were then determined for each month for both
18 the peaks and energy as shown on **Exhibit 208 (KEI-4)**. The overall adjustment
19 reflects an increase of 3.8% for coincident peaks, and 4.9% for energy. Thus, when
20 the cost study is run based on loads which better align to the JAM study, Monsanto's
21 increase is \$8.0 million as summarized below:

TABLE 3

Rocky Mountain Power Results of Class Cost of Service

**As Corrected for Gas Categorization Error,
the Overstatement of Monsanto Loads and
the Alignment of Class Loads to the JAM Study Loads**

	<u>Present Revenue</u>	<u>Increase (Decrease) to Equal ROR</u>	<u>Percentage Change</u>
Residential	\$ 51,015,604	\$ 4,140,5828	8.1%
General Service	34,512,075	(1,274,058)	-3.7%
Irrigation	39,404,679	4,644,790	11.8%
Other	977,444	228,725	23.4%
Agrium	3,998,852	479,387	12.0%
Monsanto	<u>48,668,727</u>	<u>7,995,505</u>	<u>16.4%</u>
Total	\$178,577,381	\$16,214,931	9.1%

Source: Monsanto Workpapers

1 Based on this corrected cost study, the overall change in Monsanto's net rate would
2 be 22.4% compared to the 33% as originally filed:

3 Total Firm Revenues: \$56,664,232
4 Less: Non-Firm kW Credit: (\$13,019,289)
5 Net Revenues: \$43,644,943
6 Divided by 1,395,545.2 MWH = \$31.27 per MWH

1 **Treatment of the Rate Mitigation Cap**

2 **Q WHAT IS THE REDUCTION TO THE REQUESTED INCREASE AS A RESULT OF**
3 **THE RATE MITIGATION CAP?**

4 A Rocky Mountain Power has reduced the Revised Protocol revenue requirement by
5 \$3,561,268 in its original filing.⁴ This amount has now been adjusted downward to
6 \$3,308,193 as a result of the correction of the gas categorization error.⁵

7 **Q HOW DOES ROCKY MOUNTAIN POWER PROPOSE TO HANDLE THIS**
8 **REDUCTION?**

9 A The Company has reduced its overall requested rate of return in its Idaho COS study
10 from 8.52% down to 8.07% in order to provide the revenue reduction back to its
11 customers.⁶ The Idaho COS study is based on the Revised Protocol method JAM
12 results, not on the Rolled-In method since the Company no longer performs class
13 cost studies based on the Rolled-In allocation.⁷

14 **Q DO YOU AGREE WITH ROCKY MOUNTAIN POWER'S TREATMENT OF THE**
15 **RATE MITIGATION CAP?**

16 A No. While I agree with Rocky Mountain Power's determination of the dollar amount of
17 the reduction to its revenue requirement, I do not agree with the Company's approach
18 to distributing the reduction. By using a lower rate of return in the Idaho COS study,
19 the Company's method mitigates the increase across all functions. However, the

⁴Page 1.0 of Exhibit No. 11.

⁵Rocky Mountain Power Response to IPUC Audit Data Request 107, Attachment IPUC 107 b 2.

⁶See Response to Monsanto Data Request 7.9.

⁷See Response to Monsanto Data Request 1.16: "Separate cost of service allocations for Rolled-In are no longer calculated in any of the company's jurisdictions."

1 movement of going from the Rolled-In allocation method to the Revised Protocol
2 allocation methodology impacts system-wide costs that are allocated among all of
3 PacifiCorp's jurisdictions, that is, generation and transmission-related costs.
4 Distribution costs are not affected by the choice of allocation methodology since
5 these costs are situs and directly assigned to their respective jurisdictions. Lowering
6 the return to distribution functions is not a proper use of the revenue reduction from
7 the rate mitigation cap.

8 **Q WHY IS LOWERING THE RETURN TO THE DISTRIBUTION FUNCTION**
9 **IMPROPER?**

10 A A review of the Revised Protocol and Rolled-In workpapers show that distribution
11 expenses and distribution total plant are exactly the same between the two
12 jurisdictional allocation methodologies.⁸ Since the distribution function is unaffected
13 by the transition to the Revised Protocol methodology it does not make sense to
14 provide any portion of the rate mitigation cap to reducing the distribution revenue
15 requirement.

16 In other words, the rate mitigation cap exists to mitigate (that is, lessen) the
17 impact of moving to the Revised Protocol method. Since there are no added costs to
18 mitigate for the distribution and retail functions, it makes no sense to apply any of the
19 rate mitigation cap dollars to the distribution and retail functions. Instead, the
20 reduction in revenues should apply only to the generation and transmission functions.

⁸See Pages 2.12 and 9.12 of Exhibit 11 showing that distribution expense is \$10,136,621 for both methods. See Pages 2.26 and 9.26 of Exhibit 11 showing that distribution total plant is \$229,476,980 for both methods.

1 Q HOW DO YOU PROPOSE THE RATE MITIGATION CAP BE TREATED IN THIS
2 CASE?

3 A Rocky Mountain Power should first calculate the increases to the customer classes
4 based on the full authorized rate of return. The rate mitigation cap reduction should
5 then be allocated to all classes based on their share of generation and transmission
6 rate base. I should emphasize this does not impact the overall amount of rate
7 mitigation cap dollars, it correctly distributes those mitigation dollars to the classes
8 impacted by the transition from the Rolled-In method to the Revised Protocol.

9 Q HAVE YOU QUANTIFIED THE IMPACT OF YOUR PROPOSAL?

10 A Yes. Exhibit 209 (KEI-5) quantifies the distribution of the \$3.3 million revenue
11 reduction as proposed by the Company in column (1). Column (2) shows the same
12 amount of revenue reduction, however, allocated under our proposal on the basis of
13 generation and transmission rate base. This analysis is based on the results of the
14 cost study presented in Table 3, and assumes the Company's request for a return on
15 equity of 10.75%.

16 **Other Revenue Requirement Adjustments**

17 Q WHAT OTHER REVENUE REQUIREMENT ADJUSTMENTS SHOULD BE
18 INCORPORATED IN THE CLASS COST STUDY?

19 A Mr. Gorman addresses the following revenue requirement issues. The impacts of
20 these adjustments are as follows:

21 Return on Equity: Mr. Gorman supports a return on equity ("ROE") of 10.00%
22 compared to the Company's request for 10.75%, reducing the Company's request
23 by roughly \$3 million.

1 Transition Severance: This adjustment reduces Idaho's revenue requirement by
2 \$542,387. As an adjustment to Account 930, it is functionalized on the LABOR
3 allocator and allocated to the classes.

4 Pension Expenses: This adjustment reduces Idaho's revenue requirement by
5 approximately \$1 million. It is functionalized and allocated on the same basis as
6 the severance adjustment above.

7 SO₂ Allowances: This adjustment reduces Idaho's revenue requirement by
8 approximately \$850,000.

9 2007 Plant Additions: This adjustment reduces Idaho revenue requirement by
10 approximately \$4.7 million.

11 **Q HAVE YOU ESTIMATED THE IMPACT OF EACH OF THESE ADJUSTMENTS ON**
12 **CUSTOMER CLASSES?**

13 **A** Yes. Starting with the results of the Idaho COS study shown on Table 3, I have
14 separately estimated the impact of the various adjustments on **Exhibit 210 (KEI-6)**.
15 While the proper method would be to run these adjustments through the JAM study
16 (both the Rolled-In and Revised Protocol methods for purposes of the rate mitigation
17 cap) as well as the Idaho COS study, for purposes of this testimony we have simply
18 shown the adjustments made external to the cost studies. Any compliance study
19 created as a result of the Commission's decision in this case would of course adjust
20 the JAM studies and the Idaho COS study so that all adjustments flow through to their
21 proper functionalization and allocation.

22 **Summary of Cost Allocation Studies**

23 **Q PLEASE SUMMARIZE THE RESULTS OF YOUR COST STUDIES AND**
24 **MODIFICATIONS.**

25 **A** Table 4 summarizes the results of the cost studies with the treatment of Monsanto as
26 a firm customer:

TABLE 4

Adjusted Cost of Service Study Results

	<u>Present Revenue</u>	<u>Increase (Decrease) to Equal ROR</u>	<u>Percentage Change</u>
Residential	\$ 51,015,604	\$ 1,617,290	3.2%
General Service	34,512,075	(3,092,821)	-9.0%
Irrigation	39,404,679	2,647,368	6.7%
Other	977,444	177,234	18.1%
Agrium	3,998,852	207,001	5.2%
Monsanto	<u>48,668,727</u>	<u>4,472,640</u>	<u>9.2%</u>
Total	\$178,577,381	\$ 6,028,712	3.4%

Source: Exhibit 210 (KEI-6)

1 Based on this adjusted results of the cost study, Monsanto's firm cost of power would
 2 be \$38.08 per MWH. With no change in the interruption valuation, Monsanto's net
 3 rate would be \$28.75 per MWH, or an increase of 12.5% above the current net rate of
 4 \$25.55 per MWH.

5 Total Firm Revenues: \$53,141,367
 6 Less: Non-Firm kW Credit: (\$13,019,289)
 7 Net Revenues: \$40,122,078
 8 Divided by 1,395,545.2 MWH = \$28.75 per MWH

9 Based on the above firm revenue requirement, the firm rates for Monsanto would be
 10 \$1,275 per month customer charge, a demand charge of \$10.92 per kW-month and
 11 an energy charge of 2.1205¢ per kWh.

V. VALUATION OF MONSANTO INTERRUPTIBILITY

1 **Q WHAT AMOUNT OF CREDIT DOES MONSANTO CURRENTLY RECEIVE FOR ITS**
2 **INTERRUPTIBILITY?**

3 **A**The majority of Monsanto's load is served under an interruptible demand charge of
4 \$3.64 per kW-month. This represents a credit of \$6.36 off the \$10.00 firm demand
5 charge. As I stated earlier, the \$13 million credit offsets the firm revenue requirement
6 and results in a current net rate to Monsanto of \$25.55 per MWH.

7 **Q IS THE CURRENT CREDIT BASED ON ANY PARTICULAR VALUATION**
8 **METHODOLOGY?**

9 **A**No. The 2007 Electric Service Agreement ("2007 ESA") was negotiated in spring
10 2006 with rates agreed upon by the parties as reasonable and acceptable for service
11 to the Soda Springs facility. While information was provided by the Company on its
12 cost study, there was never an attempt to tie either the firm rates to a compliance cost
13 study, or to claim any particular method as the basis for the reduced demand charge
14 for non-firm service.

15 **Q WHAT AMOUNT OF INTERRUPTIBILITY DOES MONSANTO PROVIDE ROCKY**
16 **MOUNTAIN POWER?**

17 **A**The 2007 ESA provides for three products: (1) Operating Reserves of 95 MW which
18 can be called upon 188 hours per calendar year; (2) Economic Curtailment of 67 MW
19 available for 800 hours per calendar year; and (3) System Integrity of 162 MW
20 available 12 hours per calendar year.

1 Q WHAT RECOMMENDATIONS DO YOU MAKE TO THE COMMISSION FOR
2 PURPOSES OF ESTABLISHING A PROPER CREDIT FOR MONSANTO'S
3 INTERRUPTIBLE PRODUCTS?

4 A Before going into the details, let me first start with a few basic points regarding the
5 valuation:

- 6 1. Monsanto is a **long-term** customer. It has been an exemplary interruptible
7 customer complying with Rocky Mountain Power's curtailment requests over the
8 last fifty-plus years. Given its long-term commitment, we believe this surely
9 justifies valuing Monsanto on the basis of avoided capacity and energy.
- 10 2. Price **stability** and rate **certainty** have been consistent priorities for Monsanto's
11 management. Valuation methods which produce widely swinging or erratic values
12 year-to-year can not be considered either stable or certain.
- 13 3. Rocky Mountain Power assumes that Monsanto's interruptible load contract is
14 extended to the end of their resource planning period.⁹ In order to retain such
15 contracts in their portfolio, the Company should encourage commitment through
16 **fair and reasonable valuations**.
- 17 4. Demand response resources, such as interruptible contracts, promote efficient
18 use of resources in general and depending on generation fuel mix, can help
19 reduce externalities in power generation and reduce emissions.¹⁰ Protecting and
20 enhancing the **environment** is at the forefront of Rocky Mountain Power's
21 business strategy and the Monsanto interruptible contract is consistent with that
22 strategy.

23 Q DO YOU BELIEVE THAT ROCKY MOUNTAIN POWER HAS FAILED IN ITS
24 TESTIMONY TO RECOGNIZE THESE BASIC POINTS?

25 A Yes, I do.

- 26 1. Rocky Mountain Power handles valuation on a year-to-year basis. It never
27 approaches the valuation of Monsanto as a **capacity-focused program**.
- 28 2. Results of Rocky Mountain Power's models are **conflicting** and show **erratic**
29 **swings** in valuation. For example, the introduction of a single new resource in a
30 single month can result in wiping out \$1.4 million of the annual value.

⁹PacifiCorp 2007 Integrated Resource Plan, Chapter 4, page 74.

¹⁰PacifiCorp 2007 Integrated Resource Plan, Appendix B, page 8.

1 3. The Company's valuation offers no hedge against market prices. Claiming that
2 the value has decreased 25% since last year, while simultaneously seeking a rate
3 increase of 24% to Monsanto's firm rates, does not constitute a fair and
4 reasonable approach to encourage retention of its interruptible contract.

5 **Treatment of Monsanto as a Capacity-Focused Long-Term Resource**

6 **Q HOW LONG HAS MONSANTO BEEN A CUSTOMER?**

7 A Monsanto has been a reliable interruptible customer since 1951 and has adequate
8 ore to be mined for another 40 years. The fact that Monsanto has been an unailing
9 customer these fifty-plus years along with its commitment to remain operating in
10 Idaho in the foreseeable future all point to treating Monsanto's interruptibility as a
11 long-term resource.

12 **Q WHAT ARE THE ECONOMIC BENEFITS TO THE UTILITY, THE CONSUMERS**
13 **AND THE POWER SYSTEM AS A WHOLE FROM A LONG-TERM**
14 **INTERRUPTIBLE PROGRAM SUCH AS MONSANTO'S CONTRACT?**

15 A According to PacifiCorp's IRP, there are a host of economic benefits, but cost
16 avoidance and cost reduction are the main economic drivers. Perhaps the
17 Company's 2007 IRP stated it best:

18 Demand response allows utilities to avoid or defer incurring costs for
19 generation, transmission, and distribution, including capacity costs,
20 line losses, and congestion charges. (PacifiCorp 2007 IRP,
21 Appendix B, page 7, emphasis added)

22 **Q ARE THERE OTHER SYSTEM BENEFITS AS WELL?**

23 A The support of reliability in power supply and delivery during system emergencies is
24 also a benefit when customers such as Monsanto can shed load during emergency
25 conditions. This is further explained in the 2007 IRP:

26 Customer demand management can enhance reliability of the electric
27 supply and delivery systems by providing the utility with the means to

1 better balance loads with supply during system emergencies and/or
2 high-use periods. In this context, (demand response) can help
3 improve the adequacy and security of the power supply and delivery
4 (T&D) systems by augmenting the utility's ancillary services, such as
5 supplemental reserve. (PacifiCorp 2007 IRP, Appendix B, pages 7-8)

6 **Q DOES MONSANTO PROVIDE THESE BENEFITS TO ROCKY MOUNTAIN POWER**
7 **AND ITS CUSTOMERS?**

8 A Yes it does. Monsanto's contract allows Rocky Mountain Power to avoid or defer
9 incurring capacity costs for generation. It also allows the Company to reduce its fuel
10 or purchased power expense by calling upon Monsanto for economic curtailment over
11 800 hours each year. Furthermore, since Monsanto is able to interrupt within a ten-
12 minute time period, it qualifies as a resource that can provide operating reserves. For
13 the test period 2006, the Company called on Monsanto 70 times for operating
14 reserves, with the interruptions occurring fairly consistently across the year.
15 Interruptions for operating reserves can occur at any time and in any month, and
16 Monsanto stands available 24 hours per day to provide this product.

17 Monsanto also provides Rocky Mountain Power the means to balance system
18 loads during system emergencies. The loads of its three furnaces – 162 MW – are
19 available for curtailments for system integrity purposes.

20 **Q IS MONSANTO A "CAPACITY-FOCUSED" RESOURCE?**

21 A Yes. Monsanto's load is a flexible, price-responsive load that may be curtailed in
22 whole or in part during system emergencies, or during periods of high market prices
23 or stressed regional resources. In valuing the resource then, it makes sense to base
24 its avoided cost not on some short-term value, but the long-run avoided cost of
25 resources with similar attributes. A combustion turbine ("CT"), like Monsanto, is used

1 to meet peak periods of high demand, or in situations where numerous generator
2 outages result in scarce resources.

3 **Q DO YOU BELIEVE THAT ROCKY MOUNTAIN POWER CURRENTLY USES**
4 **MONSANTO'S INTERRUPTIBLE PRODUCTS MUCH LIKE IT WOULD A**
5 **COMBUSTION TURBINE?**

6 A Yes. Rocky Mountain Power calls upon Monsanto practically every month of the year
7 to provide either operating reserves or economic curtailment. In times of emergency,
8 the Company has called on Monsanto to interrupt all three of its furnaces, or has
9 sought Monsanto's cooperation to keep furnaces from coming on-line. Monsanto has
10 been highly successful in its performance and the Company has even sought
11 additional curtailments at critical times. A recent example occurred on July 25, 2006
12 when Monsanto was able to respond quickly to Rocky Mountain Power's appeal for
13 an additional 47 MW of curtailment above the existing 67 MW already under
14 curtailment. The fact that Monsanto is willing to provide additional curtailments when
15 needed showcases its on-going commitment to work with Rocky Mountain Power for
16 the good of the system.

17 **Q ARE THERE PENALTIES IF MONSANTO DOESN'T PERFORM?**

18 A Yes, there are penalties set forth in the 2007 ESA, but Rocky Mountain has never
19 had to exercise them since Monsanto has complied 100% with all requests. In fact, if
20 Monsanto does not comply, there is a \$150,000 penalty for each occurrence and with
21 only "two strikes" Rocky Mountain Power can petition the Commission for appropriate
22 relief.

1 Q SINCE MONSANTO'S LOAD IS TREATED LIKE A COMBUSTION TURBINE,
2 SHOULD ITS VALUE BE LIKEWISE DETERMINED ON THE BASIS OF THE
3 AVOIDED COST OF A COMBUSTION TURBINE?

4 A Yes. The credit should be based on the costs Rocky Mountain Power would incur if it
5 were to build and install a new CT. A turbine that can provide quick-start capability in
6 less than ten minutes, such as aero-derivative simple cycle combustion turbine ("Aero
7 SCCT") should be used as the basis for the load which Monsanto can curtail within
8 ten minutes, in particular the 95 MW of operating reserves. While the 67 MW of
9 economic curtailment can also be interrupted in a matter of seconds for the 12 hours
10 of system integrity, the contract currently requires a two-hour notice for the 800 hours
11 of economic curtailment. Thus, to be conservative I have used the lesser capacity
12 cost of a turbine that does not have quick-start capability, e.g., a 2 Frame "F" simple
13 cycle combustion turbine ("Frame CT"), to model the value associated with the 67
14 MW furnace load.

15 Q WHAT ARE THE COSTS ASSOCIATED WITH THESE TWO TYPES OF
16 TURBINES?

17 A The avoided capital and running costs of these turbines are shown in **Exhibit 211**
18 **(KEI-7)**. These figures represent Rocky Mountain Power's own estimates of peaking
19 resources in the East as detailed in the May 2007 Integrated Resource Plan ("2007
20 IRP").

21 The real levelized¹¹ cost of an Aero SCCT ranges between \$92.94 and
22 \$100.79 per kW (2006\$) based on construction in Utah of a 78 or 79 MW unit at a
23 carrying charge of 9.51% and including fixed operation and maintenance and other

¹¹Real levelized capacity costs used in this analysis comprise the first year's deferral. Real levelization (in contrast to a nominal levelization), assumes that the avoided capital portion would increase each year by the rate of inflation.

