

**Before the  
Public Utilities Commission  
of the State of Idaho**

**In the Matter of the Application of PacifiCorp,            )  
dba Utah Power & Light Company for                    )  
Approval of Interim Provisions for the Supply         )  
of Electric Service to Monsanto Company             )**

**CASE NO. PAC-E-01-16**

Direct Testimony of

**Dr. Alan Rosenberg**

On behalf of

**Monsanto Company**

July 2002

Project 7402



**PACIFICORP**

**Before the  
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**CASE NO. PAC-E-01-16**

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

2 **Q WHAT IS THE SUBJECT MATTER OF YOUR TESTIMONY?**

3 A First, I explain why it is appropriate to continue serving Monsanto on a contract rate  
4 for interruptible service. Second, I show how one may reasonably reflect and  
5 measure the interruptible nature of Monsanto's service in the calculation of a cost  
6 based rate. Here I examine the issue from several perspectives and demonstrate  
7 that they all point to a relatively narrow range for a contract rate for Monsanto. Third,  
8 I explain how Ms. Iverson's calculation of the cost of serving Monsanto as a firm  
9 customer should be appropriately modified and utilized to calculate the cost of serving  
10 Monsanto as an interruptible customer. Finally I comment upon some peripheral, but  
11 nevertheless important, terms and conditions for serving Monsanto.

12 **Q PLEASE SUMMARIZE YOUR FINDINGS AND CONCLUSIONS.**

13 A The first and foremost conclusion is that PacifiCorp is proposing a radical break with  
14 its 50-year history of serving Monsanto. Specifically, the Company is proposing a \$18  
15 million or 70% increase in Monsanto's rates for essentially the same level of service  
16 as Monsanto is receiving under its current contract. There is scant evidence that  
17 Pacificorp's generation and transmission costs have increased by any appreciable  
18 degree over the last seven years, let alone increased to a level that would warrant a  
19 70% increase. PacifiCorp itself notes that generally, its prices have fallen in Utah and  
20 Idaho since the merger.

21 In my twenty plus years of experience I cannot recall a utility asking, much  
22 less receiving, a 70% increase under any circumstances. PacifiCorp has not even  
23 begun to meet its burden of proof for such a drastic change. Consequently the  
24 Commission should find that PacifiCorp's request is totally unjustified and must be  
25 rejected out of hand.

1           My analysis indicates that a fair and reasonable cost based rate for serving  
2 Monsanto is \$26.10 per MWh for its 9 MW of firm service and \$19.00 per MWh for the  
3 balance of its load, which should be taken on interruptible terms. The overall cost  
4 would be approximately \$19.40 per MWh, or almost \$1 per MWh greater than current  
5 contract rate, or an increase of roughly 5%. This compares to no increase, or even  
6 decreases, for other Idaho customers in the recently completed Case No. PAC-E-02-  
7 1. There is, however, a good deal of judgment involved in establishing a rate for an  
8 interruptible contract, especially one as unique as this one. On balance, I conclude  
9 that a rate in the range of from \$17.00 to \$21.00 per MWh could be considered just,  
10 fair and reasonable.

11 **Q     HAVE THE USAGE CHARACTERISTICS OF MONSANTO CHANGED SINCE THE**  
12 **LAST CONTRACT WAS APPROVED?**

13 **A     No.**

14 **Q     THEN HOW DOES PACIFICORP ATTEMPT TO JUSTIFY A 70% INCREASE?**

15 **A**In its testimony and data responses, PacifiCorp does offer some reasons for its new  
16 position, but I find those to be rather strained. Monsanto witness Richard Anderson  
17 and I refute these excuses in our testimonies. In a letter to Mr. James R. Smith of  
18 Monsanto, Mr. Griswold, a witness for PacifiCorp in this case, does note that the sale  
19 of the Centralia plant has changed the Company's resource balance. However, that  
20 should not be a reason to denigrate the value of Monsanto's interruptibility, and  
21 hence increase its rates by 70%. Indeed, the Centralia sale, along with the cessation  
22 of other interruptible service, should logically only make Monsanto's interruptibility  
23 that much more valuable to PacifiCorp and its other customers.

1 Q PACIFICORP ALLEGES THAT MONSANTO WILL NOW BE TREATED AS A FIRM  
2 CUSTOMER, RATHER THAN AN INTERRUPTIBLE CUSTOMER. YET YOU  
3 ASSERT THAT PACIFICORP WILL BE SUPPLYING THE SAME LEVEL OF  
4 SERVICE AS UNDER THE CURRENT CONTRACT. PLEASE EXPLAIN.

5 A Under the current contract, Pacifcorp may interrupt or curtail service to Monsanto  
6 (except for the 9 MW of firm power) at any time to maintain Pacifcorp's system  
7 integrity. Under PacifiCorp's proposed new contract:

8 PacifiCorp may temporarily interrupt or curtail service of power and  
9 energy when; (i) PacifiCorp's system providing service has actually  
10 become out of balance through inadvertent or unplanned sudden  
11 occurrences and interruption or curtailment is necessary to maintain  
12 service to those retail customers (including Monsanto) receiving firm  
13 service from PacifiCorp; and/or (ii) when, in the considered opinion of  
14 PacifiCorp, pursuant to Prudent Electrical Practice, an interruption or  
15 curtailment of power and energy to Monsanto is necessary to maintain  
16 service to those retail customers (including Monsanto) receiving firm  
17 service from PacifiCorp. Except under emergency conditions,  
18 PacifiCorp shall give Monsanto at least two hours advance notice of  
19 desired interruption and/or curtailment and at least one hour's notice  
20 when interruption and/or curtailment are to be discontinued.

21 You can judge for yourself whether there is any meaningful difference between the  
22 two contracts. Moreover the new contract, as proposed by PacifiCorp, notes:

23 PacifiCorp acknowledges that Monsanto's electric furnaces require  
24 shutdowns for maintenance and overhauling, and it is the intent of the  
25 parties hereto that such shutdowns and consequent reduction of power  
26 requirements be predetermined insofar as possible by agreement  
27 between the parties.

28 If Monsanto were truly a completely firm customer, as PacifiCorp alleges, there would  
29 be no requirement for Monsanto to coordinate with PacifiCorp when it could shut  
30 down its furnaces, but could do so to minimize its own costs, not PacifiCorp's. Thus  
31 PacifiCorp is only offering Monsanto quasi-firm service.

1 Q **COULD YOU PLEASE SUMMARIZE HOW YOU ARRIVED AT AN APPROPRIATE**  
2 **RATE FOR THE NEW CONTRACT?**

3 A First let me say as a preamble there is no single formula that yields an unerring  
4 precise rate for interruptible service. Even establishing a rate for firm service involves  
5 some knowledgeable judgment and discernment. Rate design for interruptible  
6 service is that much more difficult because there are different levels of interruptible  
7 service. A customer who can interrupt within ten minutes of being notified to curtail is  
8 deserving of a rate that is lower than one who requires two hours notification. The  
9 former is receiving lower quality service, and providing the utility with greater value,  
10 than the latter. Consequently a rate that is just and reasonable for the “two hour”  
11 interruptible customer would be overcharging the “ten minute” interruptible customer.

12 There are several additional factors that may influence the level of an  
13 interruptible rate. The more important ones are:

- 14 • The total number of hours for which the customer can be interrupted; up to a  
15 point, the more hours, the lower the rate.
- 16 • The maximum number of hours which the customer can be interrupted with  
17 each notification – in general the longer the duration, the lower the rate that  
18 can be justified.
- 19 • The number of times that an interruption can be called – again, generally, the  
20 more the better.

21 Of course, even these guidelines must be used with discernment. For  
22 example, a customer that can be interrupted for a 4,000 hours in a year may not  
23 deserve a lower rate than a one that can be interrupted for 2,000 hours. The reason  
24 is that after a certain point, all usage is more than likely off peak and so the additional  
25 interruption is of little or no value to the utility. However, because electricity cannot  
26 be stored, it is always true that the shorter the notification period, the more value is  
27 the interruptibility and the lower the rate that can be justified.

1 **Q PLEASE CONTINUE WITH YOUR EXPLANATION OF HOW A FAIR AND**  
2 **REASONABLE RATE FOR INTERRUPTIBLE SERVICE MAY BE DERIVED.**

3 A The methods for deriving an interruptible rate fall into three general categories. The  
4 first is by looking at how other interruptible contracts are priced. Of course, the more  
5 comparable the other contract is to the one you are trying to price, the more  
6 relevance there is to the comparison.

7 A second type of analysis can be thought of as a bottom up approach. In this  
8 method you try to measure the variable cost of serving the load, plus a fraction of the  
9 fixed costs that would be required if the load were firm. The more interruptible the  
10 load, the closer the fraction is to zero. This method is probably the most subjective  
11 because the only thing we can say for certain is that the fraction should be between  
12 zero and one.

13 The third perspective can be categorized as a top down type of cost analysis.  
14 Here we start out with the cost of serving a fully firm load and then subtract the cost  
15 saved or avoided by the utility interrupting or having the ability to interrupt, even if the  
16 interruptions are not necessary.

17 **Q YOUR RECOMMENDATION IS FOR A RATE THAT IS ONLY APPROXIMATELY**  
18 **5% HIGHER THAN THE RATE UNDER THE EXISTING CONTRACT. DOES THAT**  
19 **SEEM REASONABLE?**

20 A Focusing only on the nominal increase of 5% is very misleading. In the first place,  
21 the rate I am recommending is more than 5% higher than the current rate. Under the  
22 current contract, PacifiCorp buys reserves from Monsanto which lowers the actual  
23 effective rate for Monsanto from the nominal \$18.50 per MWh. Under the new  
24 contract as proposed by Monsanto, the reserves are already included in the price. In  
25 the second place, the service provided under the new contract would be much more



1 interruptible than under the current contract. (This also makes it more costly to  
2 Monsanto.) So the two rates are not directly comparable.

3 **III. BACKGROUND REGARDING MONSANTO'S RATE**

4 **Q WHY HAVE YOU FOCUSED ON THE CALCULATION OR DERIVATION OF A**  
5 **COST BASED RATE FOR MONSANTO?**

6 A My understanding is that Idaho has a requirement to offer all its customers the  
7 opportunity to be served by a rate that is fair, just and reasonable. While there are  
8 certainly other considerations in establishing a just and reasonable rate, cost of  
9 service is a time-honored guideline. Of course, in the case of Monsanto, the term  
10 cost of service must be interpreted in the context of the interruptible nature of  
11 Monsanto's service. Moreover, to the best of my knowledge and belief, this is the first  
12 time that the Idaho Commission has considered such a cost analysis for Monsanto.

13 **Q IS MONSANTO CURRENTLY SERVED UNDER A COST BASED RATE?**

14 A No, not in the usual sense. Historically, a fully distributed cost study was not used to  
15 derive a rate for the Soda Springs plant. Instead the rate was set with two objectives  
16 in mind – first to keep the plant competitive and second to cover the variable cost of  
17 serving the plant plus a reasonable contribution to fixed costs so that other customers  
18 are not only not harmed, but indeed gain by the presence of the plant's usage.

19 Today, Monsanto is currently served under a rate that was negotiated by  
20 Monsanto and PacifiCorp and approved by the Commission. The Commission  
21 explicitly found the current rate to be fair, just and reasonable. The result was that  
22 not only has the Monsanto facility in Soda Springs been able to operate and  
23 contribute to the economy of Idaho, but the balance of Idaho's customers even pay

1 less for electricity by virtue of Monsanto's contribution to fixed costs, than they would  
2 have without Monsanto's load.

3 **Q WHY CAN'T MONSANTO BE SERVED ON SIMPLY A STANDARD RATE?**

4 A The size, load factor, service voltage level, history, and interruptibility provisions make  
5 Monsanto unique among PacifiCorp's Idaho customer level. As noted by the Idaho  
6 PUC in Order No. 22976:

7 Utah Power's Idaho operations serve two customers significantly larger  
8 than any other. The first and largest is Monsanto Company. Its load  
9 of over 160 megawatts (but 9 megawatts of which is firm) dwarfs that  
10 of any other customer on Utah Power's Idaho system. The  
11 determination of a fair rate for Monsanto is more complicated than for  
12 any other customer in the Idaho system because its interruptibility is  
13 treated as a resource of the entire Utah Power (and perhaps Utah  
14 Power – PacifiCorp Power) system, and analyses of the  
15 reasonableness of the Monsanto rate do not apply to smaller firm  
16 customers. (Docket No. UPL-E-89-7, Order 22976, February, 1990)

17 Consequently, Monsanto has always been served under a special contract rate.  
18 PacifiCorp likewise serves several large industrial customers under special contracts  
19 in other states.

20 **Q WHAT DOES THE CURRENT CONTRACT STIPULATE FOR MONSANTO'S**  
21 **ELECTRIC RATE?**

22 A Pursuant to the contract, Monsanto can take 9 MW of firm service and up to 206 MW  
23 of interruptible service. The overall rate is \$18.50 per MWh.

24 **Q WHAT DOES PACIFICORP PROPOSE TO CHARGE MONSANTO UPON THE**  
25 **TERMINATION OF THE CURRENT CONTRACT?**

26 A PacifiCorp is proposing to charge Monsanto \$31.40 per MWh, an increase of 70%  
27 over the current rate of \$18.50 per MWh. This dramatic increase should be

1 contrasted to the 16% average *reduction* for its other Idaho customers as a result of  
2 the recent stipulation in Case No. PAC-E-02-1. In my view, the Company proposal  
3 should be rejected if only because of the unduly disruptive magnitude of the rate  
4 being sought. Rate continuity and the avoidance of rate shock is a principle that is  
5 widely respected by regulators across North America.

6 **Q PACIFICORP WITNESS MR. TAYLOR STATES THAT THE CURRENT**  
7 **MONSANTO RATE IS \$23.20 PER MWH. WHAT ACCOUNTS FOR THE**  
8 **DIFFERENCE BETWEEN MR. TAYLOR'S REPRESENTATION OF THE RATE**  
9 **AND THE \$18.50 RATE NOTED IN YOUR LAST RESPONSE?**

10 A Mr. Taylor arrives at the \$23.20 figure by adding to the contract rate, the amortization  
11 of a \$30 million payment that Monsanto made to PacifiCorp at the time the current  
12 contract was consummated. However, there is no indication in the contract that that  
13 this one-time payment was to be amortized over the term of the contract. Indeed that  
14 language of the Company's application characterized the \$30 million as money  
15 received for the termination of the previous contract, not the current one. Moreover,  
16 from a rate impact perspective, it is clear that the correct rate to use should be the  
17 \$18.50 per MWh.

18 **Q IS PACIFICORP PROPOSING TO LOWER OTHER RATES IN IDAHO AS A**  
19 **RESULT OF THE DRAMATIC INCREASE PROPOSED FOR MONSANTO?**

20 A No. It appears that the entire increase would be pocketed by Scottish Power, at least  
21 until the next time rates are reset for all of PacifiCorp's Idaho service territory.

1 **IV. SHOULD MONSANTO LOAD BE CONSIDERED FIRM OR INTERRUPTIBLE?**

2 **Q WHY DOES PACIFICORP WANT TO TREAT MONSANTO AS A FIRM**  
3 **CUSTOMER?**

4 A The Company's request must first be clarified. Mr. Taylor only wants to treat  
5 Monsanto as a "firm" customer *for purposes of setting the new rate for Monsanto*.  
6 Obviously the cost of serving a firm customer is significantly greater than serving an  
7 interruptible customer. Thus by portraying Monsanto as a firm customer, PacifiCorp  
8 can ostensibly justify charging a higher rate to Monsanto. Since it is not proposing to  
9 decrease rates to the other customers as a result of this "reclassification",  
10 PacifiCorp's shareholders would reap the benefit.

11 I should note, however, that PacifiCorp does not necessarily consider  
12 Monsanto a firm customer subsequent to the determination of Monsanto's rate in this  
13 proceeding. PacifiCorp states that it would negotiate a credit with Monsanto for  
14 Monsanto's willingness to be interrupted, with a separate agreement for "purchasing"  
15 interruptibility from Monsanto on a short-term basis from time to time.

16 **Q IS THIS A SATISFACTORY ARRANGEMENT?**

17 A No. PacifiCorp currently serves Monsanto on a monopoly basis. Monsanto does not  
18 have access to other parties who can purchase its interruptions. Consequently,  
19 PacifiCorp could use its monopoly power to impose unfair leverage on Monsanto.  
20 Moreover, without some price certainty, the Soda Springs plant would be in a  
21 precarious financial condition, as testified to by Monsanto witness Daniel R. Schettler.

1 Q MR. GRISWOLD STATES THAT ONE REASON TO SEPARATE THE  
2 AGREEMENTS WAS TO "CLEARLY DEFINE ANY TERMS AND CONDITIONS  
3 FOR INTERRUPTIBILITY." DOES THIS RATIONALIZATION MAKE ANY SENSE?

4 A No. The frequency notification, duration, and the times when interruption are allowed  
5 can easily be incorporated in a simple purchase power agreement. Mr. Griswold's  
6 excuse is superficial.

7 Q IN RESPONSE TO THE IPUC DATA REQUEST NO. 18, MR. GRISWOLD STATES  
8 THAT THROUGH 2001 THERE WERE NO INTERRUPTIONS OF MONSANTO  
9 PURSUANT TO ITS POWER SALES CONTRACT. DOES THIS NEGATE THE  
10 VALUE OF MONSANTO AS AN INTERRUPTIBLE CUSTOMER?

11 A No, not in the slightest. First, we should point out that Monsanto was interrupted  
12 under emergency and certain auxiliary arrangements entered into with PacifiCorp.  
13 There is documented evidence that Monsanto curtailed load on over 100 occasions in  
14 the years 2000 and 2001 alone, as shown in Exhibit 201. The Company states it has  
15 continuing interest to purchase interruptions, or potential interruptions, from  
16 Monsanto. Thus, there can be no doubt concerning Monsanto's capability to interrupt  
17 its draw of power. Second, according to that same data response, it should be noted  
18 that none of PacifiCorp's other interruptible customers were interrupted over the last 5  
19 years pursuant to their power sales agreements. Thus, this is more of a generic  
20 phenomenon relating to how PacifiCorp runs its system and negotiated these  
21 agreements, rather than a problem with Monsanto. Third, the ability to interrupt is of  
22 great value, even if the actual interruption is not triggered. One does not claim a  
23 refund for your fire insurance premiums simply because your house did not catch fire.  
24 Finally, as described in the testimony of Mr. Schettler, Monsanto is willing to enter into  
25 a new contract that will make interruptions both more valuable and more likely.

1    **Q     WHY DOES PACIFICORP WANT TO CHANGE THE STATUS OF MONSANTO**  
2           **FROM INTERRUPTIBLE TO FIRM, AT LEAST FOR PURPOSES OF SETTING THE**  
3           **CONTRACT RATE?**

4    A     PacifiCorp's stated reasons are somewhat ambivalent. In his direct testimony in this  
5           case, PacifiCorp's witness Mr. Taylor states that the current method of excluding  
6           Monsanto (and other special contracts) and allocating the benefit of Monsanto's  
7           revenues to the entire PacifiCorp system has not "proved acceptable to all states".  
8           Second he states that market prices and the Company's avoided costs make the  
9           "contribution to fixed cost standard much harder to meet". Finally, he states that  
10          including a price discount for interruptibility assigns a fixed value to the interruptibility  
11          over the term of the agreement. He concludes that this would be somehow  
12          inappropriate given the "dramatic changes in the wholesale market" over the last  
13          couple of years.

14                 However, when asked in Monsanto's Data Request No. 35 why PacifiCorp  
15                 wants to consider the Monsanto load as firm, the Company gave totally different  
16                 reasons. There it stated that it wants to consider Monsanto's load as firm because:  
17                 (1) no provision in the supply contract allows for load curtailment due to economics;  
18                 and (2) the Company's practice is to limit load curtailment due to system emergencies  
19                 to two hours, which is insufficient duration to be relied upon for capacity.

20   **Q     DO YOU CONSIDER ANY OF THESE TO BE COMPELLING REASONS FOR THE**  
21           **COMPANY'S TREATMENT OF MONSANTO?**

22   A     No. I will respond to all five of those reasons. It is true that treating Monsanto as a  
23           system customer and allocating the benefits of the special contract rate back to all  
24           customers sheds no light on an appropriate rate to charge Monsanto. Moreover,

1 treatment of Monsanto and other contracts as a system resource may or it may not be  
2 acceptable to other states. However, both those observations are completely beside  
3 the point as to whether or not Monsanto is treated as an interruptible customer. In  
4 other words those considerations are totally independent of the fundamental question  
5 of whether or not Monsanto should be interruptible. Monsanto can be firm and still be  
6 considered in-situs or system (as other firm customers are), or it could be interruptible  
7 and be considered in-situs or system. In fact, it is my understanding that the issue of  
8 system versus situs is being taken up in the new Multi-State Process. In any event, it  
9 would not be necessary for the Idaho Commission to decide on in-situs versus  
10 system treatment until the time that this Commission deliberates on a general rate  
11 application by PacifiCorp.

12 I would also note that differing treatment by different regulatory bodies is a risk  
13 of doing business in different jurisdictions. Often times, having operations in several  
14 jurisdictions confers advantages to the utility, such as diversity in customer base and  
15 weather. When Utah Power merged with Pacific Power, the Company acknowledged  
16 from the beginning that it had a risk associated with inconsistent allocation methods  
17 from one state to another. If, at times, there are hazards associated in operating in  
18 multiple jurisdictions, PacifiCorp should not be able to shift those risks to its  
19 customers, as Mr. Taylor seeks to do to Monsanto in this case.

20 **Q MR. TAYLOR STATES THAT THE REVENUE CREDIT APPROACH HAS NOT**  
21 **PROVED ACCEPTABLE TO ALL STATES. PLEASE COMMENT.**

22 **A** In Data Request No. 39 (a), PacifiCorp was asked to produce sections of all Orders,  
23 Decisions and Opinions of other states that have rejected the “system revenue credit  
24 approach”. In response, Mr. Taylor was able to identify only the testimony of Staff  
25 witnesses in Oregon and Utah on this issue. Moreover, since Utah recently approved

1 a special contract for a PacifiCorp industrial customer with interruptible service, along  
2 the lines that Monsanto is seeking in this case, we can see that this issue is a red  
3 herring.

4 **Q HOW DOES MR. TAYLOR'S PROPOSED CHANGE IN TREATMENT, FROM**  
5 **"SYSTEM" TO "SITUS," AFFECT IDAHO?**

6 A First I might note that, according to the Company response to Monsanto Data  
7 Request No. 5 (Attachment), switching from "system" to "situs" implies that PacifiCorp  
8 as a whole "requires" an additional \$23 million. Second, it is the Idaho jurisdiction  
9 that is most adversely affected by this change, as the following table shows:

	<b><u>Idaho</u></b>	<b><u>Other States</u></b>	<b><u>Total</u></b>
<b><u>SYSTEM METHOD</u></b>			
"Required" Increase	\$5.3	\$293.9	\$299.2
Percent Increase	3.6%	9.5%	9.3%
<b><u>SITUS METHOD</u></b>			
"Required" Increase	\$20.7	\$301.9	\$322.6
Percent Increase	11.3%	9.9%	10.0%

10 **Q PLEASE CONTINUE WITH YOUR RESPONSE TO MR. TAYLOR'S OBJECTIONS**  
11 **TO AN INTERRUPTIBLE CONTRACT.**

12 A I disagree with Mr. Taylor that market prices and the Company's avoided costs make  
13 the "contribution to fixed cost standard much harder to meet". PacifiCorp's revenue  
14 requirement is based on its average embedded costs, which include any market



1 purchases that it may or may not have to make, and not its marginal costs. I dispute  
2 Mr. Taylor's insinuation that Monsanto should only be served by PacifiCorp's marginal  
3 resources. PacifiCorp itself changed its dependence on marginal resources when it  
4 sold its Centralia plant. PacifiCorp should take full responsibility for how it runs its  
5 system and not use this as an excuse to raise the rates of some of its customers by  
6 70%. Monsanto has been a system customer for 50 years and should have just as  
7 much right to PacifiCorp's low embedded generation costs as any other Idaho  
8 customer (or Utah or Wyoming or Oregon customer for that matter). Thus as long as  
9 Monsanto's rate is covering all of its properly allocable variable costs, and still makes  
10 a profit margin, it is contributing to PacifiCorp's fixed costs. Finally, I would note that  
11 Mr. Taylor was unable to provide the fixed cost contribution of any of the other  
12 customer classes in Idaho, thus demonstrating that this too is a red herring<sup>1</sup>.

13           Regarding PacifiCorp's third rationale cited above, I disagree that fixing an  
14 interruptible rate for Monsanto in this proceeding necessarily assigns a fixed value to  
15 the interruptibility over the term of the agreement. This excuse is also refuted in the  
16 testimony of Mr. Richard Anderson in this case. Moreover, once again Mr. Taylor is  
17 using anomalous market prices as a pretext to denigrate the value of interruptibility.  
18 The inference is that Monsanto's rate should be based on embedded costs if and only  
19 if Monsanto is considered firm. That is a false inference. All customers are served  
20 from both owned generation and power purchases.

---

<sup>1</sup> Reference Company response to Monsanto Data Request No. 42.

1 Q BUT DO YOU NOT CONCEDE THAT MARKET PRICE VOLATILITY MAKES IT  
2 MORE DIFFICULT TO SERVE MONSANTO AS AN INTERRUPTIBLE  
3 CUSTOMER?

4 A No, I do not agree at all. In fact, just the opposite is true. The fact that market prices  
5 may be very high when Monsanto is interrupted simply enhances the value of having  
6 the ability to interrupt Monsanto. As I will explain in the ensuing section of this  
7 testimony, by not incorporating any additional savings due to economic interruptions,  
8 my proposed contract price for Monsanto gives any benefit of the doubt to PacifiCorp  
9 and not to Monsanto.

10 Q HOW DO YOU RESPOND TO THE REASONS STATED IN PACIFICORP  
11 RESPONSE TO MONSANTO'S DATA REQUEST NO. 35 FOR TREATING  
12 MONSANTO AS FIRM?

13 A With regards to PacifiCorp's observation that no provision of the contract allows for  
14 curtailment due to economic reasons, I would note:

- 15
- 16 • PacifiCorp chose to offer Monsanto a contract which did not allow interruptions for economic reasons.
  - 17 • An interruptible load is still of value even if curtailment is allowed strictly for reliability reasons
  - 18
  - 19 • If the contract had allowed for economic curtailments, that would only add to the value of the interruptible nature of the contract (and lower the quality of service to Monsanto).
  - 20
  - 21

22 As to PacifiCorp's observation that a two-hour duration is insufficient to rely  
23 upon for capacity, I would note that:

- 24
- 25 • The 2 hour "limitation" appears nowhere in the current contract.
  - 26 • The Company's Emergency Response Plan states that the objective is to restore supplies to normal "*as soon as is reasonably practical*" – not in just 2 hours.
  - 27
  - 28 • The Company Plan for "controlled load reduction" states that emergencies in this category are those "requiring a large amount of load to be restricted *for a*
  - 29

1                    *short period, for example, over the peak period of the day.*" Certainly the peak  
2                    period of the day could be for a longer period than just 2 hours.

- 3                    • The Company Plan states only that the controlled disconnection will be  
4                    maintained with an *initial* maximum 2-hour disconnection.

5    **Q        IN HIS TESTIMONY OF MAY 29, MR. GRISWOLD OF PACIFICORP STATES**  
6                    **THAT MONSANTO HAS NOT BEEN TREATED DIFFERENTLY THAN ANY**  
7                    **OTHER SPECIAL CONTRACT CUSTOMER. PLEASE COMMENT.**

8    A        In that response Mr. Griswold notes that PacifiCorp has provided Nu-West a special  
9                    contract based on their cost of service. Mr. Griswold does not mention that Nu-West  
10                    is one-tenth the size of Monsanto, and that Nu-West takes firm service and not  
11                    interruptible service. Furthermore, Mr. Griswold does not mention the recent Utah  
12                    Public Service Commission's Order on Magcorp, an interruptible customer only one-  
13                    half the size of Monsanto. Magcorp is now being served by PacifiCorp at a price of  
14                    \$21.00 per MWh, or 2/3 of the price PacifiCorp is proposing for Monsanto.

15   **Q        MR. GRISWOLD NOTES THAT DURING THE SUMMER OF 2001, PACIFICORP**  
16                    **WAS "CONSTANTLY PURCHASING POWER AT PRICES OVER \$150 PER MWH**  
17                    **TO SERVE MONSANTO." PLEASE COMMENT.**

18   A        First, I should note that the market prices in the west during the summer of 2001 were  
19                    most unusual. The on peak prices this summer will be a small fraction of that price.  
20                    Second, Mr. Griswold does not mention the many hours when PacifiCorp could have  
21                    been purchasing power at less than the contract rate. Third, Monsanto is not served  
22                    entirely by purchases but is also served by PacifiCorp's low cost embedded  
23                    generation. Finally, to the extent that prices do peak that high again, and PacifiCorp  
24                    chooses to curtail Monsanto during those times, the cost savings would be quite  
25                    huge. For example, assume that PacifiCorp could avoid buying \$150 power for only

1 200 hours out of an entire year. That savings, spread out over the remaining hours of  
2 the year, would equate to a credit of almost \$3.50 per MWh.

3 **Q DOES PACIFICORP STILL CONSIDER MONSANTO INTERRUPTIBLE FOR**  
4 **PLANNING PURPOSES?**

5 A Yes. In its most recent integrated resource plan, RAMPP-6, issued only June 2001,  
6 while PacifiCorp was still in negotiations with Monsanto and insisting on a firm  
7 contract, it considered Monsanto as interruptible (as it always had), and modeled  
8 Monsanto (as it did other interruptible contracts) as a simultaneous purchase and  
9 sale. Put another way, no firm resources were modeled to meet the Monsanto load.

10 **Q IS IT YOUR POSITION THAT MONSANTO SHOULD CONTINUE TO BE TREATED**  
11 **AS AN INTERRUPTIBLE LOAD?**

12 A Yes. Monsanto should be treated as an interruptible contract because:

- 13 • Continuity with past practice warrants it.
- 14 • Monsanto has instituted its operations and capital investments on that basis.
- 15 • Monsanto is willing to continue taking lower quality service as an interruptible  
16 customer.
- 17 • Monsanto cannot be competitive without the lower rate by virtue of  
18 interruptibility.
- 19 • If all interruptible load were switched to firm, PacifiCorp would need additional  
20 capacity, potentially increasing its average cost.

21 **Q WHAT IS THE BASIS FOR YOUR LAST ASSERTION THAT IF ALL**  
22 **INTERRUPTIBLE LOAD WERE CONSIDERED FIRM, PACIFICORP WOULD NEED**  
23 **TO ADD ADDITIONAL RESOURCES?**

24 A First, as previously explained, that is indicated in RAMPP-6. Second, in response to  
25 Monsanto Data Request No. 35, PacifiCorp acknowledges that Monsanto's entire

1 Idaho load cannot be served in 2002 and 2003 from PacifiCorp's owned generation.  
2 In fact, PacifiCorp recently entered into lease arrangements for 200 MW of simple  
3 cycle gas turbines in West Valley City, Utah and is in the process of constructing 120  
4 MW of simple cycle gas turbines at its Gadsby facility. Finally, I would note that  
5 PacifiCorp is becoming more and more dependent upon short-term resources to meet  
6 its requirements as shown in the following table:

<b><u>Year</u></b>	<b><u>Net Short Term Purchases</u></b>	<b><u>% of System Requirements</u></b>
1996	0.9 GWh	1.4%
1997	0.8 GWh	2.7%
1998	2.3 GWh	3.4%
1999	1.7 GWh	2.5%
2000	4.5 GWh	6.6%
2001 <sup>2</sup>	3.7 GWh	7.1%

7 This means that PacifiCorp is finding itself short of capacity with increasing frequency.  
8 Eliminating Monsanto as an interruptibility customer exacerbates this situation.

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<sup>2</sup> Through October 2001, Source Direct Testimony of Stan K. Waters, Case No. PAC-E-02-1

1                   **V. EVALUATING THE COST OF SERVING AN INTERRUPTIBLE LOAD**

2   **Q       HOW CAN THE COMMISSION REASONABLY EVALUATE THE COST OF**  
3           **SERVING MONSANTO UNDER AN INTERRUPTIBLE CONTRACT?**

4   **A**There are several methods that would reasonably derive a cost based rate for serving  
5           Monsanto under an interruptible contract. Moreover to the extent that all or most of  
6           these methods indicate a narrow bandwidth of rates, the Commission can have  
7           confidence that the resultant rate is fair, just and reasonable. I would suggest the  
8           following six methods for consideration in this case:

- 9                   • An examination of the rates for other comparable interruptible contracts.
- 10                  • The average cost of short-term purchased power included in the Company  
11                    rates.
- 12                  • A cost of service study that allocates materially less than 100% of the  
13                    demand-related generation and transmission costs to Monsanto.
- 14                  • A cost based firm rate less the average differential PacifiCorp uses between  
15                    firm and interruptible service.
- 16                  • A cost based firm rate less the avoided resource cost by virtue of the load  
17                    being subject to interruptibility.
- 18                  • The average variable cost of production plus losses plus a judgmental adder  
19                    for a contribution to fixed cost.

20                   While it would not be advisable to focus only on one of the above benchmarks  
21           to the exclusion of others, it is my opinion that by considering all of the above, the  
22           Commission may arrive at a reasonable estimate of a just and fair rate for Monsanto.

23                   Of course, however the interruptible rate is arrived at, one thing is clear. As  
24           noted in the recent Utah Order involving PacifiCorp and Magcorp, an interruptible  
25           customer:

1            All parties agree that large customers who are willing to receive  
2            interruptible service under certain conditions impose less costs on the  
3            utility than do firm customers, and therefore warrant special pricing  
4            consideration.<sup>3</sup>

5            Since PacifiCorp was a party to that case, we see that even the Company  
6            acknowledges that interruptible customers are less costly to serve and thus deserving  
7            of lower rates.

8            **Other Interruptible Contracts**

9            **Q        WHAT RATE WOULD BE INDICATED BY EXAMINING CURRENT RATES FOR**  
10           **OTHER COMPARABLE INTERRUPTIBLE CONTRACTS?**

11           **A        Based on Company supplied information, the following table summarizes pertinent**  
12           data for PacifiCorp's interruptible customers:

<b><u>Name</u></b>	<b><u>Interruptible Load (MW)</u></b>	<b><u>Voltage Level</u></b>	<b><u>Indicative Rate (per MWh at 85% Load factor)</u></b>
Boise Cascade	50 MW	4.16 kV, 12.5 kV	\$23.90
Western Electro Chemical	9 MW	138 kV	\$20.40
Nucor	64 MW	138 kV	\$28.30
Oremet	20 MW	N/A	\$20.10
Geneva Steel Company	150 MW	138 kV	\$28.30
Magcorp	80 MW	138 kV	\$21.00
Kennecot Copper	90 - 150 MW	46 kV	\$23.50
<b>Simple Average</b>			<b>\$23.60</b>

<sup>3</sup> Order of Public Service Commission of Utah, Docket No. 01-035-38, Issued May 24, 2002, page 3. [Emphasis added]

1 **Q HOW RECENT ARE THE ABOVE CONTRACTS?**

2 A These contracts were all entered into in 1996 or later, and one as recently as the year  
3 2000. However, the most recent information concerns the situation with Magcorp.  
4 On May 24, 2002, the Public Service Commission of Utah was asked to resolve a  
5 contract dispute between Magcorp and PacifiCorp, much like the issue which is the  
6 topic of this proceeding. The Utah PSC found that a rate of \$21.00 per MWh was  
7 justified.

8 **Q DID PACIFICORP PRESENT THE SAME ARGUMENTS THAT IT NOW APPLIES**  
9 **TO MONSANTO, IN ITS ATTEMPT TO SET THE RATE FOR MAGCORP?**

10 A Yes. Mssrs. Taylor & Griswold used the same arguments, almost verbatim, to argue  
11 for a \$30.20 per MWh tariff rate for Magcorp. I would also note that PacifiCorp  
12 extended an offer to Magcorp to provide service in 2002 at an average price of  
13 \$26.50 – far less than the offer to Monsanto in this case of \$31.40<sup>4</sup>.

14 **Q HOW DOES THE MONSANTO INTERRUPTIBILITY COMPARE TO THOSE OF**  
15 **OTHER INTERRUPTIBLE CUSTOMERS OF PACIFICORP?**

16 A The Monsanto contract is much more valuable, principally because of its very short  
17 response time. Response time is of utmost importance for an electric system,  
18 because generation and load must always be in balance. Monsanto can be curtailed  
19 in seconds for emergency purposes, and is willing to do so. Monsanto can provide  
20 operating reserve in a matter of a few minutes. To the best of my knowledge, none of  
21 PacifiCorp's other interruptible customers can do that. For example, the following

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<sup>4</sup> Reference direct testimony of Bruce W. Griswold, page 5, before the Public Service Commission of Utah, Dockets No. 01-035-38, 02-035-02.



1 table shows the notification provisions for the interruptible contracts on fixed rates  
2 that PacifiCorp supplied during discovery in this case:

<b><u>Customer Name</u></b>	<b><u>Notification Provision</u></b>
Boise Cascade	At least 4 hour advance notice
Western Electro Chemical Co.	8 hours notice before interruption
Nucor Corporation	Not less than 10 minutes
Oremet	As much notice as reasonably possible
Geneva Steel Company	Never less than 10 minutes except under emergency conditions
Magnesium Corporation	At least 2 hours advance notice
Kennecott Utah Copper	Not less than 2 hours except under emergency conditions

3 **Short-Term Power Costs in Current Rates**

4 **Q THE NEXT BENCHMARK YOU MENTION IS THE PRICE OF SHORT TERM**  
5 **PURCHASED POWER INCLUDED IN THE COMPANY RATES. WHY IS THIS A**  
6 **RELEVANT BENCHMARK FOR THE PRICE OF INTERRUPTIBLE POWER?**

7 **A** In response to Data Request No. 31, PacifiCorp states that in RAMPP-6, Monsanto's  
8 load was treated as a simultaneous purchase and sale. In other words, in RAMPP-6,  
9 Monsanto is treated as though it is both a short-term resource and a short-term  
10 obligation that is on par with wholesale transactions.

1 Q WHAT IS THE AVERAGE MARKET PRICE OF SHORT-TERM PURCHASED  
2 POWER INCLUDED IN PACIFICORP'S RATES AT THE CURRENT TIME?

3 A According to the testimony of Mr. Stan K. Watters in Case No. PAC-E-02-1, that rate  
4 is approximately \$21.50 per MWh. Consequently, I believe that \$21.50 per MWh  
5 serves as yet another benchmark to be considered for the Monsanto interruptible  
6 rate.

7 **Demand Adjusted Cost Study**

8 Q YOU STATED PREVIOUSLY THAT ANOTHER METHOD BY WHICH TO GAUGE  
9 THE REASONABLENESS OF AN INTERRUPTIBLE LOAD IS TO USE A COST OF  
10 SERVICE STUDY WHICH ALLOCATED ONLY A PORTION OF THE FIXED  
11 GENERATION AND TRANSMISSION COSTS TO THE INTERRUPTIBLE  
12 CUSTOMER. PLEASE EXPLAIN THAT METHOD.

13 A In that method the full demand allocator, that would normally be used for a firm  
14 customer, is multiplied by a number less than 1, to reflect the fact that the interruptible  
15 customer does not have the right to electric service at any time it wishes.

16 Q WHAT PERCENTAGE OF THE FULL DEMAND WOULD BE USED?

17 A Clearly that is subject to debate. Some observers have recommended that no  
18 demand be used. On the other hand, if zero demand is used then the customer  
19 would not be making a contribution to fixed costs. Perhaps the only thing that is  
20 universally agreed upon is that it be significantly less than 100%

1 **Q WHAT PERCENTAGE WOULD YOU RECOMMEND IN THIS PROCEEDING?**

2 A Since this is simply another method, among many, that we are using to assess a  
3 range of reasonableness, Ms. Iverson and I have examined two different percentages  
4 for this purpose. The first percentage of full demand that we used is 50%.

5 **Q WHAT IS THE BASIS FOR USING 50% OF THE FULL DEMAND IN THE COST**  
6 **ANALYSIS?**

7 A The first is that 50% is halfway between the two extremes of 0% and 100%. Also, this  
8 is the figure that the Company has used in the past. In the Idaho PUC's Order No.  
9 22622 it states as follows:

10 With regard to embedded cost of service studies, historically the  
11 Company recovered its out-of-pocket costs for interruptible customers,  
12 a transmission component, and used a 50% factor for generation.  
13 (Docket No. UPL-E-89-3, Order No. 22622, page 17, July, 1989)

14 **Q WHY HAVE YOU APPLIED THE 50% FACTOR FOR TRANSMISSION AS WELL**  
15 **AS GENERATION?**

16 A I have applied the 50% factor for transmission as well as generation for two reasons.  
17 First, for most utilities generation and transmission are cross-substitutable. In other  
18 words, sometimes a utility will build transmission to avoid building generation, and  
19 other times the other way around – it will build generation closer to load to avoid  
20 transmission. (Although the former happens more frequently than the latter.) The  
21 second reason is that, as noted, for Monsanto a lower figure than 50% (for  
22 generation) was used in order to keep the customer. In any case, to give the  
23 Commission a more complete picture, we have run our analysis both ways.

1 Q WHAT ARE THE RESULTS OF INCLUDING 50% OF MONSANTO'S NON-FIRM  
2 DEMAND?

3 A The results of Ms. Iverson's analyses are as follows:

- 4 • 50% of Demand applied to Generation and Transmission - \$19.60 per MWh
- 5 • 50% of Demand applied to Generation, 100% to Transmission - \$21.80 per MWh

6 Q HAVE YOU CONDUCTED AN ANALYSIS USING A DIFFERENT PERCENTAGE  
7 OF FULL DEMAND, OTHER THAN THE 50%?

8 A Yes. In this method we worked backwards to arrive at a percentage of Monsanto's  
9 full demand that would achieve a predetermined objective.

10 Q WHAT OBJECTIVE DID YOU SEEK TO ACHIEVE?

11 A Prior to this proceeding, as explained by Mr. Taylor, Monsanto was treated as a  
12 system customer. In other words, no costs were explicitly assigned to Monsanto.  
13 Rather, Monsanto's contract revenue was allocated to the entire PacifiCorp system  
14 firm customers as a credit, or negative cost if you will. In this case, PacifiCorp wants  
15 to treat Monsanto as a situs or Idaho customer. Consequently, the objective we  
16 sought to achieve was to hold the remaining Idaho customers of PacifiCorp, those  
17 other than Monsanto, indifferent to the change in status of Monsanto. Put another  
18 way, we sought to keep the revenue requirement allocated to the non-Monsanto  
19 Idaho customers the same under the *situs* method as under the current *system*  
20 method.

21 Q WHAT WERE THE RESULTS OF THIS "HOLD HARMLESS" METHOD?

22 A Again, Ms. Iverson supports the analysis. The percentage of demand that we arrived  
23 at was 34% of full demand and the indicative result for serving Monsanto was \$21.70

1 per MWh under the Company's cost study. The cost for serving Monsanto is even  
2 less under the alternative cost studies.

3 **Use of Historical Rate Differential**

4 **Q DID YOU NOTE THAT ANOTHER METHOD FOR DETERMINING A REASONABLE**  
5 **RATE FOR AN INTERRUPTIBLE LOAD SUCH AS MONSANTO'S IS BY TAKING**  
6 **A COST BASED FIRM RATE AND SUBTRACTING FROM IT THE AVERAGE**  
7 **DIFFERENTIAL PACIFICORP USES BETWEEN FIRM AND INTERRUPTIBLE**  
8 **SERVICE?**

9 A Yes.

10 **Q WHAT IS THE AVERAGE DIFFERENTIAL BETWEEN PACIFICORP'S FIRM**  
11 **CONTRACT RATES AND ITS INTERRUPTIBLE CONTRACT RATES?**

12 A Based on the information we received from PacifiCorp the average differential is  
13 anywhere from \$8.27 per MWh to \$8.98 per MWh, depending upon which data  
14 response is used. The calculations are shown on my Exhibit 222.

15 **Q BASED ON THIS ANALYSIS WHAT WOULD BE THE INDICATIVE DIFFERENTIAL**  
16 **BETWEEN FIRM AND INTERRUPTIBLE SERVICE FOR PURPOSES OF THIS**  
17 **PROCEEDING?**

18 A Based on this analysis an appropriate discount to firm service would be \$9.00 per  
19 MWh. As supported by Ms. Iverson's evidence, the firm cost of serving Monsanto is  
20 approximately \$26.10 per MWh, the indicated interruptible rate by this standard would  
21 be \$26.10 less \$9.00 or approximately \$17.10 per MWh.

1 **Resources Saved and Avoided**

2 **Q WHAT WOULD BE A REASONABLE DISCOUNT TO FIRM SERVICE BASED ON**  
3 **THE RESOURCES SAVED OR AVOIDED BY THE INTERRUPTIBLE NATURE OF**  
4 **THE SERVICE?**

5 A There are two ways that a utility can reduce its revenue requirement by providing  
6 interruptible service as opposed to firm service. The first way is the avoided fixed  
7 cost of a peaking resource, simply by having the ability to interrupt the customer. I  
8 call this potential savings, because it is not even necessary to interrupt the customer  
9 to realize these savings. The potential savings can be thought of as an insurance  
10 policy and the discount to the interruptible customer as the premium. In addition to  
11 these savings, the utility could realize even more savings when the customer is  
12 actually interrupted. These additional savings are related to the avoided cost of  
13 production or purchases that would have to be made were it not for the interruption.  
14 While the latter savings are a function of market prices, and therefore difficult to  
15 predict, the potential savings can be readily estimated.

16 **Q HAS MR. TAYLOR ESTIMATED A REASONABLE DISCOUNT TO A FIRM RATE**  
17 **BASED ON RESOURCE SAVINGS?**

18 A Strangely enough he has not done so for Monsanto. However, in the Magcorp case  
19 he did estimate a discount based on avoided capacity costs of \$6.00 per MWh.

20 **Q DO YOU AGREE WITH THAT FIGURE?**

21 A No, I believe that figure is materially understated. In the first place, the fixed cost of  
22 the capacity resource Mr. Taylor used did not comport with the fixed costs used in  
23 RAMPP-6. In the second place, Mr. Taylor ignored the concept of reserve margin. A

1 1 MW reduction in load avoids the need for more than 1 MW of capacity. Finally, Mr.  
2 Taylor translated the avoided costs into a "per kWh" discount by using a 92% load  
3 factor. The load factor used for Monsanto is approximately 85%.

4 **Q HAVE YOU ESTIMATED THE RESOURCE SAVINGS ATTRIBUTABLE TO THE**  
5 **ABILITY TO INTERRUPT MONSANTO?**

6 A Yes. In Chapter 3 of the Company's most recent planning document, RAMPP – 6,  
7 the Company provides fixed cost estimates of potential resources. The smallest  
8 estimate for a peaking resource was for a simple cycle CT at a cost of \$73.48 per kW-  
9 year. This figure should be adjusted for reserve margin requirements because 1 MW  
10 of additional load requires more than 1 MW of additional capacity. On a conservative  
11 basis, I have used 10%, which is in the Company's base case reserve margin.<sup>5</sup> This  
12 brings the capital cost of a peaking resource to \$80.83 per kW-year. If we express  
13 this figure at an 85% annual load factor that Monsanto exhibits, and also adjust for a  
14 3% loss factor, we get a resource savings of \$11.00 per MWh. Again, using the  
15 \$26.10 per MWh firm rate for serving Monsanto, this would indicate an interruptible  
16 rate of \$15.10 per MWh.

17 **Q DO YOU BELIEVE THAT MONSANTO'S AVAILABILITY FOR INTERRUPTION**  
18 **MAKES SUCH A COMPARISON, TO A SIMPLE CYCLE COMBUSTION TURBINE,**  
19 **REASONABLE?**

20 A Yes. Peaking units, because of their high running costs, normally run for a relatively  
21 few number of hours per year. In RAMPP-6, the all-in cost for a combustion turbine is  
22 calculated at a 15% capacity factor. Under the interruption terms offered by Mr.  
23 Schettler, Monsanto could potentially be interrupted for approximately 800 hours per

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<sup>5</sup> In other scenarios, the Company's reserve margin is as high as 18%.

1 year. While 800 hours is less than 15%, it is close enough to make a comparison  
2 meaningful.

3 Furthermore, a combustion turbine does not always start up when it is only  
4 called upon sporadically. In contrast, Monsanto is fairly certain to have a large load  
5 that can be interrupted without fail.

6 **Q ARE THERE ANY FACTORS WHICH WOULD MAKE THE INTERRUPTIBILITY**  
7 **PROVIDED BY MONSANTO MORE VALUABLE TO PACIFICORP THAN A**  
8 **COMBUSTION TURBINE?**

9 A Absolutely. As noted in a May 13, 2002 "Discussion Document", authored by Gordon  
10 McDonald, Regulation Manager of PacifiCorp:

11 The divisions would have had to purchase peak power or build  
12 additional resources, both of which carry substantial risks. [Emphasis  
13 added]

14 For example, building a combustion turbine to meet its capacity requirements would  
15 entail:

- 16 • Gas purchase risks
- 17 • Siting and community acceptance risks
- 18 • Equipment reliability risks
- 19 • Cost overrun risks
- 20 • Regulatory risk
- 21 • Credit risk

22 If it purchased the capacity, it would entail transmission risk. Of course, PacifiCorp  
23 would seek to transfer those risks to its customers, including those in Idaho. All these  
24 risks would be avoided by utilizing Monsanto's interruptibility as a resource.



1 Q THE \$15.10 PER MWH APPEARS AT THE LOWER END OF YOUR RANGE OF  
2 JUST AND REASONABLE COST ESTIMATES FOR SERVING MONSANTO'S  
3 INTERRUPTIBLE LOAD. IS THIS ESTIMATE AN ANOMOLY?

4 A No, I do not believe so. In fact, one could even conclude that the \$11 per MWH  
5 resource savings may be conservative, for the following reasons:

- 6 • The cost of operating reserves in PacifiCorp's FERC Open Access  
7 Transmission Tariff is \$12 per kW-month, or \$144 per kW-year, considerably  
8 higher than the \$73.48 per kW-year derived from the RAMPP-6 study.
- 9 • The \$11 per MWH savings for capacity costs does not include any energy  
10 cost savings for interrupting during periods of high market prices.
- 11 • The \$11 figure does not contemplate any additional cost savings for  
12 transmission because of interruptibility.

13 Q ARE YOU AWARE THAT THE \$12 PER KW FIGURE FOR OPERATING  
14 RESERVES HAS BEEN SUPPLANTED BY A MORE RECENT APPLICATION TO  
15 FERC?

16 A Yes. Nevertheless the \$12 per kW per month price cap was based on PacifiCorp's  
17 incremental cost of capacity at certain generating facilities capable of providing  
18 reserves at the time of its 1996 rate case as the FERC.

19 Q WOULD INTERRUPTING MONSANTO PROVIDE PACIFICORP WITH  
20 PURCHASED POWER SAVINGS IN ADDITION TO THE CAPACITY COST  
21 SAVINGS?

22 A Definitely. For example, in justifying its proposed Gadsby project, Ms. Janet  
23 Morrison, Director of Resource Planning for PacifiCorp, submitted an Exhibit which  
24 stated in part:

25 Because the project will begin to immediately displace higher cost  
26 market purchases once it is operational, it provides an after-tax NPV of  
27 \$7.1 million above the regulated rate of return.

1    **Q     HAVE YOU ESTIMATED THE PURCHASE POWER SAVINGS THAT PACIFICORP**  
2           **MAY POTENTIALLY DERIVE, BASED UPON THE ECONOMIC CURTAILABILITY**  
3           **OFFERED BY MONSANTO'S PROPOSAL?**

4    A     Yes. Of course, the calculated savings depend upon which furnaces were curtailed  
5           and what market prices were like. Were this feature available in 1999, I estimate  
6           PacifiCorp could have saved anywhere from approximately \$850,000 up to almost  
7           \$1.5 million. Last year, in 2001, PacifiCorp could have saved between \$7 million and  
8           \$12.7 million.

9    **Q     HAVE YOU FACTORED IN THESE POTENTIAL PURCHASE POWER SAVINGS IN**  
10           **YOUR ANALYSIS OF A CONTRACT RATE FOR MONSANTO?**

11   A     No, I have not. For one thing, the amount is uncertain. For another thing, a portion of  
12           those savings may be given back with buy-throughs.

13   **Q     WHAT WOULD BE A FAIR AND REASONABLE INTERRUPTIBLE RATE BASED**  
14           **SOLELY ON THE CAPACITY RESOURCE SAVINGS?**

15   A     Based on my analysis, a fair and reasonable rate would be the firm rate of \$26.10  
16           less the resource savings of \$11.00, or \$15.10 per MWh.

1 **Variable Cost Plus Fixed Cost Adder**

2 **Q THE LAST METHOD YOU MENTION FOR ARRIVING AT A REASONABLE RATE**  
3 **FOR SERVING INTERRUPTIBLE LOAD IS TO ADD A JUDGEMENTAL ADDER**  
4 **TO THE VARIABLE COST OF SERVING MONSANTO. WHAT IS THE VARIABLE**  
5 **COST OF SERVING MONSANTO?**

6 A Based on cost information supplied by the Company, Ms. Iverson has derived a  
7 variable cost of serving Monsanto of \$14 per MWh. I would also note that this  
8 determination is not dependent upon the usually controversial issues dealing with the  
9 allocation of fixed, as opposed to variable, costs. Consequently, the \$14 per MWh  
10 can be used with a fair degree of confidence.

11 **Q IN YOUR OPINION WHAT WOULD BE A REASONABLE FIXED COST**  
12 **CONTRIBUTION TO ADD TO THAT IN ORDER TO ARRIVE AT A TOTAL**  
13 **INTERRUPTIBLE RATE FOR MONSANTO?**

14 A Clearly, that is a matter of judgment. In its application to the Idaho Commission for  
15 approval of the existing contract (Point #9), PacifiCorp estimated a range for  
16 contribution to fixed costs over the term of the contract of \$25 million to \$100 million.  
17 Since PacifiCorp represented that this contract would extend from November 1, 1995  
18 until December 31, 2001 and allow for approximately 1,656,000,000 kilowatts  
19 annually, I calculate that this translates to a fixed cost contribution of between \$2.44  
20 per MWh and \$9.80 per MWh. PacifiCorp characterized the new contract as  
21 providing "substantial benefits to Utah Power's other customers." The Commission  
22 found the new agreement to be fair, just and reasonable. Based on that, and also  
23 partly on my own general experience, I would say that a fixed cost adder of \$5.00 per  
24 MWh would be both appropriate and adequate.

1 **Summary and Recommendation**

2 **Q PLEASE SUMMARIZE THE RANGE OF PRICES/COSTS THAT COULD SERVE**  
3 **AS A GUIDELINE FOR A REASONABLE CONTRACT PRICE FOR MONSANTO?**

4 **A** These are summarized, from highest to lowest, on the following table:

<b>TABLE 5</b>	
<b><u>Summary of Interruptible Rate Benchmarks</u></b>	
	<b><u>Rate (\$ per MWH)</u></b>
Other Interruptible Contracts	\$23.60
Short-Term Power Cost in Current Rates	\$21.50
Magcorp Contract (new) <sup>6</sup>	\$21.00
50% of Demand Cost*	\$19.60
Variable Cost + Fixed Cost Contribution	\$19.00
Current Contract	\$18.50
Hold Harmless Method*	\$18.50
Historic Rate Differential	\$17.10
Resource Savings	\$15.10
Variable Cost Only	\$14.00
* Includes 9 MW of firm power	

5 Because the proposed Monsanto contract affords PacifiCorp much more value (and  
6 hence lower cost) than other interruptible contracts I would tend to discount the

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<sup>6</sup> The Magcorp contract price is included in "Other Interruptible Contracts." However, because of the similarities to the Monsanto situation, and because it was fully litigated, this indication is of special relevance.

1 relevance of the \$23.60 figure. Also, I would be hesitant to recommend a rate lower  
2 than that indicated by the resource savings analysis. Consequently, *a priori* a valid  
3 range would be from a low of \$15.10 per MWh to a high of \$21.50 per MWh.

4 **Q IN LIGHT OF YOUR ANALYSIS, WHAT WOULD BE A JUST, FAIR AND**  
5 **REASONABLE RATE FOR SERVING MONSANTO ON AN INTERRUPTIBLE**  
6 **BASIS?**

7 A In my opinion, a figure toward the lower end of the range is fully justifiable. I  
8 recommend an interruptible rate of \$19.00 per MWh. I come to this conclusion based  
9 on the following considerations:

- 10 • Other than the possibility of possible external power purchases, PacifiCorp  
11 has not evidenced an increase in its cost of generation and transmission since  
12 1995. Even the expensive power purchase may be an anomaly.
- 13 • The current rate has been found to be fair, just and reasonable.
- 14 • Under the new terms and conditions Monsanto is proposing, PacifiCorp will  
15 have increased opportunity to interrupt Monsanto. Specifically, PacifiCorp will  
16 be able to interrupt for economic reasons and to gain operating reserves; not  
17 only in system emergencies as in the current contract.
- 18 • Monsanto's proposed interruptibility features would make it more valuable to  
19 PacifiCorp than the recently approved contract with Magcorp. These features  
20 include:
  - 21 ○ Over twice as much load as Magcorp.
  - 22 ○ Monsanto can be interrupted in several minutes, versus a two-hour  
23 notification requirement for Magcorp.
  - 24 ○ By having the ability to shut down 1, 2, or all 3 furnaces, PacifiCorp  
25 is afforded a greater degree of flexibility.
- 26 • Because not all three furnaces would be interrupted simultaneously (except  
27 for system emergencies), the rate should be somewhat above the absolute  
28 lowest end of the range.

1 **VI. THE COST OF SERVING MONSANTO AS A FIRM LOAD**

2 **Q HOW DID MS. IVERSON ARRIVE AT THE COST OF SERVING MONSANTO AS A**  
3 **FIRM LOAD?**

4 A Ms. Iverson's starting point was the Jurisdictional Allocation Model (JAM) and Idaho  
5 Retail cost of service models supplied by PacifiCorp. It should be noted that this  
6 study, as would be expected of a cost study put together by the Company, reflects all  
7 of the expenses and investments that are being claimed by PacifiCorp. In other  
8 words, these are the expenses and rate base that the Company could be expected to  
9 claim if it were filing a rate case with a 1999 test year.

10 **Q DO UTILITIES NORMALLY GET ALL OF THEIR CLAIMED EXPENSES AND RATE**  
11 **BASE APPROVED BY REGULATORS?**

12 A No, they do not. Moreover, PacifiCorp in particular has only received a fraction of its  
13 claimed costs (or equivalently its claimed revenue requirement) in other jurisdictions.  
14 My Exhibit 223 shows the increases the PacifiCorp has sought in recent history and  
15 the final outcome of those requests. Nevertheless, Ms. Iverson and I have not made  
16 any explicit disallowances or exclusions to the full costs and investment contained in  
17 the study. As a consequence, the indicated cost of serving Monsanto, in either the  
18 Company's analysis or in ours, is most certainly overstated.

19 **Q ARE THERE ARE OTHER REASONS TO BELIEVE THE COSTS REFLECTED IN**  
20 **THE COMPANY STUDY MAY BE OVERSTATED?**

21 A Yes. When ScottishPower purchased PacifiCorp, it was anticipated that there would  
22 be considerable savings. None of those savings appear to be reflected in the study.  
23 Moreover, a full-blown investigation of PacifiCorp's allowed expenses is probably  
24 outside the scope of this proceeding.

1 Q MS. IVERSON FOUND THAT THE FULLY ALLOCATED COST FOR SERVING  
2 MONSANTO IS \$26.10 PER MWH. SHOULD ANY FURTHER ADJUSTMENTS BE  
3 MADE TO THAT?

4 A There could be. As noted before, Monsanto made a contribution of \$30 million to  
5 PacifiCorp as a condition for entering into the current contract. PacifiCorp states that  
6 it amortized this contribution, and that therefore there is no balance left to be credited.  
7 Consequently, it has not reflected this \$30 million whatsoever in its calculations. I  
8 disagree with that approach.

9 Q WHY DO YOU DISAGREE WITH PACIFICORP'S TREATMENT OF THE \$30  
10 MILLION MONSANTO CONTRIBUTION?

11 A In Point 12 of the Company's application in Case No. UPL-E-95-4, seeking approval  
12 of the current contract with Monsanto, PacifiCorp itself stated:

13 Utah Power does not seek a determination at this time on the  
14 ratemaking treatment applicable to Monsanto's \$30 million payment or  
15 other rates and changes under the New Agreement. The Company  
16 requests that all ratemaking issues be reserved for a rate case.

17 On page 2 of Order No. 26282, the Idaho PUC duly noted, and implicitly accepted,  
18 PacifiCorp's representation of that treatment. However, this is not what PacifiCorp  
19 has done. By amortizing the \$30 million it has essentially preempted this promise  
20 and taken the entire \$30 million as additional profit for its shareholders.

1 **Q DID PACIFICORP EVER SEEK A DETERMINATION FROM THE COMMISSION AS**  
2 **TO HOW TO TREAT THE \$30 MILLION PAYMENT BY MONSANTO?**

3 A No. (Reference the Company response to Monsanto Data Request No. 25). It  
4 amortized the \$30 million payment in annual reports to the Commission, and smugly  
5 treated the Staff's silence as approval.

6 **Q WAS AMORTIZING THE \$30 MILLION OVER THE LIFE OF THE CURRENT**  
7 **CONTRACT CONTEMPLATED BY THE COMMISSION?**

8 A Obviously not. If it was contemplated, it would not make any sense for the  
9 Commission to explicitly make the observation that a determination on treating the  
10 \$30 million "be reserved for a (future) rate case." It would already have been  
11 determined.

12 **Q WHAT ARE THE IMPLICATIONS OF POINT 12 OF THE COMPANY'S**  
13 **APPLICATION IN CASE UPL-E-95-4?**

14 A The implications are two-fold. First, it is highly presumptuous for PacifiCorp to claim  
15 the benefits for the entire \$30 million solely for its stockholders. Second, at least a  
16 portion of the \$30 million should arguably be available to offset rates for Idaho  
17 customers. I just wanted to bring this to the attention of the Commission, even  
18 though I have made no adjustment to Monsanto's proposed rate relating to the \$30  
19 million.

20 **Q WHAT MODIFICATIONS MIGHT BE APPROPRIATE TO THE RESULTS**  
21 **INDICATED BY THE COST OF SERVICE STUDY?**

22 A In this case, PacifiCorp has unabashedly requested an increase of 70% compared to  
23 the current rate. The evidence of Ms. Iverson and myself suggest a much smaller



1 increase is warranted. If however, for some reason, the Commission finds  
2 PacifiCorp's arguments more persuasive, it would be appropriate to moderate the  
3 strict results of the cost study to moderate the increase.

4 **Q DOES PACIFICORP SUBSCRIBE TO THIS PRINCIPLE OF MODERATION?**

5 A In theory it appears to. For example, in the direct testimony of PacifiCorp witness  
6 James Z. Zhang in Idaho Docket PAC-E-0201, rate schedules falling outside a plus or  
7 minus 5% cost of service bandwidth were adjusted to the outer edges of the  
8 bandwidth as a way to "balance cost of service precision and appropriate cost  
9 responsibility". In a recent Wyoming rate case, the Company made a similar proposal  
10 to use a 95/105 bandwidth because it produced "reasonable results". In that case  
11 "reasonable" was interpreted as no major rate schedule receiving an increase greater  
12 than two times the overall average.

13 **Q WHY WAS THE 5% TOLERANCE BANDWIDTH NOT APPLIED IN THIS CASE?**

14 A According to the Company, it was not applied because the Monsanto price is being  
15 established outside the context of a general rate case.

16 **Q DO YOU AGREE WITH PACIFICORP'S RATIONALE IN THIS REGARD?**

17 A No. Frankly, I find the reasoning quite strained. In the first place, why should the  
18 avoidance of unduly disruptive rates be any less important in this proceeding than  
19 they would be in a general rate case? Secondly, in this case the "overall average"  
20 increase for Idaho is actually a decrease as shown on Exhibit 223. Third, I would  
21 note that PacifiCorp extolled the virtues of rate stability in Case PAC-E-02-1, despite  
22 the fact that that was not a general rate case. Finally, in a case where there is no  
23 "general rate case", and hence no detailed scrutiny and oversight of the Company's

1 claimed expenses, it is that much more important to have a customer safeguard  
2 against cost imprecision.

3 **VII. SUGGESTED TERMS AND CONDITIONS FOR THE NEW CONTRACT**

4 **Q MR. TAYLOR STATES THAT HE ONLY SUPPORTS HIS RATE IF THE**  
5 **MONSANTO CONTRACT IS SUBJECT TO THE SAME LEVEL OF PRICE**  
6 **CHANGES AS THE COLLECTIVE CHANGE IN BASE RATES FOR ALL OTHER**  
7 **IDAHO CUSTOMERS. DO YOU AGREE WITH HIS SUGGESTION?**

8 **A** No. In the first place, this would be contrary to precedent. The Monsanto contract  
9 has always been fixed for the term of the contract. In fact, I am not aware of any  
10 other non-tariff contract that PacifiCorp has with any of its large industrial customers  
11 that calls for such an escalation.

12 Second, such a provision would defeat one of the purposes of the contract,  
13 namely to provide a degree of price stability.

14 Third, other tariffs could increase for reasons that have nothing to do with the  
15 cost of serving Monsanto. For example, suppose that the price of general service  
16 increases because PacifiCorp experiences an increase in distribution costs. Since  
17 Monsanto is not served by distribution facilities – but only transmission facilities – it  
18 would be inappropriate to extrapolate that increase to Monsanto.

19 Finally, I would note that Mr. Taylor is inconsistent with his application of the  
20 “parallel” escalation principle. If he truly believed in the validity of the principle, he  
21 should be advocating a new contract price for Monsanto equal to that of the present  
22 rate, adjusted for the level of change in base rates since 1995, and not the 70%  
23 increase he is seeking.

1 **Q MR. SCETTLE RECOMMENDS THAT THE TERM OF THE NEW CONTRACT**  
2 **BE NO LESS THAN FIVE YEARS. DO YOU FIND THAT PROPOSAL TO BE**  
3 **REASONABLE?**

4 A Yes. Such a term would provide benefits to both parties. This would give Monsanto  
5 the price stability it needs while also providing PacifiCorp the certainty of having this  
6 interruptible resource for planning purposes. Moreover, paragraph 2.3 of the  
7 proposed contract allows for renegotiations in the event of significant changes in  
8 either the elemental phosphorous industry or PacifiCorp's cost structure.

9 **Q IS IT YOUR SUGGESTION THAT THE NEW CONTRACT ALLOW PACIFICORP**  
10 **TO INTERRUPT MONSANTO FOR ECONOMIC REASONS AS WELL AS FOR**  
11 **RELIABILITY CONSIDERATIONS?**

12 A Yes, with three provisos. First, the number of calls for interruption should be limited  
13 to those proposed by Mr. Schettler. This should give PacifiCorp sufficient latitude to  
14 curb its peak demands and potentially limit its exposure to high price purchases as  
15 well. Second, Monsanto should be given the option of buying through any economic  
16 interruption at the firm Mid-C index price plus \$2 per MWh for transmission. This  
17 would give Monsanto the opportunity for making economic decisions while at the  
18 same time serve to protect the Company as well. Third, Monsanto should not be  
19 interrupted significantly more than comparable interruptible customers on PacifiCorp's  
20 system.

21 **Q DOES THIS CONCLUDE YOUR TESTIMONY AT THE PRESENT TIME?**

22 A Yes.

7402/30552

**QUALIFICATIONS OF DR. ALAN ROSENBERG**

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

2 A Dr. Alan Rosenberg. My business mailing address is P. O. Box 412000, 1215 Fern  
3 Ridge Parkway, Suite 208, St. Louis, Missouri 63141-2000.

4 **Q WHAT IS YOUR OCCUPATION?**

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

7 **Q PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.**

8 A I was awarded a Bachelor of Science Degree from the City College of New York in  
9 1964 and a Doctorate of Philosophy in Mathematics from Brown University in 1969.  
10 Subsequently, I held an Assistant Professorship of Mathematics at Wesleyan  
11 University in Connecticut. In the summer of 1975, I was a Visiting Fellow at Yale  
12 University. From July, 1975 through January, 1981, I was Assistant Controller for a  
13 division of National Steel Products Company. My responsibilities there included  
14 supervision of management accounting, cost accounting and data processing  
15 functions. I was also responsible for internal control, working capital levels, budget  
16 preparation, cash flow forecasts and capital expenditure analysis. From February,  
17 1981, through December, 1981, I was Project Manager of the Steel Fabricating and  
18 Products Group, National Steel Corporation, responsible for implementing an  
19 integrated general ledger system. I have published in major academic journals and  
20 am a member of the International Association for Energy Economics.

1           In January, 1982, I joined the firm of Drazen-Brubaker & Associates, Inc., the  
2 predecessor of Brubaker & Associates. Since that time, I have presented expert  
3 testimony on the subjects of industry restructuring, open access transmission,  
4 marginal and embedded class cost of service studies, prudence and used and useful  
5 issues, electric and gas rate design, revenue requirements, natural gas transportation  
6 issues, demand-side management, and forecasting.

7           I have previously testified before the Federal Energy Regulatory Commission  
8 as well as the public service commissions of Arizona, Connecticut, Delaware, Florida,  
9 Illinois, Iowa, Massachusetts, Michigan, Montana, New Jersey, New Mexico, New  
10 York, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia, Wyoming and the  
11 Provinces of Alberta, British Columbia, Nova Scotia, and Saskatchewan in Canada. I  
12 was an invited speaker at the NARUC Introductory Regulatory Training Program and  
13 a panelist at a conference on LDC and Pipeline Ratemaking sponsored by the  
14 Institute of Gas Technology. I have presented a paper on stranded costs at the 21st  
15 Annual International Conference of the International Association for Energy  
16 Economics. I have had a paper on transmission congestion pricing published in The  
17 Electricity Journal. I have also spoken at several conferences on the topic of  
18 competitive sourcing of electricity for industrial users.

19           In addition to our main office in St. Louis, the firm also has branch offices in  
20 Denver, Colorado; Chicago, Illinois; Asheville, North Carolina; Kerrville, Texas; and  
21 Plano, Texas.