

BERKSHIRE HATHAWAY INC.

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Official Home Page

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Berkshire's Corporate Performance vs. the S&P 500

Year	Annual Percentage Change		Relative Results (1)-(2)
	in Per-Share Book Value of Berkshire (1)	in S&P 500 with Dividends Included (2)	
1965	23.8	10.0	13.8
1966	20.3	(11.7)	32.0
1967	11.0	30.9	(19.9)
1968	19.0	11.0	8.0
1969	16.2	(8.4)	24.6
1970	12.0	3.9	8.1
1971	16.4	14.6	1.8
1972	21.7	18.9	2.8
1973	4.7	(14.8)	19.5
1974	5.5	(26.4)	31.9
1975	21.9	37.2	(15.3)
1976	59.3	23.6	35.7
1977	31.9	(7.4)	39.3
1978	24.0	6.4	17.6
1979	35.7	18.2	17.5
1980	19.3	32.3	(13.0)
1981	31.4	(5.0)	36.4
1982	40.0	21.4	18.6
1983	32.3	22.4	9.9
1984	13.6	6.1	7.5
1985	48.2	31.6	16.6
1986	26.1	18.6	7.5
1987	19.5	5.1	14.4
1988	20.1	16.6	3.5
1989	44.4	31.7	12.7
1990	7.4	(3.1)	10.5
1991	39.6	30.5	9.1
1992	20.3	7.6	12.7
1993	14.3	10.1	4.2
1994	13.9	1.3	12.6
1995	43.1	37.6	5.5
1996	31.8	23.0	8.8
1997	34.1	33.4	.7
1998	48.3	28.6	19.7
1999	.5	21.0	(20.5)
2000	6.5	(9.1)	15.6
2001	(6.2)	(11.9)	5.7
2002	10.0	(22.1)	32.1
2003	21.0	28.7	(7.7)
2004	10.5	10.9	(.4)
2005	6.4	4.9	1.5
2006	18.4	15.8	2.6
2007	11.0	5.5	5.5
2008	(9.6)	(37.0)	27.4
2009	19.8	26.5	(6.7)
Compounded Annual Gain – 1965-2009	20.3%	9.3%	11.0
Overall Gain – 1964-2009	434,057%	5,430%	

Notes: Data are for calendar years with these exceptions: 1965 and 1966, year ended 9/30; 1967, 15 months ended 12/31.

Starting in 1979, accounting rules required insurance companies to value the equity securities they hold at market rather than at the lower of cost or market, which was previously the requirement. In this table, Berkshire's results through 1978 have been restated to conform to the changed rules. In all other respects, the results are calculated using the numbers originally reported.

The S&P 500 numbers are **pre-tax** whereas the Berkshire numbers are **after-tax**. If a corporation such as Berkshire were simply to have owned the S&P 500 and accrued the appropriate taxes, its results would have lagged the S&P 500 in years when that index showed a positive return, but would have exceeded the S&P 500 in years when the index showed a negative return. Over the years, the tax costs would have caused the aggregate lag to be substantial.

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Our gain in net worth during 2009 was \$21.8 billion, which increased the per-share book value of both our Class A and Class B stock by 19.8%. Over the last 45 years (that is, since present management took over) book value has grown from \$19 to \$84,487, a rate of 20.3% compounded annually.*

Berkshire's recent acquisition of Burlington Northern Santa Fe (BNSF) has added at least 65,000 shareholders to the 500,000 or so already on our books. It's important to Charlie Munger, my long-time partner, and me that *all* of our owners understand Berkshire's operations, goals, limitations and culture. In each annual report, consequently, we restate the economic principles that guide us. This year these principles appear on pages 89-94 and I urge all of you – but particularly our new shareholders – to read them. Berkshire has adhered to these principles for decades and will continue to do so long after I'm gone.

In this letter we will also review some of the basics of our business, hoping to provide both a freshman orientation session for our BNSF newcomers and a refresher course for Berkshire veterans.

How We Measure Ourselves

Our metrics for evaluating our managerial performance are displayed on the facing page. From the start, Charlie and I have believed in having a rational and unbending standard for measuring what we have – or have not – accomplished. That keeps us from the temptation of seeing where the arrow of performance lands and *then* painting the bull's eye around it.

Selecting the S&P 500 as our bogey was an easy choice because our shareholders, at virtually no cost, can match its performance by holding an index fund. Why should they pay us for merely duplicating that result?

A more difficult decision for us was how to measure the progress of Berkshire versus the S&P. There are good arguments for simply using the change in our stock price. Over an extended period of time, in fact, that is the best test. But year-to-year market prices can be extraordinarily erratic. Even evaluations covering as long as a decade can be greatly distorted by foolishly high or low prices at the beginning or end of the measurement period. Steve Ballmer, of Microsoft, and Jeff Immelt, of GE, can tell you about that problem, suffering as they do from the nosebleed prices at which their stocks traded when they were handed the managerial baton.

The ideal standard for measuring our yearly progress would be the change in Berkshire's per-share intrinsic value. Alas, that value cannot be calculated with anything close to precision, so we instead use a crude proxy for it: per-share book value. Relying on this yardstick has its shortcomings, which we discuss on pages 92 and 93. Additionally, book value at most companies understates intrinsic value, and that is certainly the case at Berkshire. In aggregate, our businesses are worth considerably more than the values at which they are carried on our books. In our all-important insurance business, moreover, the difference is huge. Even so, Charlie and I believe that our book value – understated though it is – supplies the most useful tracking device for changes in intrinsic value. By this measurement, as the opening paragraph of this letter states, our book value since the start of fiscal 1965 has grown at a rate of 20.3% compounded annually.

*All per-share figures used in this report apply to Berkshire's A shares. Figures for the B shares are 1/1500th of those shown for A.

Finally, we own a group of smaller companies, most of them specializing in odd corners of the insurance world. In aggregate, their results have consistently been profitable and, as the table below shows, the float they provide us is substantial. Charlie and I treasure these companies and their managers.

Here is the record of all four segments of our property-casualty and life insurance businesses:

<u>Insurance Operations</u>	<u>Underwriting Profit</u>		<u>Yearend Float</u>	
	<u>2009</u>	<u>2008</u>	<u>2009</u>	<u>2008</u>
			<i>(in millions)</i>	
General Re	\$ 477	\$ 342	\$21,014	\$21,074
BH Reinsurance	349	1,324	26,223	24,221
GEICO	649	916	9,613	8,454
Other Primary	84	210	5,061	4,739
	<u>\$1,559</u>	<u>\$2,792</u>	<u>\$61,911</u>	<u>\$58,488</u>

And now a painful confession: Last year your chairman closed the book on a very expensive business fiasco entirely of his own making.

For many years I had struggled to think of side products that we could offer our millions of loyal GEICO customers. Unfortunately, I finally succeeded, coming up with a brilliant insight that we should market our own credit card. I reasoned that GEICO policyholders were likely to be good credit risks and, assuming we offered an attractive card, would likely favor us with their business. We got business all right – but of the wrong type.

Our pre-tax losses from credit-card operations came to about \$6.3 million before I finally woke up. We then sold our \$98 million portfolio of troubled receivables for 55¢ on the dollar, losing an additional \$44 million.

GEICO’s managers, it should be emphasized, were never enthusiastic about my idea. They warned me that instead of getting the cream of GEICO’s customers we would get the ----- well, let’s call it the non-cream. I subtly indicated that I was older and wiser.

I was just older.



Regulated Utility Business

Berkshire has an 89.5% interest in MidAmerican Energy Holdings, which owns a wide variety of utility operations. The largest of these are (1) Yorkshire Electricity and Northern Electric, whose 3.8 million end users make it the U.K.’s third largest distributor of electricity; (2) MidAmerican Energy, which serves 725,000 electric customers, primarily in Iowa; (3) Pacific Power and Rocky Mountain Power, serving about 1.7 million electric customers in six western states; and (4) Kern River and Northern Natural pipelines, which carry about 8% of the natural gas consumed in the U.S.

MidAmerican has two terrific managers, Dave Sokol and Greg Abel. In addition, my long-time friend, Walter Scott, along with his family, has a major ownership position in the company. Walter brings extraordinary business savvy to any operation. Ten years of working with Dave, Greg and Walter have reinforced my original belief: Berkshire couldn’t have better partners. They are truly a dream team.

Somewhat incongruously, MidAmerican also owns the second largest real estate brokerage firm in the U.S., HomeServices of America. This company operates through 21 locally-branded firms that have 16,000 agents. Though last year was again a terrible year for home sales, HomeServices earned a modest sum. It also acquired a firm in Chicago and will add other quality brokerage operations when they are available at sensible prices. A decade from now, HomeServices is likely to be much larger.

Here are some key figures on MidAmerican's operations:

	<i>Earnings (in millions)</i>	
	2009	2008
U.K. utilities	\$ 248	\$ 339
Iowa utility	285	425
Western utilities	788	703
Pipelines	457	595
HomeServices	43	(45)
Other (net)	25	186
Operating earnings before corporate interest and taxes	1,846	2,203
Constellation Energy *	—	1,092
Interest, other than to Berkshire	(318)	(332)
Interest on Berkshire junior debt	(58)	(111)
Income tax	(313)	(1,002)
Net earnings	<u>\$ 1,157</u>	<u>\$ 1,850</u>
Earnings applicable to Berkshire **	\$ 1,071	\$ 1,704
Debt owed to others	19,579	19,145
Debt owed to Berkshire	353	1,087

*Consists of a breakup fee of \$175 million and a profit on our investment of \$917 million.

**Includes interest earned by Berkshire (net of related income taxes) of \$38 in 2009 and \$72 in 2008.

Our regulated electric utilities, offering monopoly service in most cases, operate in a symbiotic manner with the customers in their service areas, with those users depending on us to provide first-class service and invest for their future needs. Permitting and construction periods for generation and major transmission facilities stretch way out, so it is incumbent on us to be far-sighted. We, in turn, look to our utilities' regulators (acting on behalf of our customers) to allow us an appropriate return on the huge amounts of capital we must deploy to meet future needs. We shouldn't expect our regulators to live up to their end of the bargain unless we live up to ours.

Dave and Greg make sure we do just that. National research companies consistently rank our Iowa and Western utilities at or near the top of their industry. Similarly, among the 43 U.S. pipelines ranked by a firm named Mastio, our Kern River and Northern Natural properties tied for second place.

Moreover, we continue to pour huge sums of money into our operations so as to not only prepare for the future but also make these operations more environmentally friendly. Since we purchased MidAmerican ten years ago, it has never paid a dividend. We have instead used earnings to improve and expand our properties in each of the territories we serve. As one dramatic example, in the last three years our Iowa and Western utilities have earned \$2.5 billion, while in this same period spending \$3 billion on wind generation facilities.

MidAmerican has consistently kept its end of the bargain with society and, to society's credit, it has reciprocated: With few exceptions, our regulators have promptly allowed us to earn a fair return on the ever-increasing sums of capital we must invest. Going forward, we will do whatever it takes to serve our territories in the manner they expect. We believe that, in turn, we will be allowed the return we deserve on the funds we invest.

In earlier days, Charlie and I shunned capital-intensive businesses such as public utilities. Indeed, the best businesses by far for owners continue to be those that have high returns on capital and that require little incremental investment to grow. We are fortunate to own a number of such businesses, and we would love to buy more. Anticipating, however, that Berkshire will generate ever-increasing amounts of cash, we are today quite willing to enter businesses that regularly require large capital expenditures. We expect only that these businesses have reasonable expectations of earning decent returns on the incremental sums they invest. If our expectations are met – and we believe that they will be – Berkshire's ever-growing collection of good to great businesses should produce above-average, though certainly not spectacular, returns in the decades ahead.

Our BNSF operation, it should be noted, has certain important economic characteristics that resemble those of our electric utilities. In both cases we provide fundamental services that are, and will remain, essential to the economic well-being of our customers, the communities we serve, and indeed the nation. Both will require heavy investment that greatly exceeds depreciation allowances for decades to come. Both must also plan far ahead to satisfy demand that is expected to outstrip the needs of the past. Finally, both require wise regulators who will provide certainty about allowable returns so that we can confidently make the huge investments required to maintain, replace and expand the plant.

We see a “social compact” existing between the public and our railroad business, just as is the case with our utilities. If either side shirks its obligations, both sides will inevitably suffer. Therefore, both parties to the compact should – and we believe will – understand the benefit of behaving in a way that encourages good behavior by the other. It is inconceivable that our country will realize anything close to its full economic potential without its possessing first-class electricity and railroad systems. We will do our part to see that they exist.

In the future, BNSF results will be included in this “regulated utility” section. Aside from the two businesses having similar underlying economic characteristics, both are logical users of substantial amounts of debt that is *not* guaranteed by Berkshire. Both will retain most of their earnings. Both will earn and invest large sums in good times or bad, though the railroad will display the greater cyclicality. Overall, we expect this regulated sector to deliver significantly increased earnings over time, albeit at the cost of our investing many tens – yes, tens – of billions of dollars of incremental equity capital.

Manufacturing, Service and Retailing Operations

Our activities in this part of Berkshire cover the waterfront. Let’s look, though, at a summary balance sheet and earnings statement for the entire group.

Balance Sheet 12/31/09 (in millions)

<u>Assets</u>		<u>Liabilities and Equity</u>	
Cash and equivalents	\$ 3,018	Notes payable	\$ 1,842
Accounts and notes receivable	5,066	Other current liabilities	7,414
Inventory	6,147	Total current liabilities	9,256
Other current assets	625		
Total current assets	14,856		
Goodwill and other intangibles	16,499	Deferred taxes	2,834
Fixed assets	15,374	Term debt and other liabilities	6,240
Other assets	2,070	Equity	30,469
	<u>\$48,799</u>		<u>\$48,799</u>

Earnings Statement (in millions)

	<u>2009</u>	<u>2008</u>	<u>2007</u>
Revenues	\$61,665	\$66,099	\$59,100
Operating expenses (including depreciation of \$1,422 in 2009, \$1,280 in 2008 and \$955 in 2007)	59,509	61,937	55,026
Interest expense	98	139	127
Pre-tax earnings	2,058*	4,023*	3,947*
Income taxes and minority interests	945	1,740	1,594
Net income	<u>\$ 1,113</u>	<u>\$ 2,283</u>	<u>\$ 2,353</u>

*Does not include purchase-accounting adjustments.

Rocky Mountain Power

PacifiCorp Historical Capital Structure and Net Utility Plant (\$000)

	Q3 2010 (1)	2009 (2)	2008 (3)	2007 (4)	2006 (5)	2005 (6)
Amount						
1 Common Equity	\$ 7,153,471	\$ 6,606,934	\$ 5,945,440	\$ 5,039,642	\$ 4,385,367	\$ 3,761,073
2 Preferred Stock	40,733	41,463	41,463	41,463	41,463	41,463
3 Short Term Debt	34,000	-	85,000	-	399,000	216,650
4 Long Term Debt	6,357,737	6,356,965	5,502,871	5,117,231	4,080,562	4,046,925
5 Total Capital	\$ 13,585,941	\$ 13,005,362	\$ 11,574,774	\$ 10,198,336	\$ 8,906,392	\$ 8,066,111
Percent Change Total Capital	133.22%					
Percent Change Common Equity	141.94%					
Weight						
6 Common Equity	52.65%	50.80%	51.37%	49.42%	49.24%	45.63%
7 Preferred Stock	0.30%	0.32%	0.36%	0.41%	0.47%	0.51%
8 Short Term Debt	0.25%	0.00%	0.73%	0.00%	4.48%	2.69%
9 Long Term Debt	46.80%	48.88%	47.54%	50.18%	45.82%	50.17%
10 Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Net Utility Plant						
11 Utility Plant	\$ 20,821,797	\$ 19,881,830	\$ 18,462,954	\$ 16,637,483	\$ 15,526,911	\$ 14,532,899
12 Construction Work in Progress	1,897,349	1,799,367	1,208,786	941,819	734,457	594,604
13 Total Utility Plant	\$ 22,719,146	\$ 21,681,197	\$ 19,671,740	\$ 17,579,302	\$ 16,261,368	\$ 15,127,503
14 Accum. Prov. For Depr. Amort. Depl	\$ (7,399,321)	\$ (7,199,824)	\$ (6,848,927)	\$ (6,591,766)	\$ (6,408,699)	\$ (6,129,968)
15 Net Utility Plant	\$ 15,319,826	\$ 14,481,373	\$ 12,822,813	\$ 10,987,536	\$ 9,852,669	\$ 8,997,535
	140.71%					

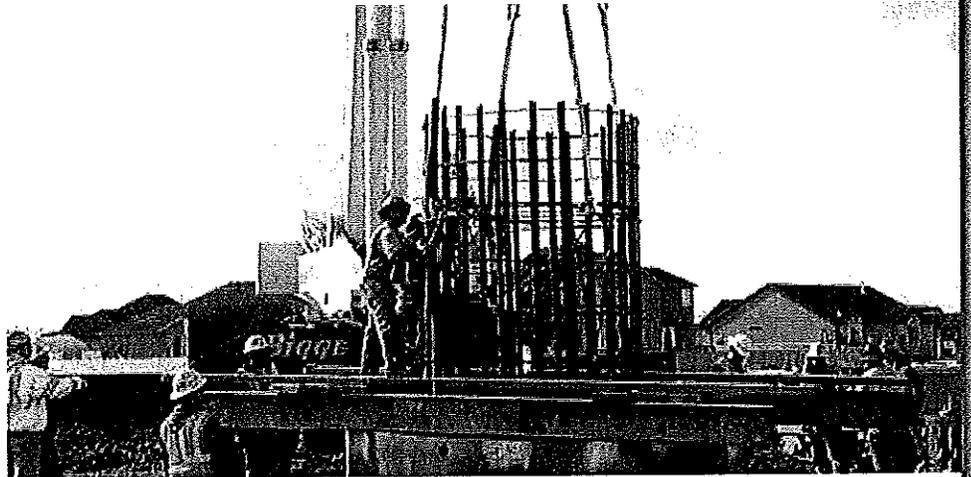
Source:
FERC Form 1, various dates.

Energy Gateway

Bringing new transmission to the West

Customer benefits

- Energy independence within the PacifiCorp footprint and long-term rate stability through increased protection from market price volatility into the future.
- More flexibility and stronger connections across the region to move energy resources where they are – or will be needed by customers.
- Ease current bottlenecks in the transmission network, ensuring reliable, efficient, coordinated service.
- Access to diverse energy resource areas to support customer growth.
- Continue the reliability levels that our customers need and expect.
- More efficient use of existing generating resources while encouraging development of needed new generation, including renewable energy resources, to support customer needs.



Facts about this transmission expansion project

The need for a robust transmission system has been identified by federal and state officials and industry experts as critical to meeting the growing needs of consumers as well as evolving energy policies. Yet, for a number of reasons, significant regional investment has been lacking for almost two decades. PacifiCorp, however, is taking the lead and moving forward to invest more than \$6 billion to construct approximately 2,000 miles of new high-voltage transmission lines. The investment in new transmission lines will help the company meet the growing electrical needs of its customers while easing transmission congestion and improving the flow of electricity throughout the region.

PacifiCorp's ambitious plan was first announced in May 2007, and construction began in February 2009 on the first segment, with other segments moving forward in siting and permitting processes.

Why PacifiCorp?

PacifiCorp is uniquely situated to make these essential investments in the regional transmission system.

- Through Rocky Mountain Power and Pacific Power, PacifiCorp serves more than 1.7 million retail electric customers in Utah, Oregon, Wyoming, Washington, Idaho and northern California. In addition to service to its retail customers, PacifiCorp, as one of the largest owners of transmission in the West, provides transmission service to a wide range of other utilities, municipalities, public agencies and independent generators that use PacifiCorp lines to deliver electricity to their customers. This not only helps reduce overall costs for customers, this access is also required by federal regulators.



Pacific Power | Rocky Mountain Power

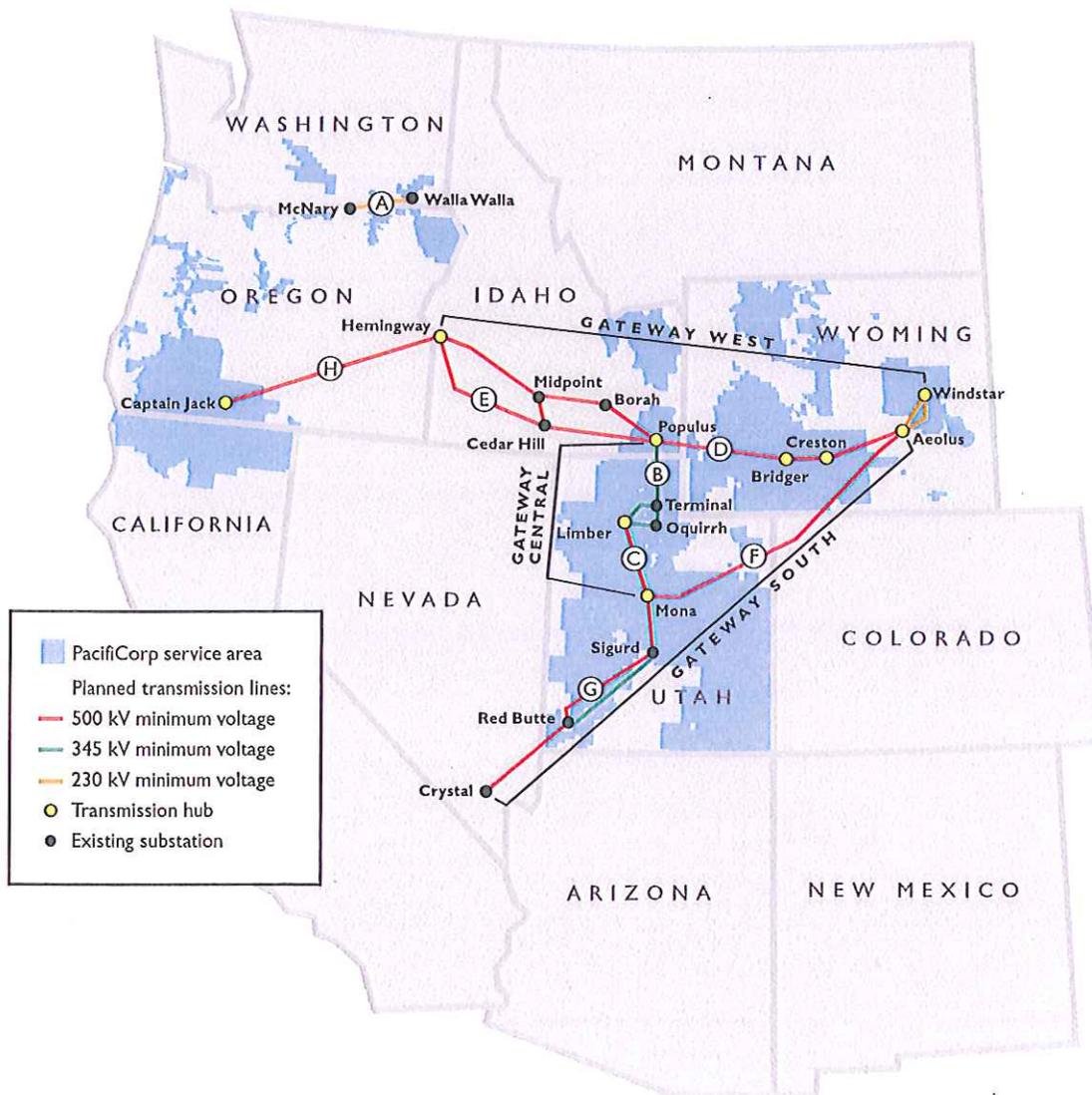
- The Energy Gateway transmission expansion will position PacifiCorp to serve the growing needs of its retail customers and network customers while improving the reliability of its overall transmission system.
- PacifiCorp already owns and operates approximately 15,800 miles of transmission lines from southeast Utah to central Washington, and from northeast Wyoming across to Oregon and into California.
- The transmission expansion will help PacifiCorp ensure its system is adequate and capable of meeting future customer load growth. The new lines will move power to customer load centers, particularly in Utah, Oregon and Wyoming. They also will support the needs of our customers seeking a more diverse resource mix.
- The new transmission segments are a natural expansion of the transmission investment commitments MidAmerican Energy Holdings Company made when it acquired PacifiCorp in 2006.

Benefits

- New transmission planned as part of the Energy Gateway project will strengthen the connections between Rocky Mountain Power and Pacific Power. This provides more flexibility to move energy resources where they are needed, and to maintain low-cost delivery and service reliability.
- Designed to provide the company with much-needed infrastructure to reliably serve its customers, these new projects also provide substantial long-term benefits to the entire Western region through a backbone for cost-efficient, flexible and diverse resource development in resource-rich areas.
- Major transmission expansion to resource areas within the West can help lead to energy independence within the PacifiCorp footprint and long-term rate stability through increased protection from market price volatility in the future. Transmission is the difference between proactively shaping our customers' future rates or leaving it largely exposed to market price volatility and availability of outside resources.
- Provides essential new transmission in important, resource-rich areas that are currently without adequate transmission options.
- A stronger transmission network that provides more capacity and more access will ease congestion throughout the West and ensure reliable, efficient, coordinated service for our customers.
- The transmission model will enable new markets for – and encourage increased development of – new energy resources.
- Other environmental benefits include more efficient use of existing resources, a critical first step in addressing carbon footprint and global climate change issues.

Design features

- A unique feature of Energy Gateway is the “hub and spoke” design of the project. Instead of building to specific generating facilities, the transmission is being built to resource areas, often ahead of specific resources being constructed. From these hubs, power will be collected from a variety of existing, future and even currently unplanned generation sources, then moved back out through the transmission system to customers. This is particularly important for, and designed for, renewable energy resources.
- This design opens up improved access to load centers, markets and geographic areas rich with new resource potential. It provides flexibility and encourages new resource development from increased access and critical transmission capacity. It will help resolve an ongoing regional situation where potential development of new resources is hindered by lack of transmission access, or vice versa, when transmission isn't built until generation resources are built first.
- Specific routes for most of the line segments remain to be finalized. The company is working with a variety of local, state and federal entities and involving the public in local meetings. A general map on the facing page shows the full potential build of the project. It may not reflect the final routes or construction sequence. For the most current information, go to pacificorp.com/energygateway.

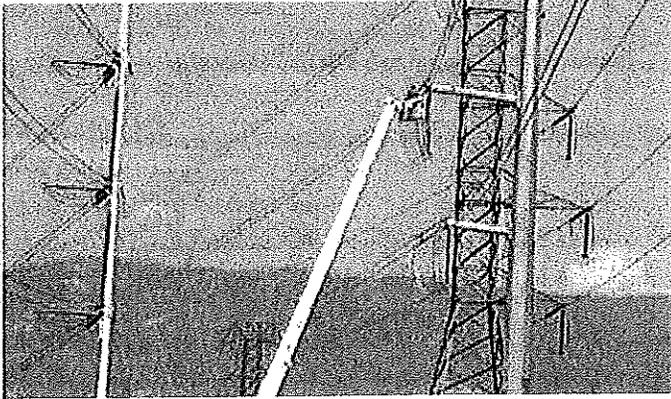


This map is for general reference only and reflects the expansion necessary to construct Energy Gateway to its full capacity of 6000 MW. It may not reflect the final routes or construction sequence.

Energy Gateway Transmission Expansion Project

These current in-service dates are planned, but are subject to change based on customer and regional needs.

- (A) Walla Walla to McNary: In-service date undergoing regional review.
- (B) Populus to Terminal: Part of the Gateway Central project. Construction underway with projected in-service date of 2010.
- (C) Mona to Oquirrh: Also part of the Gateway Central project with projected in-service date of 2013.
- (D) Windstar to Populus: Part of Gateway West, with projected in-service date of 2014-2016.
- (E) Populus to Hemingway: Also part of Gateway West, with projected in-service date of 2014-2018.
- (F) Aeolus to Mona: Part of Gateway South, with projected in-service date of 2017-2019.
- (G) Mona to Crystal: Also part of Gateway South, with projected in-service date of 2017-2019. The adjacent Sigurd to Red Butte line has a projected in-service date of 2014.
- (H) Hemingway to Captain Jack: In-service date undergoing regional review.

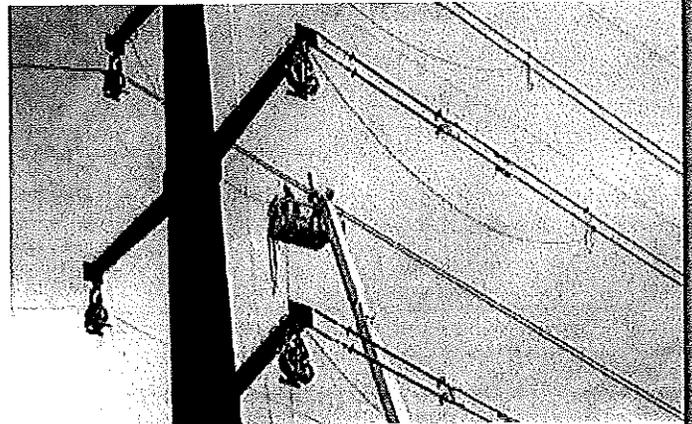


Lessons learned as progress continues

Now, more than two years since Energy Gateway was originally announced, the basic premise for Energy Gateway remains sound and the project continues to move forward.

- Concrete and steel are in the ground and construction is well underway on the Populus to Terminal segment, which is on schedule to go into service in 2010. Planning and siting work continues on several other segments.
- Flexibility has been added to some later priority segments to prudently respond to cost, projected demand and resource issues, including those identified in PacifiCorp's most recent long-range energy resource planning tool, the Integrated Resource Plan, released late May 2009. Through this planning process, customer growth forecasts are matched with resource requirements to balance costs and risks while ensuring our customers' future energy requirements can be met.
- The need for new transmission has moved to the forefront throughout the region and the United States in the past year. Developing a more robust transmission system is increasingly seen as critical to the successful expansion of new renewable development, to maintaining a reliable, safe electrical system, and as part of the economic stimulus intended to bring our country out of an economic recession.

- PacifiCorp's Energy Gateway project is real, it's happening and it is under construction. The key to the successful ability to get these projects from concept to reality is a strong collaboration with all who have an interest in the development. This includes all who may be impacted by the development as well as local, state and federal officials, and a wide range of other organizations.
- Consistent, regular communication and an opportunity for interested parties to be heard and their ideas considered makes all the difference in the successful siting of these projects. PacifiCorp has and will continue to follow these guidelines throughout the process of planning, siting, permitting and developing these lines.
- PacifiCorp actively pursued partners on key aspects of Energy Gateway and will continue to do what is possible to accommodate broader regional needs. However, our first priority is building this project to meet the needs of our customers, and we will not delay the work that must be done to benefit and protect the interests of our customers.
- Capital costs increased significantly in the first year of the project – some 20 percent from original estimates for raw materials alone. These costs are dynamic and continue to evolve. We will carefully and responsibly manage the investments to minimize the financial impacts on our customers.



For additional information, please visit
pacificorp.com/energygateway



Pacific Power | Rocky Mountain Power

- These outages will comply with all regional outage notice proceedings and will be scheduled at times that minimize the impacts to transmission service to the extent reasonable.

Will these projects impact neighboring utilities?

- The Western Electricity Coordinating Council path rating process has specific steps that incorporate input from neighboring utilities and establish mitigation steps necessary to reduce impact on them. PacifiCorp will work with its neighboring utilities through this process to mitigate the impacts of construction, if any, on their systems.
- As proposed, Energy Gateway segments will increase the overall reliability and usability of the transmission grid as a whole.

What will be the rate impacts to wholesale transmission customers?

- Transmission rates will need to increase to cover the incremental cost of this new construction above and beyond capacity being built to serve retail customers.
- The new lines, however, will increase system flexibility and allow access to lower cost resource areas, even when considering the increase in transmission use rates.

Collaboration with Others

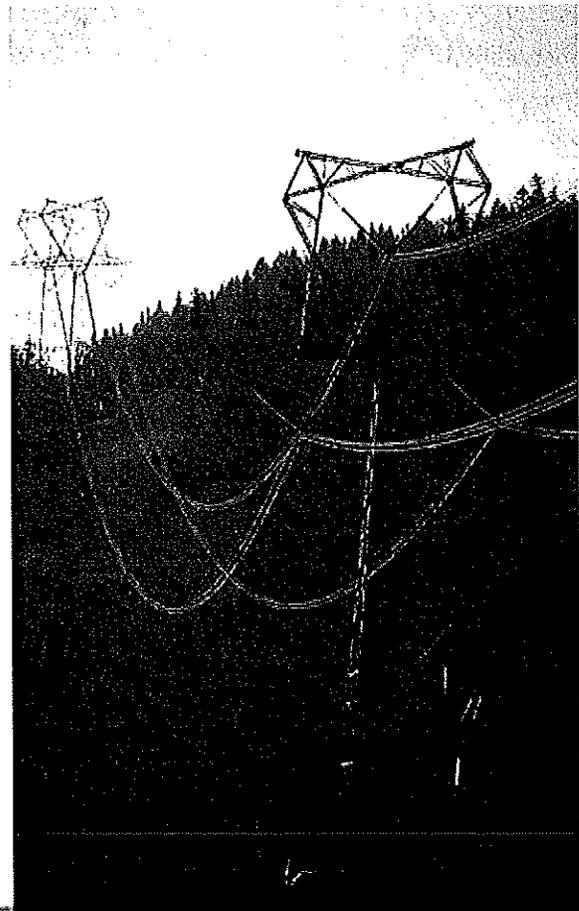
How does the Energy Gateway project relate to other regional projects already underway or under consideration?

- The lines proposed as part of Energy Gateway will result in a stronger and more versatile system that will facilitate the development of additional transmission projects.
- Portions of this project also form a "keystone" that other regional projects can tie into, reducing the need for redundant transmission in the area.
- PacifiCorp continues to coordinate with other regional entities and proposed transmission projects where it makes sense and where it has the potential to benefit our customers. However, Energy Gateway will happen regardless, our customers need it and it is already under construction.

How will you coordinate with other groups in the region like the Western Electricity Coordinating Council, Northern Tier Transmission Group, Columbia Grid, West Connect and others?

- PacifiCorp will work through WECC and NTTG to coordinate with other utilities and sub-regional planning groups in the region. PacifiCorp also will work directly with other utilities as required to coordinate the planning and implementation of these facilities.
- The Energy Gateway project segments currently are in various stages of the WECC three-phase ratings process.

For additional information, please visit pacifiCorp.com/energygateway





Energy Gateway

Bringing new transmission to the West

Attention has focused on our nation's electrical transmission system, especially in the West where there has been very little investment in new transmission infrastructure for nearly 20 years. During that time, population, communities and demand for electricity in the region have increased significantly. The transmission system is reaching capacity in many places and faces bottlenecks in others.

Our parent company, PacifiCorp, is leading the way to change that. In May 2007, PacifiCorp launched the Energy Gateway Transmission Expansion project – an ambitious, multi-year \$6 billion plus investment that will add approximately 2,000 miles of new transmission line across the West. Energy Gateway, and projects planned by other entities, will alleviate constraints and address current and future growth of many kinds.

Today construction is underway on one Energy Gateway segment and outreach, siting and permitting processes continue for several others. Major segments are scheduled to be in service by 2014.

Among its benefits, Energy Gateway will provide access to conventional energy sources and connect areas where renewable energy development possibilities are strong, as shown in these regional maps of wind (PDF), solar, biomass and geothermal (PDF) potential. Learn more about how Energy Gateway supports renewable resource development (PDF).

Along with population and energy demand growth, investment in our transmission system also is driven by our required Integrated Resource Plan. This plan identifies a need for more transmission lines to deliver electricity from new generating resources – either from new generating plants or to provide a path for additional energy purchases from other entities in the region.

The Energy Gateway map shows the individual segment additions to the transmission system to complete the expansion at its potential full build. Depending on regional, third-party and local participation, the final lines may vary somewhat. PacifiCorp is taking every reasonable step to accommodate broad regional transmission needs but will, at minimum, build Energy Gateway to first meet our commitment to provide our customers with safe, reliable and reasonably priced electrical service.

Read more about this important investment in the Energy Gateway fact sheet (PDF), or get answers to frequently asked questions (PDF).

Links to Energy Gateway and local transmission project segment information can be found below. We update these pages regularly as new information becomes available.

Energy Gateway Segments

Segment A - Walla Walla to McNary

Gateway Central

Segment B - Populus to Terminal

Segment C - Mona to Oquirrh

Segment C - Oquirrh to Terminal

Gateway West

Segment D - Windstar to Populus

Segment E - Populus to Hemingway

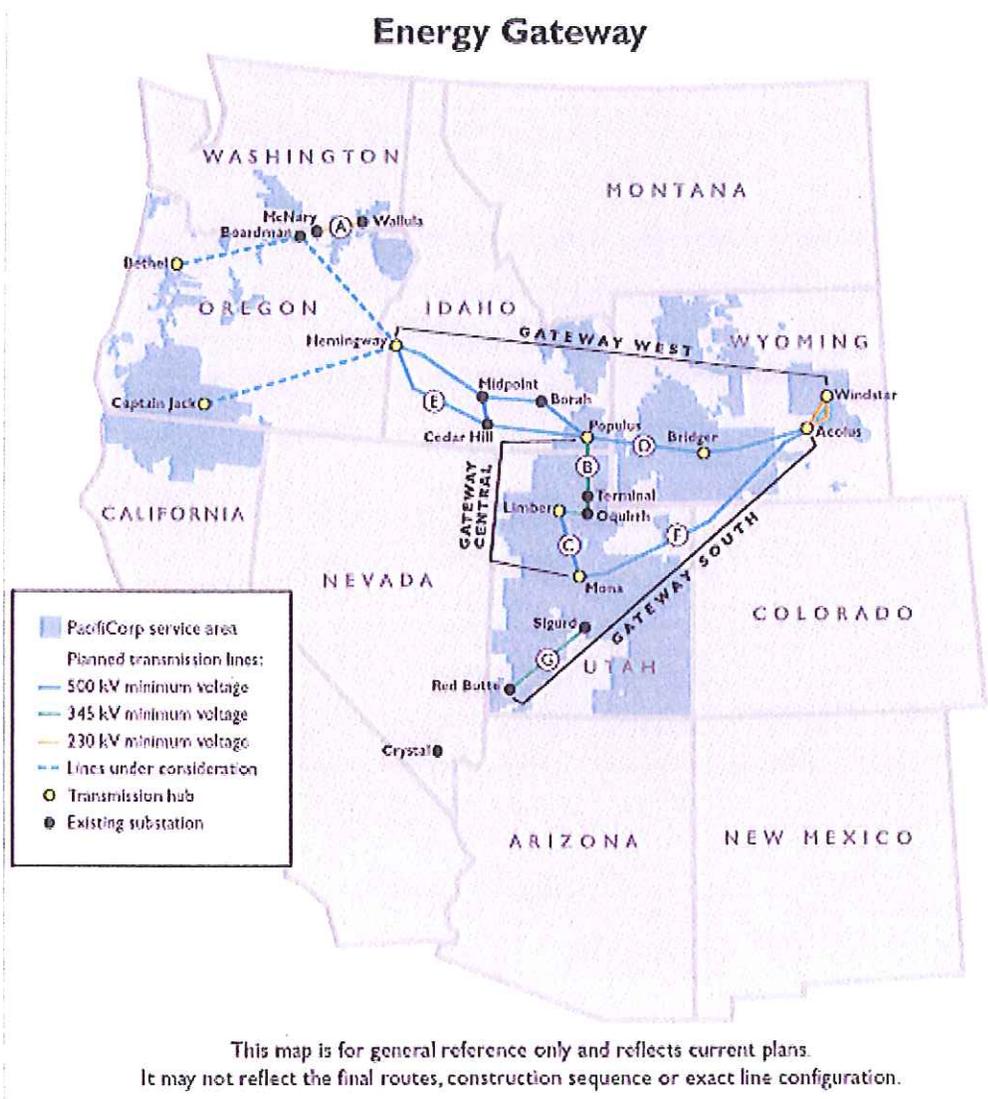
Gateway South

Segment F - Aeolus to Mona

Segment G - Mona to Crystal

Segment G - Sigurd to Red Butte

Segment H - Hemingway to Captain Jack



(Updated November 10, 2010)

Customer Service



Customer service

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Gateway South

With energy use on the rise and electrical demand fast approaching the limits of the existing transmission system, new facilities are needed to meet the growing needs. This growth in demand for electrical energy comes from both new and existing customers. Individually, consumers today are using 26 percent more electricity than they did 20 years ago.

As part of PacifiCorp's Energy Gateway Transmission Expansion Project, the company is planning to build a high-voltage transmission line, known as the Gateway South segment, from the Aeolus substation in southeastern Wyoming into the new Clover substation located near Mona, Utah. While there has been significant interest by third parties to participate in the Gateway South project and maximize the project's transmission capacity, to date none have been able to make a financial commitment that would allow this project to be built to meet broader regional needs. Therefore, the company will proceed with the portion necessary to serve our customers.

For more information on specific sections of this line, please go to:

Aeolus to Mona

Mona to Crystal

Sigurd to Red Butte, another transmission line that is part of the Gateway South project, will start in Sigurd, Utah, and continue south to the Red Butte Substation north of St. George, Utah. That project is currently underway.

A map (PDF) showing the revised Gateway South proposal is available on this web site. Detailed maps will be made available here as the project enters into the Public Scoping process, expected to begin in 2011.

Project Timeline

- Public Scoping – Early 2011
- Informational Meetings – Early 2011
- Environmental Impact Statement – December 2008 - 2015
- Estimated line in service for customers – 2017 - 2019

Public Participation

Public input is a very important part of this process and will be welcomed at all stages of this transmission line development. Landowner meetings will be hosted by the company as the project gets underway. Public Scoping meetings are expected to be held as part of the environmental review process. The Bureau of Land Management will oversee this process under the National Environmental Policy Act and will host these meetings to collect official public comments on the project for the draft Environmental Impact Statement.

Additional Information About the Project

The company welcomes your comments at all stages of this transmission line development. For more information, please call us at (801) 220-4221 or e-mail ConstructionProjects@pacificorp.com. Please be sure to include the project name – "Energy Gateway South" – in your inquiry.

(Updated October 14, 2010)

Customer Service

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PAC-E-10-07/Rocky Mountain Power
November 24, 2010
Monsanto Rebuttal Data Request 2.4

Monsanto Rebuttal Data Request 2.4

Re: Rebuttal of Mr. Richard Walje: At page 10, Mr. Walje states "Monsanto receives exactly the same service as any other customer on the Company's system." Please fully explain how all other customers experience hundreds of hours of interruption of service exactly as Monsanto does?

Response to Monsanto Rebuttal Data Request 2.4

Monsanto receives the same service as any other customer on the Company's system. However, Monsanto's contract allows the Company to curtail that service under certain terms and conditions that are set forth in the retail special contract.

Recordholder: Paul Clements
Sponsor: A. Richard Walje

Exh 241



September 2, 2010

Page 1 of 2

Account No: 61876396-001-004

Purchase Order No:4509583869

MONSANTO COMPANY
 Attention: Accounts Payable
 P.O. Box 816
 Soda Springs, ID 83276

REMIT WIRE TRANSFER TO:

PACIFICORP
 JPM/CHASE
 ABA # 021000021
 Account # 5531896

4509 916694

DESCRIPTION		AMOUNT	
Billing As Provided Under Electric Service Agreement Between PacifiCorp (dba Rocky Mountain Power) and Monsanto Company Dated May 18, 2006 For The Month of August, 2010			
Billing Period:	31-Jul-10	Through	31-Aug-10
Hours in Period:	744		
Customer Charge:			\$1,227.00
Demand Charge:			
	kW	Rate	Amount
Firm Demand:	9,000	12.27	110,430.00
Interruptible Demand:	178,712	[REDACTED]	[REDACTED]
Total Demand Charges	<u>187,712</u>		\$814,555.28
Energy Charges:			
	kWh	Rate	Amount
Firm Energy:	6,696,000	0.02381	159,431.76
Interruptible Energy:	100,496,000	0.02381	2,392,809.76
Replacement Energy:	15,808,000	0.04483	699,690.67
Total Energy Charges	<u>122,800,000</u>		\$3,251,932.19
Power Factor Charge:			
	kVar	Rate	Amount
Average kVars	69,281		
Less Allowed kVars 33% x 187,712	61,945		
Excess kVars	<u>7,336</u>	0.75000	\$5,502.00
Net Total Amount Due For The Month of August, 2010			<u>\$4,073,216.47</u>
Arrears			
Previous Balance			\$4,074,081.90
Payment Received	08/27/10		\$4,074,081.90
Payment Received			<u>\$0.00</u>
Account Balance			\$0.00
Interest On Arrears			
	\$0	1%	= <u>\$0.00</u>
Balance Due Rocky Mountain Power			<u>\$4,073,216.47</u>

Exh 242



MONSANTO COMPANY
 Account No: 61876396-001-004

September 2, 2010

Billing Period 31-Jul-10 Through 31-Aug-10

Page 2 of 2

DESCRIPTION			
North Meter			
	kWh	kVarh	
08/31/10 7:00	10,095	8,336	
07/31/10 7:00	10,001	8,255	
	94	81	
Multiplier	100,000	100,000	
	<u>9,400,000</u>	<u>8,100,000</u>	
Peak Demand:	14,336	Power Factor	75.75%
South Meter			
	kWh	kVarh	
08/31/10 7:00	107,109	38,811	
07/31/10 7:00	106,975	38,360	
	1,134	451	
Multiplier	100,000	100,000	
	<u>113,400,000</u>	<u>45,100,000</u>	
Peak Demand:	173,824	Power Factor	92.92%
Total North and South	<u>122,800,000</u>	<u>53,200,000</u>	
Coincidental Demand			
Date	08/23/10		
Time	15:00		
North Meter	13,888		
South Meter	173,824		
Total	<u>187,712</u>		
Total Meter (Meter Not Billing Quality - For Information Only)			
	kWh	kVarh	
08/31/10 7:00	117,073	47,094	
07/31/10 7:00	115,845	46,562	
	1,228	532	
Multiplier	100,000	100,000	
	<u>122,800,000</u>	<u>53,200,000</u>	

Monsanto Interruption and Curtailment Detail

Type	Date	BEg & End Time PPT HE	Duration Hrs	MW	YTD HRS	Replacement MW	Replacement \$
Curtailment	7/8/10	1130-2130	12	67	12.00	12 hrs @ 67	\$ 28,428.10
Curtailment	7/10/10	1130-2230	12	67	24.00	8 hrs @ 67	\$ 20,836.83
Curtailment	7/11/10	1230-2230	11	67	35.00	8 hrs @ 67	\$ 17,515.81
Curtailment	7/12/10	930-2230	14	67	49.00	13 hrs @ 67	\$ 29,321.88
Curtailment	7/13/10	930-2230	14	67	63.00	13 hrs @ 67	\$ 28,179.53
Curtailment	7/14/10	930-2230	14	67	77.00	13 hrs @ 67	\$ 30,767.69
Curtailment	7/15/10	730-2330	17	67	94.00	17 hrs @ 67	\$ 40,690.44
Curtailment	7/16/10	730-2330	16	67	110.00	15 hrs @ 67	\$ 37,884.48
Curtailment	7/17/10	830-2230	14	67	124.00	13 hrs @ 67	\$ 34,650.68
Curtailment	7/18/10	830-2230	16	67	139.00	15 hrs @ 67	\$ 34,496.29
Curtailment	7/19/10	830-2230	14	67	153.00	12 hrs @ 67	\$ 33,866.82
Curtailment	7/20/10	930-2230	14	67	167.00	14 hrs @ 67	\$ 40,602.33
Curtailment	7/21/10	930-2230	14	67	181.00	7 hrs @ 67	\$ 22,285.44
Curtailment	7/22/10	930-2230	14	67	195.00	14 hrs @ 67	\$ 37,286.84
Curtailment	7/23/10	830-2230	15	67	210.00	15 hrs @ 67	\$ 40,287.77
Curtailment	7/24/10	730-2230	16	67	226.00	16 hrs @ 67	\$ 41,378.53
Curtailment	7/26/10	0930-1330, 1930-2230	10	67	236.00	5 hrs @ 67	\$ 10,036.45
Curtailment	7/27/10	1230-2230	11	07	247.00	9 hrs @ 67	\$ 29,899.42
Curtailment	7/28/10	1230-2230	11	67	258.00	11 hrs @ 67	\$ 35,169.84
Curtailment	7/29/10	1330-1930, 2230	8	67	266.00	8 hrs @ 67	\$ 26,016.77
Curtailment	7/30/10	1230-2030, 2230	10	67	276.00	11 hrs @ 67	\$ 27,646.88
Curtailment	7/31/10	1230-2230	11	67	287.00	11 hrs @ 67	\$ 31,042.44
Curtailment	8/2/10	1230-2030, 2230	10	67	287.00	1 hr @ 18; 9 hr @ 67	\$ 30,707.00
Curtailment	8/4/10	1330-1930, 2230	8	67	305.00	8 hrs @ 67	\$ 26,164.27
Curtailment	8/6/10	1230-2030, 2230	10	67	315.00	10 hrs @ 67	\$ 32,631.85
Curtailment	8/6/10	1230-2030, 2230	10	67	325.00	8 hrs @ 67	\$ 25,793.66
Curtailment	8/7/10	1230-2030, 2230	10	67	335.00	8 hrs @ 67	\$ 25,728.10
Curtailment	8/8/10	1230-2030, 2230	10	67	345.00	3 hrs @ 22; 7 hrs @ 67	\$ 24,414.23
Curtailment	8/9/10	1230-2030, 2230	10	67	355.00	1 hr @ 21; 8 hrs @ 67	\$ 18,918.61
Curtailment	8/10/10	1230-2030, 2230	10	67	365.00	3 hrs @ 17; 6 hrs @ 67	\$ 21,647.90
Curtailment	8/11/10	1230-2030, 2230	10	67	375.00	1 hr @ 21; 8 hrs @ 67	\$ 27,589.29
Curtailment	8/12/10	1230-2030, 2230	10	67	385.00	10 hrs @ 67	\$ 30,545.97
Curtailment	8/13/10	1230-2030, 2230	10	67	395.00	10 hrs @ 67	\$ 31,323.84
Curtailment	8/14/10	1230-2230	11	67	408.00	11 hrs @ 67	\$ 34,494.28
Curtailment	8/13/10	1730-2230	8	67	412.00	6 hrs @ 67	\$ 18,068.66
Curtailment	8/16/10	1230-2230	11	67	423.00	10 hrs @ 67	\$ 36,193.40
Curtailment	8/16/10	1230-2030, 2230	10	67	433.00	10 hrs @ 67	\$ 26,413.41
Curtailment	8/20/10	1030-2230	13	67	446.00	12 hrs @ 67	\$ 30,432.07
Curtailment	8/21/10	1230-2230	11	67	457.00	11 hrs @ 67	\$ 29,615.51
Curtailment	8/23/10	1130-2230	12	67	469.00	11 hrs @ 67	\$ 31,103.41
Curtailment	8/24/10	930-2230	14	67	483.00	1 hr @ 21; 11 hrs @ 67	\$ 40,542.02
Curtailment	8/25/10	930-2230	14	67	497.00	14 hrs @ 67	\$ 48,082.93
Curtailment	8/25/10	1030-2230	13	67	510.00	11 hrs @ 67	\$ 34,108.36
Curtailment	8/27/10	1330-1930, 2230	8	67	518.00	7 hrs @ 67	\$ 22,041.66
Curtailment	8/28/10	1430-1930, 2230	7	67	525.00	7 hrs @ 67	\$ 19,587.45
Curtailment	8/30/10	1330-1830, 2230	7	67	532.00	7 hrs @ 67	\$ 18,982.88
Curtailment	8/31/10	1330-1830, 2230	7	67	539.00	6 hrs @ 67	\$ 14,895.11

Allowed Number of Interruptions
Max of 850 hours in Year 2010
System Integrity Interruption supersedes curtailment

Type	Date	BEg & End Time PPT	Duration Hrs	MW	YTD Interruptions
Interruption	1/26/10	1055-1150	0.92	95	1
Interruption	1/27/10	1052-1150	0.97	95	2
Interruption	3/5/10	0913-0953	0.87	95	3
Interruption	3/5/10	1851-1751	1.00	95	4
Interruption	3/16/10	0948-1048	1.00	95	5
Interruption	3/18/10	1523-1657	0.57	95	6
Interruption	3/30/10	1246-1348	1.00	95	7
Interruption	3/31/10	1121-1182	0.52	95	8
Interruption	4/26/10	1007-1100	0.88	95	9
Interruption	4/30/10	0357-0414	0.28	95	10
Interruption	5/1/10	0025-0100	0.58	95	11
Interruption	5/4/10	1016-1114	0.97	95	12
Interruption	6/6/10	1215-1244	0.48	95	13
Interruption	5/9/10	0000-0053	0.88	95	14
Interruption	5/20/10	0707-0717	0.17	95	15
Interruption	5/26/10	0905-0920	0.25	95	16
Interruption	6/5/10	2204-2227	0.30	95	17
Interruption	6/7/10	0021-0100	0.65	95	18
Interruption	7/18/10	1659-1714	1.26	95	19
Interruption	7/20/10	1818-1702	0.73	95	20
Interruption	7/23/10	1658-1758	1.00	67	21
Interruption	7/28/10	557-649	0.87	95	22
Interruption	8/1/10	0245-0344	0.80	95	23
Interruption	8/2/10	2012-2034	0.37	95	24
Interruption	8/9/10	1022-1056	0.57	95	25
Interruption	8/18/10	1618-1645	0.45	95	26

Allowed Number of Interruptions
Max of 4 in any 4 hour period
Max of 25 for each Billing Period
Max of 189 Interruptions in Year
Max 2 hours per Interruption
System Integrity Interruption supersedes Interruption

Type	Date	BEg & End Time PPT	Duration Hrs	MW	YTD Interruptions
System Integrity Interruption					

Allowed Number of Interruptions
Max of 12 Interruptions in Year
Max 2 consecutive hours in any 48 hour period per Double Contingency event

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE)	DIRECT TESTIMONY
APPLICATION OF UTAH POWER)	
& LIGHT COMPANY FOR)	OF
APPROVAL OF ITS PROPOSED)	DAVID L. TAYLOR
PRICE REDUCTION)	
)	
)	CASE NO. UPL-E-90-1

exh # 243

1 QUESTION

2 Please state your name.

3 ANSWER

4 David L. Taylor

5 QUESTION

6 What is your business address and by whom are you
7 employed?

8 ANSWER

9 My business address is 1407 West North Temple
10 Street, Salt Lake City, Utah. I am employed by Utah Power &
11 Light Company, a division of Pacificorp.

12 QUESTION

13 What is your position with Utah Power & Light
14 Company, and what are your responsibilities?

15 ANSWER

16 My current position is Supervisor - Pricing Design
17 and Cost of Service in the Marketing Department. I am
18 responsible for the development and modification of retail
19 pricing design in Utah Power & Light Company's service
20 territory. I am also responsible for the development and
21 preparation of the Company's Cost-of-Service Studies.
22 Further details of my educational and professional

April 30, 1990

Taylor, Di
UP&L 1

1 Commission Staff. All Staff adjustments, normalizing
2 adjustments, and audit adjustments have been included.

3 QUESTION

4 Are the large industrial customers that take
5 service under special contracts treated as a separate class
6 of service in the 1988 Embedded Cost-of-Service Study?

7 ANSWER

8 The firm usage for Monsanto and Nu West are
9 treated as separate classes of service. These customers
10 receive an allocation of embedded cost and have those costs
11 compared with their revenues the same as all other classes
12 of customers.

13 QUESTION

14 How have the non-firm revenues from the special
15 contract customers been treated in the cost-of-service
16 study?

17 ANSWER

18 The non-firm portion of special contract loads
19 (including those in UP&L's other jurisdictions) are not
20 allocated any cost directly in the embedded cost-of-service
21 study. The revenues collected from the non-firm service are
22 treated as revenue credits and are used to offset the
23 revenue requirement for all firm customers.

MAR 26 1992

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

**IN THE MATTER OF THE APPLICATION)
OF UTAH POWER & LIGHT COMPANY FOR)
APPROVAL OF A POWER SUPPLY AGREE-)
MENT BETWEEN UTAH POWER & LIGHT)
COMPANY AND MONSANTO COMPANY)
DATED JULY 3, 1991.)**

CASE NO. UPL-E-92-2

ORDER NO. 24220

On February 3, 1992, the Utah Power & Light Company (UP&L; Company), a division of PacifiCorp, filed an Application with the Idaho Public Utilities Commission (Commission) for approval of a Power Supply Agreement entered into July 3, 1991, between Monsanto Company (Monsanto) and UP&L.

According to the Application, UP&L is presently providing electric service to Monsanto's plant near Soda Springs, Idaho, under two agreements, one dated April 9, 1986 (1986 contract) and one dated April 1, 1987 (1987 contract).

The 1986 contract provides for up to 70,000 kw of interruptible service to Monsanto's third furnace and was approved by the Commission in Order No. 20605 in Case No. U-1009-165. The 1986 contract expires on June 30, 1992.

The 1987 contract provides for up to 84,000 kw of interruptible service and 9,000 kw of firm service to Monsanto's first and second furnaces and was approved by the Commission by Order No. 21225 in Case No. U-1009-178. The 1987 contract expires June 30, 1993.

Both the 1986 and the 1987 contract were amended in 1989 to replace a monthly fuel clause formula, contained in each of the contracts with a fixed monthly fuel adjustment. These amendments, the Application provides, were approved by the Commission in Case Nos. UPL-E-89-3 and UPL-E-89-4, Order No. 22622. Both the 1986 contract and the 1987 contract are tied to the price per kwh paid by FMC Corporation to Idaho Power Company.

According to the Application, the proposed Agreement will replace both the 1986 and 1987 contracts. The Agreement provides for the purchase and supply of up to 9,000 kw of firm power and up to 154,000 kw of

ech 244

interruptible power. If approved, the Agreement will become effective July 1, 1992 and will continue through June 30, 1997. The Agreement no longer ties the rates to be paid by Monsanto to the rates paid by FMC Corporation to Idaho Power Company. The rates for firm power and energy and interruptible power and energy are contained in Appendix B to the Agreement, included with the Application. The Application states that, under the Agreement, the prices for firm and interruptible power and energy set forth in Appendix B are subject to change under the same standard of review applicable to the Company's regular tariff process.

The Application states that the price for firm power and energy under the Agreement is identical to that set forth in the Company's currently approved tariff sheets for Monsanto. The energy charge for firm power and energy under the Agreement can be calculated by subtracting the 1.71 mills per kwh fuel adjustment amount from the current energy charge of 27.3826 mills per kwh.

According to the Application, demand charges are not assigned to Monsanto's interruptible service because the Company provides that service to Monsanto out of its operating reserves (i.e., generation plant is not built to meet an interruptible demand). The Application states that the prices for interruptible service under the proposed Agreement are expected to cover the Company's variable energy costs, transmission costs and make a contribution to fixed costs over the term of the contract as set forth in Exhibit B to the Company's Application. According to the Application, Exhibit B shows that the net present value of the contribution to fixed costs resulting from the supply of interruptible service over the term of the Agreement is estimated to be approximately 7 million dollars. The initial prices for interruptible service under the Agreement represent increases over the prices presently in effect under the 1986 and 1987 contracts. In addition, the prices for interruptible service continue to escalate through the term of the Agreement.

Exhibit C, attached to the Application, is an analysis of the rates and revenues under the 1986 and 1987 contracts compared to those obtained under the new Agreement. The analysis reflects usage and revenue on a total basis, i.e., firm and interruptible service combined. The Company states that, as shown in Exhibit C, total revenues for Monsanto at the rates set forth for

the last year of the Agreement will exceed the revenues at current rates by approximately 26%.

On February 13, 1992, the Commission issued a Notice of Application in this case giving all interested parties until March 5, 1992, to either file a Petition to Intervene or to submit written comments regarding the Company's Application. No petitions for intervention were ever filed. Monsanto filed written comments supporting the Company's Application on February 6 1992. The Commission Staff filed its written comments on March 5, 1992.

MONSANTO

In its written comments, Monsanto supports UP&L's Application and confirms UP&L's characterization of the proposed Power Supply Agreement. In addition, Monsanto notes that in the first year of the Agreement, its power costs will be about 7.6% (\$2,100,000) more than its current cost.

Monsanto has confirmed both in its written comments as well as in subsequent telephone conversations with the Commission Staff that the proposed contract rates will be established under the tariff rather than the contract standard. Furthermore, Monsanto agrees that, under the Agreement, UP&L may curtail interruptible service to Monsanto when the incremental cost of energy to supply Monsanto's requirements exceeds the revenue derived from Monsanto's energy price for interruptible loads.

Monsanto is careful to point out that it does not necessarily agree with the UP&L calculations of current costs or with the projections of future costs to serve the Monsanto load. Along these lines, Monsanto has informed Staff that, because of the tariff standard, Monsanto would consider itself at liberty to argue for a reduction in its interruptible rate in the event that some type of rate proceeding was instituted prior to the termination of the contract.

COMMISSION STAFF

The Commission Staff believes that the proposed rates set forth in the Agreement are fair, just and reasonable and recommends that the contract be approved.

Staff notes that, for the purposes of jurisdictional allocation, Monsanto's interruptible load is not treated as an Idaho jurisdictional customer load but, rather, as a system load. Net revenues from Monsanto's interruptible load are distributed to all PacifiCorp jurisdictions as a credit. Idaho's jurisdictional share of these net revenues is approximately 5%. Therefore, changes to Monsanto's interruptible rate will have little impact on UP&L's overall Idaho jurisdictional revenue requirement.

Staff notes that the Agreement itself is standard in most respects. It does sever the tie between Monsanto's interruptible rates and the rates paid by FMC Corporation to Idaho Power Company. Staff does not oppose severing this relationship.

The data available to Staff confirms that the interruptible rates proposed to be paid by Monsanto to Utah Power & Light will cover UP&L's variable energy costs, transmission costs and make a contribution to fixed costs over the term of the contract. Because the Agreement has a built-in price escalator, Monsanto's rates should remain ahead of any foreseeable increases and variable and transmission costs that UP&L will incur over the next five-year period.

Staff notes that PacifiCorp does have access to some "peaking" resources whose costs could potentially exceed the rates Monsanto would pay under the Agreement. The Agreement, however, allows for interruption of Monsanto's service during times when these peaking resources are used, thus providing a protective mechanism for UP&L and its ratepayers.

Staff notes that the fact that Monsanto's rates will be established under the tariff standard also provides another form of protection for the Company and its ratepayers since Monsanto's rates will be more easily adjusted by the Commission in normal rate proceedings.

Finally, Staff believes that the firm rates set forth in the contract, which are simply a continuation of those already in effect, are fair, just and reasonable. In Order No. 23508, issued on January 15, 1991 in Case No. UPL-E-90-1, the Commission ruled that the most recent Cost of Service Study conducted for UP&L revealed that Monsanto's firm rates provided a slightly higher rate of return than UP&L's Idaho's jurisdictional average.

FINDINGS

We hereby approve the Power Supply Agreement entered into by UP&L and Monsanto on July 3, 1991.

The rates for interruptible service, set forth in the Agreement, will cover UP&L's variable energy costs, transmission costs and make a contribution to fixed costs over the term of the contract. Furthermore, the Company's most recent cost of service study revealed that Monsanto's firm rates provided a rate of return at or above the jurisdictional average rate of return for UP&L's Idaho customers.

Based upon the foregoing, we hereby find that the rates for both interruptible and firm service set forth in the Power Supply Agreement are fair, just and reasonable.

In addition, none of the parties raised any objection to, and we see no reason for opposing, the termination of the relationship between Monsanto's interruptible rates and the rates paid by the FMC Corporation to Idaho Power Company.

Finally, the establishment of Monsanto's rates under the tariff standard will make those rates more easily adjusted by this Commission in normal rate proceedings, thus providing an added level of ratepayer protection.

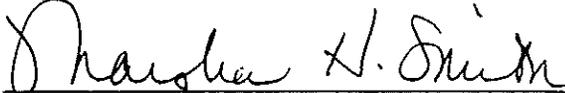
ORDER

IT IS HEREBY ORDERED that the Power Supply Agreement entered into between Utah Power & Light Company and Monsanto Company on July 3, 1991, is approved.

THIS IS A FINAL ORDER. Any person interested in this Order (or in issues finally decided by this Order) or in interlocutory Orders previously issued in this Case No. UPL-E-92-2 may petition for reconsideration within twenty-one (21) days of the service date of this Order with regard to any matter decided in this Order or in interlocutory Orders previously issued in this Case No. UPL-E-92-2. Within seven (7) days after any person has petitioned for reconsideration, any other person may cross-petition for reconsideration. See *Idaho Code* § 61-626.

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DONE by Order of the Idaho Public Utilities Commission at Boise,
Idaho, this *26th* day of March 1992.


MARSHA H. SMITH, PRESIDENT


DEAN J. MILLER, COMMISSIONER


RALPH NELSON, COMMISSIONER

ATTEST:


MYRNA J. WALTERS, SECRETARY

BP:jr/O-1699

STOEL RIVES

ATTORNEYS

STANDARD INSURANCE CENTER
900 SW FIFTH AVENUE, SUITE 2300
PORTLAND, OREGON 97204-1268

Telephone (503) 224-3380
Fax (503) 220-2480
TDD (503) 221-1045

November 8, 1995

New Case

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IDAHO PUBLIC
UTILITIES COMMISSION

JAMES F. FELL
Direct Dial
(503) 294-9343

Ms. Myrna J. Walters, Secretary
Idaho Public Utilities Commission
472 West Washington St.
Boise, ID 83702

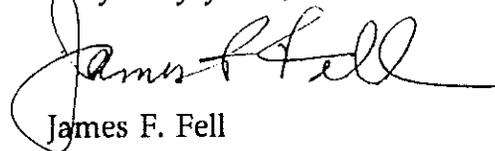
Re: Application of PacifiCorp for Approval of Electric
Service Contract with Monsanto Company
Case No. UPL-E-95-4

Dear Ms. Walters:

I enclosed for filing the original and seven copies of the Application of PacifiCorp for approval of a Power Supply Agreement with Monsanto Company, dated November 1, 1995, together with copies of the Power Supply Agreement and a Technical Assessment Package.

Please note PacifiCorp requests that the Commission process this Application under Modified Procedure.

Very truly yours,


James F. Fell

JFF:dc
Enclosures
cc w/encl: PacifiCorp
Monsanto Company

Exh # 245

**POWER SUPPLY AGREEMENT
BETWEEN
PACIFICORP
AND
MONSANTO COMPANY**

**THIS DOCUMENT IS
MARKED CONFIDENTIAL
SEE: JO NELSON**

RECEIVED
MAY 8 PM 3 50
STOEL RIVES
ATTORNEYS

1 James F. Fell
2 STOEL RIVES
3 900 SW Fifth Ave., Suite 2300
4 Portland, OR 97204-1268
5 Telephone: (503) 294-9343
6 Fax No.: (503) 220-2480

7 Attorneys for PacifiCorp dba Utah
8 Power & Light Company

9 BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

10 In the Matter of the Application) CASE NO. UPL-E-95-4
11 of PacifiCorp, dba Utah Power &)
12 Light Company for Approval of an) APPLICATION OF PACIFICORP
13 Electric Service Contract with)
14 Monsanto Company.)

15 This Application is filed by PacifiCorp dba Utah
16 Power & Light Company (Utah Power or the Company) for approval
17 of a Power Supply Agreement with Monsanto Company (Monsanto)
18 dated November 1, 1995 (New Agreement). The New Agreement
19 replaces a Power Supply Agreement with Monsanto dated July 3,
20 1991 (Existing Agreement).

21 1. Utah Power is a public utility doing business in the
22 state of Idaho and subject to the jurisdiction of the Idaho
23 Public Utilities Commission (Commission).

24 2. Monsanto is a Delaware corporation qualified to do
25 business in the state of Idaho. Monsanto operates an elemental
26 phosphorus plant near the City of Soda Springs in Caribou
County, Idaho. The electric power requirements of the plant
have been supplied by Utah Power since 1952.

1 3. Communications regarding this Application should be
2 addressed to:

3 Rodger Weaver
4 PACIFICORP
5 825 NE Multnomah, Suite 625
6 Portland, OR 97232
7 Telephone: (503) 464-5618
8 Fax: (503) 275-2827

9 James F. Fell
10 STOEL RIVES
11 900 SW Fifth Ave., Suite 2300
12 Portland, OR 97204-1268
13 Telephone: (503) 294-9343
14 Fax No.: (503) 220-2480

15 4. Attached to this Application are a copy of the New
16 Agreement between Monsanto and Utah Power and a Technical
17 Assessment Package that describes in greater detail the terms
18 and conditions of the New Agreement, the alternatives available
19 to Monsanto, and the benefits of the New Agreement to Utah
20 Power's other customers.

21 5. The Existing Agreement governing electric service to
22 Monsanto's Soda Springs plant was effective July 1, 1992, and
23 continues for a five-year period ending June 30, 1997. It
24 provides for 9 megawatts of firm demand, 154 megawatts of
25 interruptible demand, excess interruptible demand above 163
26 megawatts, and all associated energy. The Existing Contract
includes four price increases over the five-year term, with one
increase remaining to take effect on July 1, 1996.

 6. Utah Power and Monsanto initiated discussions of a
new power supply agreement in response to recent changes in

1 electric power markets. Wholesale prices in the western United
2 States have declined significantly due to excess supplies and
3 increasing competition. At the same time, the interruptible
4 power rates under Monsanto's Existing Agreement with Utah Power
5 have increased 21 percent since 1991 and are scheduled to
6 increase another 4 percent on July 1, 1996.

7 7. Utah Power has determined that Monsanto has viable
8 alternatives to continuing its current level of electricity
9 purchases. First, Monsanto could shift its electricity
10 purchases to the Soda Springs Municipal Electric Light & Power
11 Department (Soda Springs Municipal), displacing all of its
12 purchases from Utah Power. Soda Springs Municipal could
13 purchase power at current wholesale prices from any of the many
14 utilities and power marketers active in the wholesale power
15 market. This power could be resold to Monsanto with a small
16 service charge or mark-up to cover Soda Springs Municipal's
17 costs.

18 Second, Monsanto could displace much of its elemental
19 phosphorus production at Soda Springs with a product produced
20 from a purified wet acid (PWA) chemical process. Plants
21 incorporating PWA technology have been built in the
22 southeastern United States and in other countries, and Monsanto
23 is a major partner in an operating PWA plant in Brazil. Utah
24 Power has determined that all but approximately 45 megawatts of
25 Monsanto's electrical load could be displaced in this fashion.

26

Page

1 8. The New Agreement for service to Monsanto's plant
2 replaces and extends the Existing Agreement. The New
3 Agreement, which is subject to the Commission's approval, is
4 effective from November 1, 1995 until December 31, 2001. It
5 will continue from year to year thereafter subject to one
6 year's notice of termination.

7 Under the New Agreement, Utah Power will supply Monsanto
8 with 9 megawatts of firm power and up to 206 megawatts of
9 interruptible power. Utah Power may interrupt or curtail
10 service to Monsanto at any time to maintain its system
11 integrity.

12 Monsanto will pay Utah Power \$30 million for the early
13 termination of the Existing Agreement, a monthly minimum charge
14 of \$66,600, and 1.85 cents per kilowatt-hour for all energy
15 delivered. The schedule for payment of the \$30 million varies
16 depending on when the Commission approves the New Agreement.
17 If the Commission approves the New Agreement on or before
18 December 14, 1995, Monsanto is required to pay the full \$30
19 million on December 28, 1995. Otherwise, Monsanto must pay
20 Utah Power \$7.5 million on December 28, 1995 and the remaining
21 \$22.5 million within 10 days after the Commission's approval.

22 9. The New Agreement provides substantial benefits to
23 Utah Power's other customers. Monsanto is the Company's single
24 largest customer, contributing over 28 percent of all retail
25 revenues from all customer classes in Idaho. Revenues from
26 Monsanto contribute to Utah Power's recovery of fixed costs,

1 which allows the Company to charge lower prices to its other
2 customers.

3 The Technical Assessment Package compares Monsanto's net
4 contributions to fixed costs under the New Agreement with its
5 net contributions to fixed costs under two alternative cases:
6 (1) Monsanto's purchase of power from third parties, through
7 Soda Springs Municipal; and (2) Monsanto's transfer of
8 production to PWA plants, reducing purchases from Utah Power to
9 approximately 45 megawatts. This comparison shows the
10 following ranges for contribution to fixed costs over the term
11 of the New Agreement:

12	New Agreement	\$25 million - \$100 million
13	Alternative 1	\$16 million - \$32 million
	Alternative 2	\$21 million - \$49 million

14 The greater contributions to fixed costs under the New
15 Agreement will serve to reduce the revenue requirement that
16 would otherwise be borne by Utah Power's other customers.

17 10. The New Agreement will provide additional benefits
18 beyond the increase in contributions to fixed costs. The \$30
19 million up-front payment will fully compensate for the
20 termination of the Existing Agreement. This up-front payment
21 and the lower energy charge will stabilize the Monsanto load by
22 allowing Monsanto to make energy and production decisions on
23 the basis of an incremental cost of electricity at Soda Springs
24 of 1.85 cents per kilowatt-hour.

25 11. The New Agreement provides that it will be effective
26 as of November 1, 1995 subject to approval by the Commission.

Page

1 If the Commission does not approve the New Agreement by
2 January 15, 1996, the New Agreement will terminate and Utah
3 Power will refund any portion of the \$30 million paid by
4 Monsanto. Service will continue to be provided under the
5 Existing Agreement and Monsanto will pursue its other
6 alternatives.

7 12. Utah Power does not seek a determination at this time
8 on the ratemaking treatment applicable to Monsanto's \$30
9 million payment or the other rates and charges under the New
10 Agreement. The Company requests that all ratemaking issues be
11 reserved for a rate case.

12 13. In order to meet the January 15, 1996 date for
13 Commission approval of the New Agreement, Utah Power requests
14 that this application be processed under Modified Procedure
15 pursuant to RP 201-204. Modified Procedure is appropriate
16 because an evaluation of the economic effects of the New
17 Agreement and the alternatives available to Monsanto can be
18 undertaken without a hearing, and there are no other Utah Power
19 customers in the state of Idaho that purchase power in the
20 amounts and under circumstances substantially similar to
21 Monsanto's. Written comments by interested parties should be
22 sufficient for purposes of the Commission's review,
23 particularly because Utah Power is not seeking any ratemaking
24 determinations.

25 WHEREFORE, Utah Power respectfully requests that the
26 Commission process this Application under Modified Procedure

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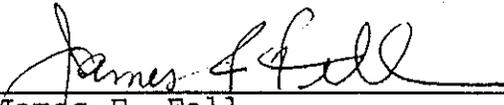
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and approve the new Power Supply Agreement dated November 1,
1995 for service to Monsanto's Soda Springs plant.

Dated: November 8, 1995

Respectfully submitted,

STOEL RIVES

By 
James F. Fell
Of Attorneys for PacifiCorp,
dba Utah Power & Light Company

Page

Technical Assessment Package for Power Supply Agreement between Monsanto Company and PacifiCorp November 1995

Section 1: Introduction

This Technical Assessment Package analyzes the new Power Supply Agreement (New Agreement) between Monsanto Company (Monsanto, or the Customer) and PacifiCorp (PacifiCorp, or the Company) dated November 1, 1995. The package will describe the New Agreement and how it benefits the Customer, PacifiCorp and other customers.

Section 2: Customer's Business Profile

Monsanto Company is a major world-wide chemical company and a leading elemental phosphorus manufacturer in North America. The Customer's Soda Springs, Idaho, facility has shared a business relationship with Utah Power & Light Co. since 1952.

The elemental phosphorus industry has been declining, with several firms exiting the business in recent years. As a result, the Soda Springs plant is one of only two such facilities remaining in operation in the United States after the end of 1995. The other U.S. plant is the FMC plant, located in Pocatello, Idaho.

Power costs are of extreme importance to the Customer. Indeed, at about one-third of total production cost, electricity is the single most important cost in the Customer's manufacturing process. Monsanto has demonstrated its price sensitivity by shutting down a furnace in lieu of purchasing higher-cost replacement power after its service has been interrupted. In its quest to remain a low-cost producer, Monsanto has identified several alternatives to its current power supply contract with PacifiCorp which expires in 1997. These alternatives include:

- the New Agreement with PacifiCorp
- low-priced power supply from alternative suppliers purchased through the Soda Springs municipal utility
- substantially reduced production at Soda Springs facility with the bulk of that plant's output being shifted to a less electricity intensive manufacturing process

All of these options will be discussed in detail in this Technical Assessment Package.

Section 3: Current Service from PacifiCorp

On July 3, 1991, Monsanto and PacifiCorp signed a five year Power Supply Agreement to take effect July 1, 1992 and continue until June 30, 1997. This contract provided for 9 megawatts of firm demand, 154 MW of interruptible demand, excess interruptible demand above 163 MW and all energy associated with Monsanto's demand levels. In the event of interruptions, the Customer had the right to buy replacement energy at the Company's cost. The remaining term of this contract is approximately 20 months.

Pricing. Prices for the firm demand and firm energy components of the contract were fixed throughout the contract's term. For interruptible power and energy, the contract included built-in escalators that increased prices four times over the five year contract term. Three of the increases have already occurred; the remaining one would have taken effect on July 1, 1996. Since the current contract began, prices to Monsanto have thus escalated significantly. Under the current contract, Monsanto's interruptible power rates have increased 21% to date and are scheduled to increase another 4% on July 1, 1996.

Section 4: Competition and Power Markets

Significant changes now underway in the electric utility industry are resulting in excess energy supplies, more competition (especially for large customers) and lower prices. In fact, less than three years ago prices on the spot energy market exceeded 30 mills; for most of 1995, wholesale prices had fallen below 20 mills. Electricity has become a commodity that is differentiated primarily by price.

PacifiCorp and Monsanto have cooperated previously in replacing agreements to better reflect business conditions. A contract signed in 1987 was scheduled to be in effect through June 30, 1993, but was replaced by the current agreement that became effective on July 1, 1992. The Idaho Public Utilities Commission (IPUC) approved this current agreement in March 1992.

Section 5: Description of New Agreement

The New Agreement -- signed by Monsanto and PacifiCorp on November 1, 1995 and subject to approval by the IPUC -- is designed to replace the current power supply contract while extending the period of retail service to the Customer through December 31, 2001. After December 31, 2001, the New Agreement would be renewed annually until either party gives a termination notice one year in advance. The New Agreement would become effective November 1, 1995.

Demand and energy. Firm demand is 9 MW, while interruptible demand increases from current contract levels to up to 206 MW. All energy is priced at 1.85 cents per kilowatt-hour (subject to a monthly minimum charge of \$66,600). Energy usage is projected to increase during the New Agreement. The Agreement allows for approximately 1,656,000,000 kilowatt-hours annually. PacifiCorp may interrupt or curtail service to Monsanto at any time to maintain PacifiCorp's system integrity.

Termination charge. The current contract between PacifiCorp and Monsanto expires June 30, 1997. In exchange for the early termination of that contract and to satisfy all obligations under it, Monsanto will pay PacifiCorp \$30 million. If the IPUC approves the New Agreement on or before December 14, 1995, the full \$30 million will be paid to PacifiCorp on December 28, 1995. Otherwise, PacifiCorp will receive \$7.5 million on December 28, 1995, with the balance paid within ten days of Commission approval. If the New Agreement is not approved by January 15, 1996, service will revert to the current contract, PacifiCorp will refund the \$7.5 million payment and Monsanto will begin pursuing other alternatives.

Section 6: Customer Alternatives

Besides the New Agreement, Monsanto has identified other options for reducing its energy costs, including:

Annexation by municipal utility. The Soda Springs Municipal Electric Light & Power Department (Soda Springs Municipal) is a fully functioning utility that could easily acquire additional supply and serve the Customer's facility. Low-priced wholesale power at economics comparable to the New Agreement could be provided by other regional utilities and power marketers such as Illinova and Enron. This option is the more likely of the two discussed here.

Different manufacturing process. At the Soda Springs facility, the manufacture of elemental phosphorus is electricity intensive. However, about 70 percent of the market served by elemental phosphorus from Monsanto's Soda Springs plant can also be served with the product of a chemical process called purified wet acid (PWA). Plants incorporating PWA technology have been built in the southeast United States as well as in several other countries. Monsanto itself is a major partner in a purified wet acid plant operating in Brazil. Monsanto is also evaluating the modification of one of its downstream plants which uses phosphorus to accept PWA material rather than elemental phosphorus. In order to remain competitive with PWA technology, and also to retain its share of the elemental phosphorus market, Monsanto requires the lowest possible electricity prices.

Customer's demand currently averages about 175 MW per month. If the bulk of production were transferred to a PWA plant, the Soda Springs facility would require approximately 45 MW. At this level, sufficient elemental phosphorus would be produced to meet demand in the market segment that cannot be served by the PWA product.

Section 7: Economic Impacts

Should the New Agreement not be approved, the negative economic impacts on PacifiCorp and the local economy would be significant. Following is a detailed analysis of those impacts assuming service is provided by another supplier or production is transferred to a PWA plant:

Alternative Scenario 1: Municipalization at Expiration of Current Agreement. If another supplier, through Soda Springs Municipal, secured a contract to serve the Customer, PacifiCorp would completely lose all electric revenues from the Customer. For the 12 months ending September 1995, revenues from Monsanto exceeded \$30 million on over 1.3 million kilowatt-hours sold.

Monsanto is the Company's single largest retail customer. Losing the contract to serve Monsanto would eliminate the contributions this Customer makes to the Company's fixed costs which provide a credit against retail jurisdictions' revenue requirements. Four percent of the Monsanto credit against revenue requirement is allocated to the Idaho service territory. In the absence of Monsanto's contributions, the revenue requirement to be borne by the Company's other customers would increase correspondingly. This alternative is the more likely of the two alternatives presented here.

Alternative Scenario 2: Production transfer to purified wet acid technology. If Monsanto decided to mitigate the effect of electricity costs by shifting production from Soda Springs to a PWA plant, a considerable number of jobs would be lost in Idaho. Currently, Monsanto employs approximately 400 full-time employees at the Soda Springs facility. The Customer estimates the plant would support no more than approximately 200 jobs if most production was shifted to PWA. It is also estimated that for every direct job lost at the Soda Springs facility, three additional jobs would be lost in industries which support the plant's operation and in the population of supporting businesses in Caribou and surrounding counties.

In addition to the job losses, a majority of the revenues and contribution to fixed costs provided by Monsanto would also disappear. If 75 percent of Monsanto's revenues evaporated, revenues from the customer would decline from over \$30 million to about \$9 million. Likewise, contribution to fixed costs would drop substantially.

Section 8: Revenue and Cost Comparisons

Revenues under current contract. As shown in Exhibit 1, Column 4, Lines 13-15, PacifiCorp would collect approximately \$53.3 million in sales revenues from Monsanto over the remainder of the current contract (November 1, 1995 through June 30, 1997). The present value of this revenue stream is \$47.2 million (Column 4, Line 21). The revenue figures incorporate a price increase on July 1, 1996 (Column 3, Line 14) as well as projected kWh usage of 1,250,000,000 annually through June 30, 1997. The projected kWh usage is based on historical usage and customer discussions. These usage figures probably overstate Monsanto's consumption under the current prices since, in the absence of the New Agreement, Monsanto would be actively seeking alternative lower-cost supplies of electricity.

Revenues under New Agreement. Exhibit 1 indicates PacifiCorp would collect revenues of \$212 million over the six-year, two-month contract life of the New Agreement (Column 4, Lines 1- 9), which has a present value of \$162.5 million (Column 4, Line 10). Total revenues include approximately \$182 million for ongoing electrical service plus the \$30 million up-front payment for termination of the existing contract. The \$30 million payment is a unique feature of the New Agreement and signifies an important commitment to PacifiCorp by the customer.

The New Agreement involves lower risk for other customers and the Company. This is due to the \$30 million up-front payment, which represents a significant investment in the Soda Springs facility and the economic health of Caribou County and surrounding counties. From the Customer's standpoint, incremental production decisions at the Customer's facility would be made on the basis of 1.85-cent electricity. This provides the customer with the economics it needs to defend its phosphorus business against PWA.

Contribution to Fixed Costs. Exhibits 1, 2, and 3 present three comparisons which establish a reasonable range for estimating the contribution to fixed costs of the three customer alternatives. The Company has incorporated assumptions regarding future customer consumption under the three alternatives.

1 Exhibit 1 presents a comparison using embedded net production costs. Since PacifiCorp has served Monsanto for over forty years, no incremental resources need to be acquired to continue serving the Customer. The Company presents this analysis as an upper bound for contribution to fixed costs. The Net Production Cost analysis indicates that the New Agreement would contribute, in present value terms, approximately \$100 million (Column 7, Line 10) in excess of production costs compared with approximately \$32 million (Line 21) under Alternative Scenario 1 and approximately \$49 million (Line 32) under Alternative Scenario 2.

Exhibit 2 presents a comparison using the Company's market alternative power cost. PacifiCorp believes these costs are an appropriate reflection of the wholesale power market costs available to the Company to meet incremental loads. The incremental cost analysis indicates that the New Agreement would contribute, in present value terms, approximately \$46 million (Column 7, Line 10) in excess of incremental production costs compared with approximately \$20 million (Line 21) under Alternative Scenario 1 and approximately \$29 million (Line 32) under Alternative Scenario 2.

The east-side incremental power cost calculation is designed to reflect the Company's actual available market alternative costs. It uses the operating cost of a combined cycle combustion turbine (CCCT) to reflect the low end of a market estimate and the full capital plus running cost of a CCCT to estimate the upper end. It then melds these two extremes on a 50/50 basis to estimate the cost of a fully integrated new market-acquired resource on the Company's system. Finally, it adjusts this fully integrated incremental market cost estimate to reflect the Company's east-to-west transmission limitation. The result is a reasonable mid-ground estimate of the Company's incremental power cost.

Using IPUC-approved Surrogate Avoided Resource (SAR) incremental production cost estimates adjusted for the Company's east-to-west transmission limitation, Exhibit 3 indicates that the New Agreement contributes, on a present value basis, approximately \$25 million (Column 7, Line 10) beyond incremental costs compared with approximately \$16 million (Column 7, Line 21) under Alternative Scenario 1 or approximately \$21 million (Column 7, Line 32) under Alternative Scenario 2. The Company believes current market conditions support lower incremental production costs and presents Exhibit 4 as a lower bound for contribution to fixed costs.

Exhibits 2, 3, and 4 establish the following ranges for contribution to fixed costs:

New Agreement:	\$25 million - \$100 million
Alternative Scenario 1:	\$16 million - \$ 32 million
Alternative Scenario 2:	\$21 million - \$ 49 million

These contributions serve to reduce the revenue requirement otherwise borne by the Company's other customers; thus, these customers will enjoy an economic benefit flowing from the New Agreement.

Section 9: Summary

PacifiCorp requests IPUC approval of the New Agreement by virtue of the benefits it provides to other customers, the Soda Springs community, the state of Idaho, the United States, Monsanto, and PacifiCorp.

Other customers served by PacifiCorp will benefit from Monsanto's continued contributions to fixed costs. Indeed, Monsanto would contribute more to fixed costs under the New Agreement than under either of the two Alternative Scenarios they would pursue if the New Agreement is not approved. Through the New Agreement, Monsanto reaffirms its commitment to the Soda Springs facility -- and the community - into the next century at a time when the combination of energy costs and developments in Monsanto's industry could prompt the Customer to secure a lower-priced electricity supply from another supplier or to shift production and jobs elsewhere.

The New Agreement offers Monsanto price predictability for a major production expense over the next six years. This will help Monsanto compete in its business markets. Through the New Agreement, a four-decade business partnership between PacifiCorp and Monsanto continues to provide benefits to Monsanto and to PacifiCorp's other customers. PacifiCorp and its Idaho customers also face less revenue risk due to the innovative up-front payment by Monsanto.

Comparison of Alternatives: Contribution to Fixed Costs with Net Production Costs

Exhibit 1

Line No.	New Agreement	Revenues			Costs			Total \$ Contribution to Fixed Costs (4) - (6) = (7)
		Total kWh (2)	\$/kWh (3)	Total \$ (4)	Net Production Incremental Costs (5)	Total \$ (2) * (5) = (6)		
1	Termination Charge			\$30,000,000		\$0	\$30,000,000	
2	11/1/95 through 6/30/96	958,667,000	\$0.018500	\$17,735,340	\$0.008340	\$7,995,283	\$9,740,057	
3	7/1/96 through 12/31/96	719,000,000	\$0.018500	\$13,301,500	\$0.008340	\$5,996,460	\$7,305,040	
4	1/1/97 through 6/30/97	762,500,000	\$0.018500	\$14,106,250	\$0.008490	\$6,473,625	\$7,632,625	
5	7/1/97 through 12/31/97	762,500,000	\$0.018500	\$14,106,250	\$0.008490	\$6,473,625	\$7,632,625	
6	through 12/31/98	1,656,000,000	\$0.018500	\$30,636,000	\$0.008340	\$13,811,040	\$16,824,960	
7	through 12/31/99	1,656,000,000	\$0.018500	\$30,636,000	\$0.008500	\$14,076,000	\$16,560,000	
8	through 12/31/00	1,656,000,000	\$0.018500	\$30,636,000	\$0.009090	\$15,053,040	\$15,582,960	
9	through 12/31/01	1,656,000,000	\$0.018500	\$30,636,000	\$0.009750	\$16,146,000	\$14,490,000	
10	Totals (Present Valued @ 9.83%):			\$162,450,987		\$62,189,550	\$100,261,437	

Alternative Scenario 1: Current Agreement with Municipalization at Expiration Date of 6/30/97

Line No.	New Agreement	Revenues			Costs			Total \$ Contribution to Fixed Costs (4) - (6) = (7)
		Total kWh (2)	\$/kWh (3)	Total \$ (4)	Net Production Incremental Costs (5)	Total \$ (2) * (5) = (6)		
12								
13	11/1/95 through 6/30/96	833,333,333	\$0.02500	\$20,833,333	\$0.008340	\$6,950,000	\$13,883,333	
14	7/1/96 through 12/31/96	625,000,000	\$0.02600	\$16,250,000	\$0.008340	\$5,212,500	\$11,037,500	
15	1/1/97 through 6/30/97	625,000,000	\$0.02600	\$16,250,000	\$0.008490	\$5,306,250	\$10,943,750	
16	7/1/97 through 12/31/97	0				\$0	\$0	
17	through 12/31/98	0				\$0	\$0	
18	through 12/31/99	0				\$0	\$0	
19	through 12/31/00	0				\$0	\$0	
20	through 12/31/01	0				\$0	\$0	
21	Totals (Present Valued @ 9.83%):			\$47,235,661		\$15,472,849	\$31,762,812	

Alternative Scenario 2: Current Agreement with 45mW load at Expiration Date of 6/30/97

Line No.	New Agreement	Revenues			Costs			Total \$ Contribution to Fixed Costs (4) - (6) = (7)
		Total kWh (2)	\$/kWh (3)	Total \$ (4)	Net Production Incremental Costs (5)	Total \$ (2) * (5) = (6)		
23								
24	11/1/95 through 6/30/96	833,333,333	\$0.02500	\$20,833,333	\$0.008340	\$6,950,000	\$13,883,333	
25	7/1/96 through 12/31/96	625,000,000	\$0.02600	\$16,250,000	\$0.008340	\$5,212,500	\$11,037,500	
26	1/1/97 through 6/30/97	625,000,000	\$0.02600	\$16,250,000	\$0.008490	\$5,306,250	\$10,943,750	
27	7/1/97 through 12/31/97	177,390,000	\$0.02500	\$4,434,750	\$0.008490	\$1,506,041	\$2,928,709	
28	through 12/31/98	354,780,000	\$0.02500	\$8,869,500	\$0.008340	\$2,958,865	\$5,910,635	
29	through 12/31/99	354,780,000	\$0.02500	\$8,869,500	\$0.008500	\$3,015,630	\$5,853,870	
30	through 12/31/00	354,780,000	\$0.02500	\$8,869,500	\$0.009090	\$3,224,950	\$5,644,550	
31	through 12/31/01	354,780,000	\$0.02500	\$8,869,500	\$0.009750	\$3,459,105	\$5,410,395	
32	Totals (Present Valued @ 9.83%):			\$74,305,753		\$25,016,008	\$49,289,746	

Comparison of Alternatives: Contribution to Fixed Costs with Market Alternative Power Costs

Line No.	New Agreement Year (1)	Revenues		Costs		Total \$ Contribution to Fixed Costs (4) - (6) = (7)
		Total kWh (2)	\$/kWh (3)	Market Alternative Incremental Costs (5)	Total \$ (2) * (5) = (6)	
1	Termination Charge					\$30,000,000
2	11/1/95 through 6/30/96	958,667,000	\$0.018500	\$0.014345	\$13,752,078	\$3,983,261
3	7/1/96 through 12/31/96	719,000,000	\$0.018500	\$0.014345	\$10,314,055	\$2,987,445
4	1/1/97 through 6/30/97	762,500,000	\$0.018500	\$0.015118	\$11,527,475	\$2,578,775
5	7/1/97 through 12/31/97	762,500,000	\$0.018500	\$0.015118	\$11,527,475	\$2,578,775
6	through 12/31/98	1,656,000,000	\$0.018500	\$0.016090	\$26,645,040	\$3,990,960
7	through 12/31/99	1,656,000,000	\$0.018500	\$0.016821	\$27,855,576	\$2,780,424
8	through 12/31/00	1,656,000,000	\$0.018500	\$0.017626	\$29,188,656	\$1,447,344
9	through 12/31/01	1,656,000,000	\$0.018500	\$0.018650	\$30,884,400	(\$248,400)
10	Totals (Present Valued @ 9.83%):				\$116,141,123	\$46,309,863

Alternative Scenario 1: Current Agreement with Municipalization at Expiration Date of 6/30/97

Line No.	Year (1)	Revenues		Costs		Total \$ Contribution to Fixed Costs (4) - (6) = (7)
		Total kWh (2)	\$/kWh (3)	Market Alternative Incremental Costs (5)	Total \$ (2) * (5) = (6)	
12						
13	11/1/95 through 6/30/96	833,333,333	\$0.02500	\$0.014345	\$11,954,167	\$8,879,167
14	7/1/96 through 12/31/96	625,000,000	\$0.02600	\$0.014345	\$8,965,625	\$7,284,375
15	1/1/97 through 6/30/97	625,000,000	\$0.02600	\$0.015118	\$9,448,750	\$6,801,250
16	7/1/97 through 12/31/97	0				\$0
17	through 12/31/98	0				\$0
18	through 12/31/99	0				\$0
19	through 12/31/00	0				\$0
20	through 12/31/01	0				\$0
21	Totals (Present Valued @ 9.83%):				\$26,880,506	\$20,355,155

Alternative Scenario 2: Current Agreement with 45mW load at Expiration Date of 6/30/97

Line No.	Year (1)	Revenues		Costs		Total \$ Contribution to Fixed Costs (4) - (6) = (7)
		Total kWh (2)	\$/kWh (3)	Market Alternative Incremental Costs (5)	Total \$ (2) * (5) = (6)	
23						
24	11/1/95 through 6/30/96	833,333,333	\$0.02500	\$0.014345	\$11,954,167	\$8,879,167
25	7/1/96 through 12/31/96	625,000,000	\$0.02600	\$0.014345	\$8,965,625	\$7,284,375
26	1/1/97 through 6/30/97	625,000,000	\$0.02600	\$0.015118	\$9,448,750	\$6,801,250
27	7/1/97 through 12/31/97	177,390,000	\$0.02500	\$0.015118	\$2,681,782	\$1,752,968
28	through 12/31/98	354,780,000	\$0.02500	\$0.016090	\$5,708,410	\$3,161,090
29	through 12/31/99	354,780,000	\$0.02500	\$0.016821	\$5,967,754	\$2,901,746
30	through 12/31/00	354,780,000	\$0.02500	\$0.017626	\$6,253,352	\$2,616,148
31	through 12/31/01	354,780,000	\$0.02500	\$0.018650	\$6,616,647	\$2,252,853
32	Totals (Present Valued @ 9.83%):				\$45,196,561	\$29,109,192

Comparison of Alternatives: Contribution to Fixed Costs with SAR-Based Costs

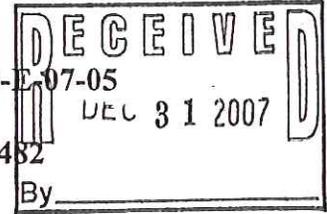
Line No.	New Agreement	Revenues			Costs			Total \$ Contribution to Fixed Costs (4) - (6) = (7)
		Total kWh (2)	\$/kWh (3)	Total \$ (4)	SAR-Based Incremental Costs (5)	Total \$ (2) * (5) = (6)		
1	Termination Charge			\$30,000,000		\$0	\$30,000,000	
2	11/1/95 through 6/30/96	958,667,000	\$0.018500	\$17,735,340	\$0.016573	\$15,887,988	\$1,847,351	
3	7/1/96 through 12/31/96	719,000,000	\$0.018500	\$13,301,500	\$0.016573	\$11,915,987	\$1,385,513	
4	1/1/97 through 6/30/97	762,500,000	\$0.018500	\$14,106,250	\$0.017409	\$13,274,363	\$831,888	
5	7/1/97 through 12/31/97	762,500,000	\$0.018500	\$14,106,250	\$0.017409	\$13,274,363	\$831,888	
6	through 12/31/98	1,656,000,000	\$0.018500	\$30,636,000	\$0.018288	\$30,284,928	\$351,072	
7	through 12/31/99	1,656,000,000	\$0.018500	\$30,636,000	\$0.020445	\$33,856,920	(\$3,220,920)	
8	through 12/31/00	1,656,000,000	\$0.018500	\$30,636,000	\$0.021579	\$35,734,824	(\$5,098,824)	
9	through 12/31/01	1,656,000,000	\$0.018500	\$30,636,000	\$0.022777	\$37,718,712	(\$7,082,712)	
10	Totals (Present Valued @ 9.83%):			\$162,450,987		\$137,302,608	\$25,148,379	
11	Alternative Scenario 1: Current Agreement with Municipalization at Expiration Date of 6/30/97							
Line No.	New Agreement	Revenues			Costs			Total \$ Contribution to Fixed Costs (4) - (6) = (7)
		Total kWh (2)	\$/kWh (3)	Total \$ (4)	SAR-Based Incremental Costs (5)	Total \$ (2) * (5) = (6)		
12	Termination Charge			\$47,235,661		\$0	\$47,235,661	
13	11/1/95 through 6/30/96	833,333,333	\$0.02500	\$20,833,333	\$0.016573	\$13,810,833	\$7,022,500	
14	7/1/96 through 12/31/96	625,000,000	\$0.02600	\$16,250,000	\$0.016573	\$10,358,125	\$5,891,875	
15	1/1/97 through 6/30/97	625,000,000	\$0.02600	\$16,250,000	\$0.017409	\$10,880,625	\$5,369,375	
16	7/1/97 through 12/31/97	0	0	0	\$0.017409	\$0	\$0	
17	through 12/31/98	0	0	0	\$0.017409	\$0	\$0	
18	through 12/31/99	0	0	0	\$0.017409	\$0	\$0	
19	through 12/31/00	0	0	0	\$0.017409	\$0	\$0	
20	through 12/31/01	0	0	0	\$0.017409	\$0	\$0	
21	Totals (Present Valued @ 9.83%):			\$47,235,661		\$31,025,900	\$16,209,761	
22	Alternative Scenario 2: Current Agreement with 45mW load at Expiration Date of 6/30/97							
Line No.	New Agreement	Revenues			Costs			Total \$ Contribution to Fixed Costs (4) - (6) = (7)
		Total kWh (2)	\$/kWh (3)	Total \$ (4)	SAR-Based Incremental Costs (5)	Total \$ (2) * (5) = (6)		
23	Termination Charge			\$74,305,753		\$0	\$74,305,753	
24	11/1/95 through 6/30/96	833,333,333	\$0.02500	\$20,833,333	\$0.016573	\$13,810,833	\$7,022,500	
25	7/1/96 through 12/31/96	625,000,000	\$0.02600	\$16,250,000	\$0.016573	\$10,358,125	\$5,891,875	
26	1/1/97 through 6/30/97	625,000,000	\$0.02600	\$16,250,000	\$0.017409	\$10,880,625	\$5,369,375	
27	7/1/97 through 12/31/97	177,390,000	\$0.02500	\$4,434,750	\$0.017409	\$3,088,183	\$1,346,567	
28	through 12/31/98	354,780,000	\$0.02500	\$8,869,500	\$0.018288	\$6,488,217	\$2,381,283	
29	through 12/31/99	354,780,000	\$0.02500	\$8,869,500	\$0.020445	\$7,253,477	\$1,616,023	
30	through 12/31/00	354,780,000	\$0.02500	\$8,869,500	\$0.021579	\$7,655,798	\$1,213,702	
31	through 12/31/01	354,780,000	\$0.02500	\$8,869,500	\$0.022777	\$8,080,824	\$788,676	
32	Totals (Present Valued @ 9.83%):			\$74,305,753		\$52,862,848	\$21,442,905	

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

ORDER NO. 30482



The Commission in this Order approves a Stipulation offered as a proposed settlement of the rate issues in Case No. PAC-E-07-05. Parties to the Stipulation are PacifiCorp dba Rocky Mountain Power (RMP; Company); the Idaho Irrigation Pumpers Association, Inc. (Irrigators); Monsanto Company; Agrium, Inc.; the Community Action Partnership Association of Idaho (CAPAI); Timothy J. Shurtz; and Commission Staff. The Commission finds the settlement to be fair, just and reasonable and in the public interest. The rate changes we authorize for an effective date of January 1, 2008 increase revenues from electric service by \$11.5 million annually or 6.4%. The increase in base rates will vary by class of customer. The base rates for residential and irrigation customers will increase by 4.89%. The base rates for general service customers (Schedules 6, 6A, 23 and 23A) will not change. The Commission in this Order also approves the November 5, 2007 Electric Service Agreement (Agreement) between PacifiCorp and Monsanto Company and approves grants of intervenor funding for CAPAI and for the Irrigators.

Initial Application

On June 8, 2007, Rocky Mountain Power filed an Application with the Commission for authority to increase the Company's revenues from electric service by \$18.5 million annually, or 10.3%. The net increases recommended by the Company in its Application range from 24.1% for Monsanto Company to 20.7% for public street lighting to 14.5% for Agrium and to 6.7% for residential service customers and irrigators.

The Company's rate spread and rate design proposals are based on a submitted class cost of service study and include a proposal that, in time of rising costs, no individual customer class would receive a rate reduction. The increase in base rates would vary by class of customer.

The revised tariff schedules proposed by the Company reflect a proposed effective date of January 1, 2008.

Parties of Record

On June 29, 2007, the Commission issued a Notice of Application and Intervention Deadline. *See* Order No. 30356. Parties requesting and granted intervention were: Monsanto Company; Idaho Irrigation Pumpers Association, Inc.; Agrium, Inc.; Community Action Partnership Association of Idaho; and Timothy J. Shurtz.

Public Workshops/Hearings

Public workshops for RMP customers were held on September 4 in Rexburg, Idaho and September 5 in Soda Springs, Idaho. At the workshops customers were provided with an opportunity to hear from Commission Staff regarding the Company's Application and ask questions of Staff and representatives of the Company.

Public hearings were held on October 30 in Rigby and November 1 in Grace, Idaho for the purpose of receiving public comments. A transcript of proceedings has been filed with the Commission.

Settlement Stipulation

A technical hearing in Case No. PAC-E-07-05 was scheduled for November 6, 2007 in Boise, Idaho. At the commencement of proceedings the parties presented for Commission consideration a Stipulation (and proposed settlement).

The following parties appeared by and through their respective counsel:

PacifiCorp dba Rocky Mountain Power	Justin Lee Brown
Commission Staff	Scott D. Woodbury Neil Price
Monsanto Company	Randall C. Budge
Agrium, Inc.	Conley Ward
Idaho Irrigation Pumpers Association, Inc.	Eric L. Olsen
Community Action Partnership Association of Idaho	Brad M. Purdy

Not appearing, although a party of record and signator to the settlement stipulation, was Timothy Shurtz.

d. Powerdale hydro facility accounting as approved in Order No. 30344 and as included in this case.

- The Stipulation does not alter or impair the recovery of regulatory assets previously deferred by the Commission Orders under FAS 71.

Cost of Service, Rate Spread and Rate Design, Stipulation ¶¶ 9-11

- The parties in Stipulation ¶ 9 agree to the following rate spread.

Idaho Rate Spread -- \$11.50M Increase					
Schedule	Description	COS		Rate Spread	
		Percent	Dollar (000)	Percent	Dollar (000)
1	Residential	5.50%	\$1,632	4.89%	\$1,450
36	Residential TOD	4.06%	\$867	4.89%	\$1,045
10	Irrigation	6.80%	\$2,679	4.89%	\$1,928
7/7A/11/12	Street & Area Lighting	74.67%	\$255	75.29%	\$257
Contract 1	Agrium	11.98%	\$479	6.25%	\$250
Contract 2	Monsanto	16.47%	\$8,014	13.50%	\$6,570
6/8/9/19/23/35	General Service		(\$2,424)	0.00%	\$0
Total		6.43%	\$11,504	6.42%	\$11,500

- With respect to the rate plans for 2008 through 2010 for Agrium and Monsanto, the Company agrees that in any rate filing during the terms of such rate plans it will not seek to recover any revenue shortfalls related to Agrium and Monsanto from other Idaho customers when compared to cost of service studies in those filings.
- The cost of service methodology proposed by the Company in this proceeding will remain in effect as the accepted methodology through the maximum duration of the rate plans for Agrium and Monsanto, which expire December 31, 2010.

Irrigation Customer Issues, Stipulation ¶¶ 12-22

- For inter-jurisdictional cost allocation purposes, the parties agree that the Company's Irrigation Load Control Program shall be situs-assigned in this case. RMP will directly assign to Idaho both the cost responsibility for the incentive payments and the reduction in loads associated with the program.
- RMP and IIPA agree that irrigation class revenues shall increase by 4.89% effective January 1, 2008.

any aspect of the methodology, PacifiCorp and IIPA will file a request with the Commission to resolve the dispute.

- The Company will use the methodology to potentially adjust the load control credit for the Dispatchable Irrigation Load Control Program for the 2008 and 2009 irrigation season at participation levels of 175 MW or greater and to assign a value for the load control credit for the Dispatchable Irrigation Load Control Program after the 2009 irrigation season.
- RMP and IIPA agree that the agreed-upon load control credit of \$28/kW-year for the Dispatchable Irrigation Load Control Program for participation levels of 175 MW or greater is subject to adjustment for the 2008 and 2009 irrigation seasons based upon the results of the Company's valuation methodology that will be provided to IIPA no later than December 7, 2007. The adjustment shall be to the final price suggested by the Company's methodology and either agreed to by IIPA or determined by Commission Order, unless the final price is greater than either \$2 above or below \$28/kW-year, then the adjustment shall be limited to a total \$2 adjustment.
- RMP and IIPA agree that the Company will work in good faith to meet all installation requests, but cannot guarantee that it can respond to all installation requests received.

Consumer Related Issues, Stipulation ¶ 23

- The Parties agree to defer consideration of the consumer related changes proposed in this case (recovery of collection agency costs, fees for reconnection of service, and line extension changes).

Agrium, Stipulation ¶¶ 24-26

- RMP and Agrium agree that Agrium's tariff contract revenues under Schedule 401 will increase 6.25% effective January 1, 2008. Rates for service to Agrium or to any other customers served under Schedule 9 will not change on January 1, 2008.
- RMP and Agrium further agree that Agrium's tariff rates will be increased 3% effective January 1, 2009 and 7% effective January 1, 2010. The price changes specified herein shall be applied as a uniform percentage increase to the customer charge, the demand charge, and the HLH and LLH Energy Charges in Schedule 401.
- RMP commits to make no further adjustments to Agrium's tariff rates prior to January 1, 2011.

Commission Findings

The Commission has reviewed the filings of record in Case No. PAC-E-07-05 including the Stipulation of parties (and proposed settlement) and the November 5, 2007 Electric Service Agreement between PacifiCorp and Monsanto Company. The supporting context for the Commission's deliberation regarding the reasonableness of the Stipulation terms is the Commission's November 6, 2007 record of hearing in this case, which includes by reference all prefiled direct and rebuttal testimony. Commission Rules of Procedure 282, 283; Tr. p. 41. The Commission is also informed by the transcripts of Rigby and Grace, Idaho proceedings where customers and other parties of interest were provided the opportunity to raise their concerns and give testimony, and by filed public comments.

Settlements are reviewed under Commission Rules of Procedure 274-276. We incorporate by reference the submitted Stipulation (and proposed settlement) as if set forth herein in its entirety.

As stated in Rule 276

The Commission is not bound by settlements. It will independently review any settlement proposed to it to determine whether the settlement is just, fair and reasonable, in the public interest, or otherwise in accordance with law or regulatory policy. When a settlement is presented for decision, the Commission may accept the settlement, reject the settlement, or state additional conditions under which the settlement will be accepted. . . .

Under Rule 275, proponents of a proposed settlement carry the burden of showing that the settlement is reasonable, in the public interest, or otherwise in accordance with law or regulatory policy.

As reflected in the November 6, 2007, transcript of proceedings, the Company in this case initially requested an overall increase in its revenues of \$18.47 million or 10.3%. Tr. p. 11; Stipulation ¶ 2. That request was reduced in Company rebuttal testimony to \$15.4 million or 8.6%. Tr. p. 12; Stipulation ¶ 3. The increase amount agreed to by the parties in the Stipulation (except Monsanto which explicitly does not object) is \$11.5 million or 6.4%. Tr. p. 13; Stipulation ¶ 5.

The parties (also with the exception of Monsanto which explicitly does not object) agree that the cost of capital shall be determined using a capital structure consisting of 50.4% common stock equity, 49.1% long-term debt and 0.5% preferred stock. RMP's authorized return

customer, and \$1,278.55 for the average Schedule 12 customer. The Commission does not find these amounts to be unduly burdensome or onerous.

Cost of service results have historically fluctuated for the street lighting classes, more so than the larger customer classes. This is the first proposed revenue increase for street lighting classes in many years. We find that moving the street lighting classes to full cost of service is justified on equity principles. Should the increase not be borne by these particular classes, the revenue shortfall would be shifted to those classes already receiving a rate increase. The Commission finds that all customers are better served by aligning costs with revenues. For street lighting customers, it is a large percentage increase, but the related dollar amount, we find, is not likely to impose undue economic hardship.

Monsanto Electric Service Agreement

The November 5, 2007, Electric Service Agreement between PacifiCorp and Monsanto (2008 Agreement) replaces and supersedes a May 18, 2006, Agreement (2007 Agreement) approved by the Commission in Order No. 30197, Case No. PAC-E-06-09. The form of the new Service Agreement remains the same. The 2008 Agreement sets the terms of electrical service provided by the Company and the interruptible (operating reserve, economic curtailment and system integrity) products offered by Monsanto. The changes to the 2007 Agreement are identified in the Settlement Stipulation. The parts redacted have been provided under separate seal and have been reviewed by the Commission. Monsanto claims as confidential information the following: (a) the interruptible credit in dollars per kW of interruptible power set forth in paragraph 4.1.2 of the 2008 Electric Service Agreement and tariff Schedule 400; and (b) the furnace sizes available for operating reserve, system integrity and economic curtailment interruptions set forth in 2008 Electric Service Agreement Exhibits A and B. The Commission has reviewed the accompanying affidavit and certificate of Monsanto's attorney and accepts Monsanto's representation that the net cost of electricity after the interruptible credit and furnace size in MW available for interruption are trade secret information entitled to protection from disclosure under *Idaho Code* § 48-801(5). The remaining terms of the Electric Service Agreement are not considered to be trade secrets or confidential information and are available for public review.

Monsanto operates an elemental phosphorous plant near the City of Soda Springs in Caribou County, Idaho. Rates for service under the 2007 Agreement are fixed through year-end

Rule 162 of the Commission's Rules of Procedure provides the form and content requirements for a petition for intervenor funding. The petition must contain: (1) an itemized list of expenses broken down into categories; (2) a statement of the intervenor's proposed finding or recommendation; (3) a statement showing that the costs the intervenor wishes to recover are reasonable; (4) a statement explaining why the costs constitute a significant financial hardship for the intervenor; (5) a statement showing how the intervenor's proposed finding or recommendation differed materially from the testimony and exhibits of the Commission Staff; (6) a statement showing how the intervenor's recommendation or position addressed issues of concern to the general body of utility users or customers; and (7) a statement showing the class of customer on whose behalf the intervenor appeared. The filings of petitioners comport with the form required by the Commission Rules.

Commission Findings

Submitted for Commission consideration are Petitions for Intervenor Funding filed by the Community Action Partnership Association of Idaho, the Idaho Irrigation Pumpers Association, and Timothy Shurtz. The Commission has reviewed the Petitions, the prefiled testimony of the Petitioners and the prefiled testimony of Commission Staff.

Pursuant to *Idaho Code* § 61-617A(2) the Commission may order PacifiCorp to pay all or a portion of the costs of one or more parties for legal fees, witness fees and reproduction costs, not to exceed a total for all intervening parties combined of \$40,000 in any proceeding before the Commission. The combined total requested by the Irrigators, CAPAI and Timothy Shurtz is \$91,207.18. We find that the Petitions for Intervenor Funding in this case were timely filed and satisfied all of the other "procedural" or technical requirements set forth in Rules 161-165 of the Commission Rules of Procedure.

Idaho Code § 61-617A includes a statement of policy to encourage participation by intervenors in Commission findings. The Commission determines an award for intervenor funding based on the following considerations:

- (a) A finding that the participation of the intervenor has materially contributed to the decision rendered by the Commission; and
- (b) A finding that the costs of intervention are reasonable in amount and would be a significant financial hardship for the intervenor; and

funding remaining is \$26,839.96. Of this amount, we find it fair, just and reasonable to award the Irrigators \$22,000.

The Commission finds that the intervenor funding awards to CAPAI and the Irrigators are fair and reasonable and will further the purpose of encouraging "participation at all stages of all proceedings before the Commission so that all affected customers receive full and fair representation in those proceedings." *Idaho Code* § 61-617A(1).

While this Commission is reluctant to deny Petitions for Intervenor Status, we find that Mr. Shurtz's participation did not result in evidence or input qualitatively different from the comments received by the Commission from customers and interested parties in the public hearings we held in eastern Idaho or in the written comments of customers filed with the Commission. Based on our review of the record in this case, the Commission finds that Mr. Shurtz has failed to demonstrate entitlement to an award of intervenor funding. Specifically, we find that his participation did not materially contribute to our decision and that his recommendations on matters deemed of relative importance and significance to this Commission did not materially differ from the prefiled testimony and exhibits of Commission Staff.

CONCLUSIONS OF LAW

The Idaho Public Utilities Commission has jurisdiction over PacifiCorp dba Rocky Mountain Power, an electric utility, and the issues presented in this case, pursuant to the powers granted it under Title 61 of the Idaho Code and pursuant to the Commission's Rules of Procedure, IDAPA 31.01.01.000 *et seq.*, including specifically Rules 272 through 280 as pertains to settlements.

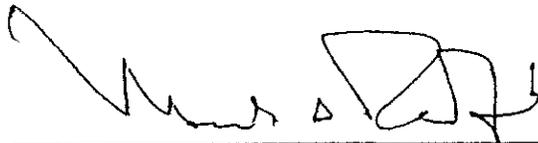
ORDER

In consideration of the foregoing and as more particularly described above, IT IS HEREBY ORDERED and the Commission hereby accepts the Stipulation and proposed settlement tendered in Case No. PAC-E-07-05 approving an \$11.5 million increase in base rates representing an aggregate base rate increase of 6.4% for an effective date of January 1, 2008. The Company is directed to file amended tariffs comporting with this Order.

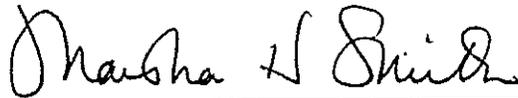
IT IS FURTHER ORDERED and the Commission does hereby approve the November 5, 2007 Electric Service Agreement between PacifiCorp and Monsanto Company.

IT IS FURTHER ORDERED and the Community Action Partnership Association of Idaho's Petition for Intervenor Funding is granted in the amount of \$13,160.04. Reference *Idaho*

DONE by Order of the Idaho Public Utilities Commission at Boise, Idaho this 27th
day of December 2007.



MACK A. REDFORD, PRESIDENT



MARSHA H. SMITH, COMMISSIONER



JIM KEMPTON, COMMISSIONER

ATTEST:



Jean D. Jewell
Commission Secretary

bis/O:PAC-E-07-05_sw3

Rocky

File - Monsanto PAC-E-08-07
Office of the Secretary
Service Date
April 16, 2009
(270,210,002)

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-08-07
ORDER NO. 30783



The Commission in this Order approves a Stipulation offered as a proposed settlement of the rate issues in Case No. PAC-E-08-07. Parties to the Stipulation are PacifiCorp dba Rocky Mountain Power (RMP; Company); the Idaho Irrigation Pumpers Association, Inc. (Irrigators; IIPA); the Community Action Partnership Association of Idaho (CAPAI); and Commission Staff. The Commission finds the settlement to be fair, just and reasonable and in the public interest.

The rate changes we authorize for an effective date of April 18, 2009, increase authorized annual base tariff revenue for electric service from non-contract customers of RMP by \$4.38 million or 3.1%. The net amount of actual increase will vary by class of customer and usage. An average electric residential customer (Schedule 1) using 850 kWh of electricity per month will see a \$3.07 per month increase in summer bills and a \$2.38 per month increase in winter bills. The Stipulation does not impact or propose any changes to the rates of Monsanto or Agrium, whose rates are controlled by a separate agreement approved in 2007. The rates of Monsanto and Agrium increased 3% on January 1, 2009, and will increase again 5% on January 1, 2010.

In this Order, the Commission also authorizes development and funding of an energy conservation education program targeted to low-income customers and acknowledges the Company's commitment to include an inverted rate design proposal for residential customers in its next general rate case. An intervenor funding grant of \$4,500 is approved for the Community Action Partnership Association of Idaho and a grant of \$18,003 is approved for the Idaho Irrigation Pumpers Association, Inc.

Initial Application

On September 19, 2008, PacifiCorp dba Rocky Mountain Power (Rocky Mountain Power; Company) filed an Application with the Idaho Public Utilities Commission (Commission) for authority to increase the Company's base rates for electric service by \$5.9

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Parties of Record

On October 3, 2008, the Commission issued a Notice of Application and Intervention Deadline. Parties requesting and granted intervention were: Monsanto Company; Idaho Irrigation Pumpers Association, Inc.; Community Action Partnership Association of Idaho; and Agrium, Inc.

Settlement Stipulation

Commission Staff filed a Notice of Intent to Engage in Settlement Discussions with the Commission on January 8, 2009. RP 272. A settlement conference was subsequently held on January 15, 2009, and was attended by all parties to the case with the exception of Agrium, Inc.

Pursuant to discussions, PacifiCorp, Commission Staff, Idaho Irrigation Pumpers Association and Community Action Partnership of Idaho have entered into a Stipulation and negotiated settlement that purports to resolve all issues raised in this proceeding. The Stipulation does not impact or propose any changes to the rates of Monsanto or Agrium, whose rates are controlled by a separate agreement approved in 2007, Case No. PAC-E-07-05, Order No. 30482. Tr. p. 50. Monsanto participated in the settlement discussions and, while it does not adopt the Stipulation, it has no objection to the Commission approving the same. Monsanto Comments filed February 5, 2009. The Stipulation was filed with the Commission on February 5, 2009. Staff Exh. 101; IDAPA 31.01.01.274. The stipulating parties represent that the Stipulation is in the public interest and that all of its terms and conditions are fair, just and reasonable.



A technical and evidentiary hearing on the Settlement Stipulation in this matter was held on March 11, 2009, at the Commission's Hearing Room in Boise, Idaho. Tr. pp. 1-105.

The following parties appeared by and through respective counsel:

- | | |
|---|--------------------------------------|
| Rocky Mountain Power: | Daniel E. Solander
Mark C. Moench |
| Idaho Irrigation Pumpers Association: | Eric L. Olsen |
| Community Action Partnership
Association of Idaho: | Brad M. Purdy |
| Commission Staff: | Scott D. Woodbury |

The Stipulation should nevertheless allow the Company to maintain its current level of earnings and continue to be an excellent provider of energy services in Idaho. Rocky Mountain Power has continued to procure demand-side as well as supply-side resources. These resources represent significant investment the Company is making on behalf of its customers to meet their energy needs on a prudent and cost-effective basis. . . . The Company will continue to work to control its costs while implementing mechanisms and pricing proposals to help customers use electricity more efficiently. Tr. pp. 43-44.

There are four issues identified by Staff that makes negotiated settlement the reasonable option in this case: (1) Most test year expenses and investments have already been reviewed and adjusted by five other state jurisdictions served by PacifiCorp. (2) Expense and investment adjustments made on PacifiCorp's system level trickle down to affected Idaho retail customers at only 2.1% of the original adjustment. (3) Multi-state process (MSP) jurisdictional allocation commitments already limit the level of revenue requirement increase that can be passed on to Idaho retail customers. (4) The stipulated settlement approved by the Commission in Case No. PAC-E-07-05 contains the following terms:

With respect to the rate plan for 2008 through 2010 for Agrium and Monsanto, the Company agrees that in any rate filing during the three-year contract period of such rate plans it will not seek to recover any revenue shortfalls related to Agrium and Monsanto from other Idaho customers when compared to cost-of-service studies in those filings. (PAC-E-07-05 Stipulation ¶ 10.)

The cost-of-service (COS) methodology proposed by the Company in this proceeding will remain in effect as the accepted methodology through the maximum duration of the rate plans for Agrium and Monsanto which expire December 31, 2010. (PAC-E-07-05 Stipulation ¶ 11.) Tr. pp. 51-52.

- The parties agree to establish the total Company base rate net power cost at \$982 million, as filed in this Application, which will be necessary for calculation purposes in Rocky Mountain Power's currently pending application for approval of an Energy Cost Adjustment Mechanism (ECAM) in Case No. PAC-E-08-08. Stipulation ¶ 6.

programs using the total resource cost test (TRC), the utility cost test (UTC), and the participant cost test (PCT). The Company maintains and Staff has verified that its programs meet Commission-approved cost-effective criteria. Staff has also verified that the methodology used by the Company to evaluate benefits and costs properly capture program energy savings. Additionally, Staff is satisfied that the Company periodically reviews and updates its DSM business base and DSM program assumptions and cost-effectiveness and makes changes as necessary. Although the Company has not yet obtained competitive bid third-party evaluations in Idaho, it is in the process of doing so. RMP has actively marketed its DSM programs and education to its Idaho customers and many of its customers have participated in them. Tr. pp. 72-74.

CAPAI proposes that RMP fund an energy conservation education program specifically targeted to low-income customers. The two CAP agencies currently providing low-income service within RMP's service territory are SEICA and EICAP. The parties agreed to work collaboratively to arrive at a fair, just and reasonable allocation of funding (# of RMP customers in each of the respective CAP service areas, etc.) and CAPAI agreed to submit a low-income education program proposal to the Company by May 1. The program will fund personnel and materials to CAP agencies to provide conservation education to all RMP customers who apply for LIHEAP. Tr. pp. 95-98.

- The parties agree that the issue raised in the Company's testimony related to the Energy Trust of Oregon Funding of the Goodnoe Hills Wind Generation plant will be deferred to Rocky Mountain Power's next filed general rate case. Stipulation ¶ 9.

The issue deferred deals with how renewable energy credits generated from the Goodnoe Hills Wind project should be allocated among the service jurisdictions given that the Oregon Energy Trust contributed directly to project development. Tr. p. 81.

- Rocky Mountain Power agrees that it will include an inverted tier rate design proposal or option for residential customers in its next filed general rate case for the Commission's consideration. Stipulation ¶ 10.

Tiered rates were recently approved by the Commission for Idaho Power residential customers. It does not follow, however, Staff contends, that tiered rates should automatically be required of RMP. There are some significant differences between Idaho

Monsanto

In a letter filing with the Commission (February 5, 2009), Monsanto agrees “that it does not adopt the Stipulation but has no objection to the Commission approving the same.”

Monsanto’s current and future rates are established pursuant to the terms of a stipulation approved in Case No. PAC-E-07-05 (Order No. 30482), and will not be subject to further adjustment prior to January 1, 2011.

It is significant to note, Monsanto contends, that Monsanto’s firm rates and curtailment credit rates were increased 3% effective January 1, 2009, and will again increase 5% effective January 1, 2010, (Schedule 400). Monsanto’s number of economic curtailment hours increased from 800 in 2008 to 830 for 2009 and will increase to 850 for 2010.

Commission Findings

The Commission has reviewed and considered the filings of record in Case No. PAC-E-08-07 including the Stipulation of parties (and proposed settlement). The supporting context for the Commission’s deliberation regarding the reasonableness of the Stipulation terms is the Commission’s record of hearing in this case, which includes by reference the Company’s prefiled direct testimony and exhibits. Commission Rules of Procedure 282, 283; Tr. p. 3. The Commission is also informed by the transcript of the Shelley, Idaho proceeding, where customers and other parties of interest were provided the opportunity to raise their concerns and give testimony, and by filed public comments. The Commission finds that the established record forms a sufficient basis for decision and that no further hearing or procedure is required.

Settlements are reviewed under Commission Rules of Procedure 274-276. We incorporate by reference the submitted Stipulation (and proposed settlement) as if set forth herein in its entirety. See Tr. Exh. 101.

As stated in Rule 276

The Commission is not bound by settlements. It will independently review any settlement proposed to it to determine whether the settlement is just, fair and reasonable, in the public interest, or otherwise in accordance with law or regulatory policy. When a settlement is presented for decision, the Commission may accept the settlement, reject the settlement, or state additional conditions under which the settlement will be accepted. . . .

settlement in the case and a public hearing scheduled for March 17, 2009 in Shelley. A week before the public hearing, an e-mail reminder was distributed to all media outlets who received the press releases. The press releases and e-mail reminders were sent to daily newspapers in Idaho Falls, Pocatello and Rexburg/St. Anthony, to Associated Press, to weekly newspapers in Preston, Malad, Soda Springs, Montpelier, Shelley, Rigby, and Driggs, to the Idaho Business Review. Press releases and e-mail reminders were sent to the ABC, CBS and NBC television affiliates in Idaho Falls and Pocatello and to KSL-TV in Salt Lake City. The same information was sent to five AM radio stations as well as the public radio FM stations in southeastern Idaho. Short of buying paid advertisements, the Commission has no way to ensure media outlets will print or air press releases. There is an ongoing effort by the Commission's public information officer to maintain communication with reporters and editors in the hope they will give proper attention to our press releases when they are issued.

Intervenor Funding

Intervenor funding is available pursuant to *Idaho Code* § 61-617A and Commission Rules of Procedure 161 through 165. Section 61-617A(1) declares that it is the "policy of [Idaho] to encourage participation at all stages of all proceedings before this Commission so that all affected customers receive full and fair representation in those proceedings." The statutory cap for intervenor funding that can be awarded in any one case is \$40,000. *Idaho Code* § 61-617A(2). Accordingly, the Commission may order any regulated utility with intrastate annual revenues exceeding \$3.5 million to pay all or a portion of the costs of one or more parties for legal fees, witness fees and reproduction costs not to exceed a total for all intervening parties combined of \$40,000.

Petitions for Intervenor Funding were filed by Community Action Partnership Association of Idaho (\$4,500 – legal \$4,380; costs \$120) and the Idaho Irrigation Pumpers Association (\$18,003.56 – legal \$5,503; consultant \$12,500).

Rule 162 of the Commission's Rules of Procedure provides the form and content requirements for a petition for intervenor funding. The petition must contain: (1) an itemized list of expenses broken down into categories; (2) a statement of the intervenor's proposed finding or recommendation; (3) a statement showing that the costs the intervenor wishes to recover are reasonable; (4) a statement explaining why the costs constitute a significant financial hardship for the intervenor; (5) a statement showing how the intervenor's proposed finding or

protection issues. As a result of financial constraints, IIPA's participation in this review and Settlement has been selective and primarily on a limited basis.

Commission Findings

Submitted for Commission consideration are the Petitions for Intervenor Funding filed by Community Action Partnership Association of Idaho (\$4,500) and the Idaho Irrigation Pumpers Association (\$18,003.56). The Commission has reviewed the Petitions, the Stipulation and the testimony and comments of the Petitioners.

Intervenor funding is available pursuant to *Idaho Code* § 61-617A and Commission Rules of Procedure 161-165. Rule 162 of the Commission's Rules of Procedure provides the form and content requirements for a petition for intervenor funding.

Idaho Code § 61-617A includes a statement of policy to encourage participation by intervenors in Commission findings. The Commission determines an award for intervenor funding based on the following considerations:

- (a) A finding that the participation of the intervenor has materially contributed to the decision rendered by the Commission; and
- (b) A finding that the costs of intervention are reasonable in amount and would be a significant financial hardship for the intervenor; and
- (c) The recommendation made by the intervenor differed materially from the testimony and exhibits of the Commission Staff; and
- (d) The testimony and participation of the intervenor addressed issues of concern to the general body of users or consumers.

Idaho Code § 61-617A. We find that the Petitions for Intervenor Funding were timely filed and comport with the procedural and technical requirements set forth in Rules 161-165 of the Commission's Rules of Procedure.

CAPAI is a non-profit corporation overseeing a number of agencies that assist with issues related to the causes and conditions of poverty in Idaho. In this case CAPAI addressed the need for an energy conservation education program targeted to low-income customers and agreed to develop a program. We find it fair, just and reasonable to award the total request of CAPAI in the amount of \$4,500 and find that the public interest is well served by such award. We find the itemized costs of CAPAI to be reasonable and recognize that the cost to CAPAI of

authorized annual base tariff revenue for electric service for non-contract customers of Rocky Mountain Power for an effective date of April 18, 2009. The Company is directed to file amended tariffs comporting with this Order.

IT IS FURTHER ORDERED and the Community Action Partnership Association of Idaho's Petition for Intervenor Funding is granted in the amount of \$4,500. Reference *Idaho Code* § 61-617A. Rocky Mountain Power is directed to pay said amount to CAPAI within 28 days from the date of this Order. IDAPA 31.01.01.165.02. Rocky Mountain Power shall include the cost of this award of intervenor funding to CAPAI as an expense to be recovered in the Company's next general rate case proceeding from the residential customer class. *Idaho Code* § 61-617A(3).

IT IS FURTHER ORDERED and Idaho Irrigation Pumpers Association, Inc.'s Petition for Intervenor Funding is granted in the amount of \$18,003.56. Reference *Idaho Code* § 61-617A. Rocky Mountain Power is directed to pay said amount to the Irrigators within 28 days from the date of this Order. IDAPA 31.01.01.165.02. Rocky Mountain Power shall include the cost of this award of intervenor funding to the Irrigators as an expense to be recovered in the Company's next general rate case proceeding from the irrigation customer class. *Idaho Code* § 61-617A(3).

THIS IS A FINAL ORDER. Any person interested in this Order may petition for reconsideration within twenty-one (21) days of the service date of this Order. Within seven (7) days after any person has petitioned for reconsideration, any other person may cross-petition for reconsideration. See *Idaho Code* § 61-626.

Average Stipulated Retail Rates For Idaho Customers of PacifiCorp

Description	Present Sch.	Present (¢)/kWh	Proposed (¢)/kWh
<u>Residential Sales</u>			
Residential Service	1	8.77	9.08
Residential Optional TOD ¹	36	7.08	7.33
Total Residential		<u>8.02</u>	<u>8.31</u>
<u>Commercial & Industrial ^{1,2}</u>			
General Service - Large Power ³	6	5.82	6.17
General Svc. - Lg. Power (R&F)	6A	6.49	6.87
General Service - High Voltage	9	4.33	4.59
Irrigation	10	6.79	6.91
Comm. & Ind. Space Heating	19	6.71	6.91
General Service Optional TOD	35	4.73	5.01
Total Commercial & Industrial		<u>5.21</u>	<u>5.30</u>
Total Sales to Ultimate Customers		<u>5.80</u>	<u>5.93</u>

Notes:

¹ Includes increase in Customer Charge

² No rate changes for Schedules 23/23A, Special Contract Customers, and Public Street Lighting (7/7A, 11, 12)

³ Remaining Schedule 8 Customers moved to Schedule 6

Let's turn the answers **on.**



2008

Integrated Resource Plan

Volume I



May 28, 2009

Pacific Power | Rocky Mountain Power | PacifiCorp Energy

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available energy. The economics of adding resources to the system to meet both capacity and energy needs are addressed with the portfolio studies described in Chapter 8.

Capacity and energy balance information is reported for two scenarios: with the Lake Side II combined-cycle plant included as a firm planned resource in 2012, and Lake Side II excluded as a resource, resulting in a larger capacity deficit beginning in that year.

Load and Resource Balance Components

The capacity and energy balances make use of the same load and resource components in their calculation. The main component categories consist of the following: existing resources, obligation, reserves, position, and reserve margin. This section provides a description of these various components.

Existing Resources

The firm capacities of the existing resources are shown in Table 5.6 by resource category and summed to show the total available existing resource capacity for the east, west and for the PacifiCorp system. A description of each of the resource categories follows:

- **Thermal.** This category includes all thermal plants that are wholly-owned or partially-owned by PacifiCorp. The capacity balance counts them at maximum dependable capability at time of system peak. The energy balance also counts them at maximum dependable capability, but derates them for forced outages and maintenance. This includes the existing fleet of 11 coal-fired plants, six natural gas-fired plants, and two co-generation units. These thermal resources account for roughly two-thirds of the firm capacity available in the PacifiCorp system.
- **Hydro.** This category includes all hydroelectric generation resources operated in the PacifiCorp system as well as a number of contracts providing capacity and energy from various counterparties. The capacity balance counts these resources by the maximum capability that is sustainable for one hour at the time of system peak, an approach consistent with current WECC capacity reporting practices. The energy associated with critical level stream flow is estimated and shaped by the hydroelectric dispatch from the Vista Decision Support System model. The energy impacts of hydro relicensing requirements, such as higher bypass flows that reduce generation, are also accounted for. Over 90 percent of the hydroelectric capacity is situated on the west side of the PacifiCorp system.

The Utah commission, in its 2007 IRP acknowledgment order, directed the Company to investigate the hydro capacity accounting methodology currently under consideration for regional resource adequacy reporting purposes in the Pacific Northwest. This accounting methodology extends the one-hour sustained peaking period to the six highest load hours over three consecutive days of highest demand. This sustained peaking-period definition was adopted in 2008 by the Northwest Power and Conservation Council (NPCC) as part the capacity resource adequacy standard developed by the Pacific Northwest Resource Adequacy Forum. The hydro sustained peak capacity methodology is still being evaluated to work out certain methodology details and to determine how best to implement it on a regional basis.

The Pacific Northwest Resource Adequacy Forum hired a consultant to conduct the study, which is expected to be completed by the end of 2009.

PacifiCorp conducted a cursory analysis of hydro resource capacity using the NPCC sustained peaking-period definition. The impact of moving from a one-hour sustained peaking period to an 18-hour period was found to be negligible.

- **Demand-Side Management (DSM).** In 2009, there are projected to be about 345 megawatts of Class 1 demand-side management programs included as existing resources. These are further projected to increase to 525 MW by 2018. Both the capacity balance and the energy balance count DSM programs by program capacity. DSM resources directly curtail load and thus planning reserves are not held for them.
- **Renewable.** This category contains one geothermal project, 21 existing wind projects and two planned wind projects. The capacity balance counts the geothermal plant by the maximum dependable capability while the energy balance counts the maximum dependable capability after forced outages. Project-specific capacity credits for the wind resources were statistically determined. Wind energy is counted according to hourly generation data used to model the projects.
- **Purchase.** This includes all of the major contracts for purchases of firm capacity and energy in the PacifiCorp system. The capacity balance counts these by the maximum contract availability at time of system peak. The energy balance counts the optimum model dispatch. Purchases are considered firm and thus planning reserves are not held for them.
- **Qualifying Facilities (QF).** All Qualifying Facilities that provide capacity and energy are included in this category. Like other power purchases, the capacity balance counts them at maximum system peak availability and the energy balance counts them by optimum model dispatch. It is assumed that all Qualifying Facility agreements will stay in place for the entire duration of the 20-year planning period. It should be noted that three of the Qualifying Facility resources (Kennecott, Tesoro, and US Magnesium) are considered non-firm and thus do not contribute to capacity planning.
- **Interruptible.** There are three east-side load curtailment contracts in this category. These agreements with Monsanto, MagCorp and Nucor provide 237 MW of load interruption capability at time of system peak. Both the capacity balance and energy balance count these resources at the level of full load interruption on the executed hours. Interruptible resources directly curtail load and thus planning reserves are not held for them.

Obligation

The obligation is the total electricity demand that PacifiCorp must serve, consisting of forecasted retail load and firm contracted sales of energy and capacity. The following are descriptions of each of these components:

- **Load.** The largest component of the obligation is the retail load. The capacity balance counts the peak load (MW) at the hour of system coincident peak load. The energy balance counts the load as an average of monthly time-of-day energy (MWa).

Due to new federal lighting standards being implemented under the Energy Policy Act of 2005, the load forecast required adjustment because lighting efficiency measures were embedded in the Class 2 DSM supply curves provided to PacifiCorp. Increasing the load forecast to account for this available energy efficiency “supply” ensures that an appropriate quantity of Class 2 DSM is selected by the capacity expansion model. Table 5.17 shows the impact of the hourly energy adjustments to the annual system coincident peak loads used in the 10-year capacity load and resource balance. (Note that this upward load adjustment applies only for capacity expansion modeling purposes. The Company’s official load forecast is reported net of this DSM adjustment.)

Table 5.17 – Federal Lighting Standard Impact on System Peak loads

Year	Federal Lighting Standard Adjustment (MW)	System Coincident Peak Prior to Adjustment (MW)	Adjusted System Coincident Peak (MW)
2009	6.3	10,143	10,150
2010	10.3	10,360	10,371
2011	8.5	10,631	10,640
2012	12.2	10,978	10,991
2013	20.3	11,261	11,281
2014	50.8	11,451	11,501
2015	69.2	11,730	11,798
2016	94.1	12,032	12,127
2017	132.7	12,251	12,384
2018	151.6	12,522	12,674
2019	144.5		
2020	173.1		
2021	174.6		
2022	200.9		
2023	217.7		
2024	226.2		
2025	232.0		
2026	234.1		
2027	239.4		
2028	245.0		

- **Sales.** This includes all contracts for the sale of firm capacity and energy. The capacity balance counts these contracts by the maximum obligation at time of system peak and the energy balance counts them by optimum model dispatch. All sales contracts are firm and thus planning reserves are held for them in the capacity view.

Reserves

The reserves are the total megawatts of planning and non-owned reserves that must be held for this load and resource balance. A description of the two types of reserves follows:

- **Planning reserves.** This is the total reserves that must be held to provide the planning reserve margin. It is the net firm obligation multiplied by the planning reserve margin as in the following equation:

$$\text{Planning reserves} = (\text{Obligation} - \text{Purchase} - \text{DSM} - \text{Interruptible}) \times \text{PRM}$$

- **Non-owned reserves.** There are a number of counterparties that operate in the PacifiCorp control areas that purchase operating reserves. This amounts to an annual reserve obligation of about 7 megawatts and 70 megawatts on the west and east-sides, respectively.

Position

The position is the resource surplus (deficit) resulting from subtracting the existing resources from the obligation. While similar, the position calculation is slightly different for the capacity and energy views of the load and resource balance. Thus, the position calculation for each of the views will be presented in their respective sections.

Reserve Margin

The reserve margin is the ratio of existing resources to the obligation. A positive reserve margin indicates that existing resources exceeds obligation. Conversely, a negative reserve margin indicates that existing resources do not meet obligation. If existing resources equals the obligation, then the reserve margin is 0%. It should be pointed out that the reserve margin can be negative when the corresponding position is non-negative. This is because the reserve margin is measured relative to the obligation, while the position is measured relative to the obligation plus reserves.

Capacity Balance Determination

Methodology

The capacity balance is developed by first determining the system coincident peak load hour for each of the first ten years of the planning horizon. Then the annual firm-capacity availability of the existing resources is determined for each of these annual system peak hours and summed as follows:

$$\text{Existing Resources} = \text{Thermal} + \text{Hydro} + \text{DSM} + \text{Renewable} + \text{Purchase} + \text{QF} + \text{Interruptible}$$

The peak load and firm sales are then added together for each of the annual system peak hours to compute the annual peak-hour obligation:

$$\text{Obligation} = \text{Load} + \text{Sales}$$

The amount of reserves to be added to the obligation is then calculated. This is accomplished by first removing the firm purchase and load curtailment components of the existing resources from the obligation. This resulting net obligation is then multiplied by the planning reserve margin.

The non-owned reserves are then added to this result to yield the megawatts of required reserves. The formula for this calculation is the following:

$$\text{Reserves} = (\text{Obligation} - \text{Purchase} - \text{DSM} - \text{Interruptible}) \times \text{PRM} + \text{Non-owned reserves}$$

Finally, the annual capacity position is derived by adding the computed reserves to the obligation, and then subtracting this amount from existing resources as shown in the following formula:

$$\text{Capacity Position} = \text{Existing Resources} - \text{Obligation} - \text{Reserves}$$

Firm capacity transfers from PacifiCorp's western to eastern control areas are reported for the east capacity balance, while capacity transfers from the eastern to western control areas are reported for the west capacity balance. Capacity transfers represent the optimized control area interchange at the time of the system coincident peak load as determined by the System Optimizer model.²⁷

Load and Resource Balance Assumptions

The assumptions underlying the current load and resource balance are generally the same as those from the 2007 IRP update with a few exceptions. The following is a summary of these assumption changes:

- **Wind Commitment.** In the 2007 IRP, 400 megawatts of the overall 1,400-megawatt commitment are included in the load and resource balance. The remaining 1,000 megawatts were treated as part of the overall wind resource potential evaluated in portfolio modeling. In the 2008 IRP, there are 263 MW of firm planned wind projects included in the load and resource balance.
- **Coal plant turbine upgrades.** The current load and resource balance assumes 162 MW of coal plant turbine upgrades, which is down from the 202 MW assumed in the 2007 IRP Update Report.

Capacity Balance Results

Table 5.18 shows the annual capacity balances and component line items using a target planning reserve margin of 12 percent to calculate the planning reserve amount. (Capacity balance information with Lake Side II included as a planned resource in 2012 is provided in Appendix H.) Balances for the system as well as PacifiCorp's east and west control areas are shown. (It should be emphasized that while west and east balances are broken out separately, the PacifiCorp system is planned for and dispatched on a system basis.) For comparison purposes, Table 5.19 shows the system-level capacity balance assuming a 15 percent planning reserve margin.

Figures 5.3 through 5.5 display the annual capacity positions (resource surplus or deficits) for the system, west control area, and east control area, respectively. The decrease in resources in 2008

²⁷ West-to-east and east-to-west transfers should be identical. However, decimal precision of a transmission loss parameter internal to the System Optimizer model results in a slight discrepancy (less than 2 MW) between reported values.

is caused by the expected expiration of the West Valley lease agreement. The slight increase in 2009 is due to executed front office transactions and an increase in the curtailment portion of the Monsanto contract. The large decrease in 2012 is primarily due to the expiration of the BPA peaking contract in August 2011. Additionally, Figure 5.4 highlights a decrease in obligation in the west starting in 2014 attributable to the expiration of the Sacramento Municipal Utility District and City of Redding power sales contracts.

Table 5.18 – System Capacity Loads and Resources (12% Target Reserve Margin)

Calendar Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
East										
Thermal	5,983	5,998	6,025	6,066	6,066	6,078	6,079	6,087	6,088	5,863
Hydro	135	135	135	135	135	135	135	135	135	135
DSM	345	395	435	465	475	485	495	505	515	525
Renewable	157	157	157	157	157	157	154	154	154	154
Purchase	751	546	541	341	341	341	341	320	320	320
QF	151	151	151	151	151	151	151	151	151	151
Interruptible	237	237	237	237	237	237	237	237	237	237
Transfers	1,150	952	602	422	440	230	490	504	265	414
East Existing Resources	8,910	8,572	8,284	7,975	8,003	7,814	8,082	8,093	7,865	7,800
Load	6,757	6,949	7,150	7,404	7,643	7,779	8,029	8,303	8,491	8,696
Sale	781	768	758	747	745	745	745	745	659	659
East Obligation	7,538	7,717	7,908	8,151	8,388	8,524	8,774	9,048	9,150	9,355
Planning reserves	745	785	803	853	880	895	924	958	969	993
Non-owned reserves	70	70	70	70	70	70	70	70	70	70
East Reserves	815	855	874	923	951	966	995	1,029	1,040	1,063
East Obligation + Reserves	8,352	8,572	8,781	9,074	9,339	9,490	9,769	10,077	10,190	10,418
East Position	558	1	(498)	(1,099)	(1,336)	(1,676)	(1,686)	(1,984)	(2,325)	(2,619)
East Reserve Margin	19%	12%	6%	(1%)	(4%)	(8%)	(7%)	(10%)	(13%)	(16%)
West										
Thermal	2,550	2,559	2,568	2,579	2,591	2,591	2,591	2,591	2,577	2,577
Hydro	1,315	1,218	1,216	980	1,009	1,046	1,157	1,150	1,149	1,146
DSM	-	-	-	-	-	-	-	-	-	-
Renewable	90	96	96	90	90	90	90	90	90	90
Purchase	1,310	1,203	753	115	144	111	111	111	111	139
QF	120	120	120	120	120	120	120	120	120	120
Transfers	(1,152)	(953)	(603)	(422)	(442)	(228)	(489)	(504)	(263)	(415)
West Existing Resources	4,233	4,242	4,150	3,462	3,513	3,729	3,580	3,558	3,783	3,656
Load	3,393	3,422	3,490	3,587	3,638	3,722	3,769	3,824	3,893	3,978
Sale	499	490	290	258	258	258	158	108	108	108
West Obligation	3,892	3,912	3,780	3,845	3,896	3,980	3,927	3,932	4,001	4,086
Planning reserves	310	325	363	448	450	464	458	459	467	474
Non-owned reserves	7	7	7	7	7	7	7	7	7	7
West Reserves	316	332	370	454	457	471	464	465	473	480
West Obligation + Reserves	4,208	4,243	4,149	4,299	4,353	4,451	4,391	4,397	4,474	4,566
West Position	25	(1)	0	(837)	(840)	(721)	(811)	(839)	(691)	(909)
West Reserve Margin	13%	12%	12%	(10%)	(10%)	(6%)	(9%)	(9%)	(5%)	(10%)
System										
Total Resources	13,143	12,815	12,433	11,437	11,515	11,543	11,662	11,651	11,648	11,456
Obligation	11,430	11,628	11,687	11,996	12,284	12,504	12,701	12,980	13,151	13,441
Reserves	1,131	1,187	1,243	1,377	1,407	1,437	1,459	1,494	1,513	1,543
Obligation + Reserves	12,561	12,815	12,931	13,373	13,692	13,940	14,160	14,474	14,664	14,984
System Position	583	(0)	(498)	(1,936)	(2,176)	(2,397)	(2,498)	(2,823)	(3,016)	(3,528)
Reserve Margin	17%	12%	8%	(4%)	(6%)	(7%)	(8%)	(10%)	(11%)	(14%)

Let's turn the answers **on.**



2008 Update

Integrated Resource Plan



March 31, 2010



Pacific Power | Rocky Mountain Power | PacifiCorp Energy

Table 3.9 – Capacity Load and Resource Balance, Megawatts (12% Target Reserve Margin)

Calendar Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
East										
Thermal	5,989	6,009	6,009	6,011	6,011	6,022	6,059	6,059	6,059	6,059
Hydroelectric	132	132	132	132	132	132	132	132	132	132
Class 1 DSM	458	463	468	468	468	468	468	468	468	468
Renewable	157	157	157	157	157	154	154	154	154	154
Purchase	560	655	705	604	304	304	283	283	283	283
Qualifying Facilities	152	152	152	152	152	152	152	152	152	152
Interruptible	327	327	327	327	327	327	327	327	327	327
Transfers	1,000	738	218	432	330	524	260	589	323	584
East Existing Resources	8,775	8,633	8,168	8,283	7,881	8,084	7,835	8,164	7,898	8,159
Load	6,753	7,036	7,292	7,577	7,846	8,070	8,295	8,461	8,628	8,804
Sale	768	758	997	1,045	745	745	745	659	659	659
East Obligation	7,521	7,794	8,289	8,622	8,591	8,815	9,040	9,120	9,287	9,463
Planning Reserves (12%)	741	762	815	867	899	926	955	965	985	1,006
Non-owned reserves	70	70	70	70	70	70	70	70	70	70
East Reserves	812	832	885	937	969	996	1,026	1,035	1,055	1,077
East Obligation + Reserves	8,332	8,626	9,174	9,559	9,561	9,811	10,066	10,156	10,343	10,540
East Position	443	7	(1,006)	(1,276)	(1,680)	(1,728)	(2,230)	(1,991)	(2,444)	(2,380)
East Reserve Margin	18%	12%	(0%)	(3%)	(8%)	(8%)	(13%)	(10%)	(14%)	(13%)
West										
Thermal	2,554	2,554	2,554	2,554	2,554	2,554	2,566	2,564	2,572	2,584
Hydroelectric	1,128	1,135	977	976	976	982	982	982	978	925
Class 1 DSM	-	-	-	-	-	-	-	-	-	-
Renewable	77	77	71	71	71	71	71	71	71	71
Purchase	1,297	856	247	281	226	221	225	255	269	285
Qualifying Facilities	144	138	135	135	135	135	135	135	135	135
Transfers	(1,000)	(739)	(219)	(432)	(329)	(523)	(260)	(588)	(323)	(585)
West Existing Resources	4,200	4,021	3,765	3,585	3,633	3,439	3,718	3,418	3,702	3,414
Load	3,166	3,236	3,355	3,400	3,459	3,504	3,546	3,588	3,653	3,674
Sale	490	290	258	258	258	158	108	108	108	108
West Obligation	3,656	3,526	3,613	3,658	3,717	3,662	3,654	3,696	3,761	3,782
Planning Reserves (12%)	283	320	404	405	419	413	412	413	419	420
Non-owned reserves	7	7	7	7	7	7	7	7	7	7
West Reserves	290	327	410	412	425	419	418	419	426	426
West Obligation + Reserves	3,945	3,853	4,024	4,070	4,142	4,081	4,072	4,115	4,186	4,208
West Position	255	168	(259)	(485)	(510)	(642)	(354)	(698)	(485)	(794)
West Reserve Margin	19%	17%	5%	(1%)	(2%)	(6%)	2%	(7%)	(1%)	(9%)
System										
Total Resources	12,975	12,653	11,933	11,868	11,514	11,523	11,554	11,582	11,600	11,574
Obligation	11,176	11,319	11,902	12,280	12,308	12,477	12,694	12,816	13,048	13,245
Reserves	1,101	1,159	1,296	1,349	1,395	1,416	1,444	1,455	1,481	1,503
Obligation + Reserves	12,277	12,478	13,197	13,629	13,703	13,893	14,138	14,271	14,529	14,748
System Position	698	175	(1,264)	(1,761)	(2,189)	(2,370)	(2,584)	(2,689)	(2,929)	(3,174)
Reserve Margin	18%	14%	1%	(2%)	(6%)	(7%)	(8%)	(9%)	(10%)	(12%)

too high
 116 MW
 16 + 16 ZMW

Table 3.10 – 2010 Business Plan Capacity Balance Less 2008 IRP Capacity Balance, Megawatts

Calendar Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
East										
Thermal	(9)	(15)	(57)	(55)	(67)	(56)	(27)	(29)	196	195
Hydroelectric	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Class 1 DSM	63	28	3	(7)	(17)	(27)	(37)	(47)	(57)	(57)
Renewable	-	-	-	-	-	-	-	-	-	-
Purchase	13	113	363	263	(37)	(37)	(37)	(37)	(37)	(37)
Qualifying Facilities	1	1	1	1	1	1	1	1	1	1
Interruptible	90	90	90	90	90	90	90	90	90	90
Transfers	48	136	(204)	(8)	100	34	(244)	324	(91)	323
East Existing Resources	202	349	193	280	67	1	(258)	299	99	511
Load	(196)	(114)	(112)	(66)	67	41	(8)	(30)	(68)	(47)
Sale	-	-	250	300	-	-	-	-	-	-
East Obligation	(196)	(114)	138	234	67	41	(8)	(30)	(68)	(47)
Planning Reserves (12%)	(43)	(41)	(38)	(13)	4	2	(3)	(4)	(8)	(5)
Non-owned reserves	-	-	-	-	-	-	-	-	-	-
East Reserves	(43)	(41)	(38)	(13)	4	2	(3)	(4)	(8)	(5)
East Obligation + Reserves	(239)	(155)	100	221	71	43	(11)	(34)	(76)	(52)
East Position	442	505	93	60	(4)	(41)	(247)	334	174	563
East Reserve Margin	6%	6%	1%	1%	0%	(0%)	(3%)	4%	2%	6%
West										
Thermal	(5)	(14)	(25)	(37)	(37)	(37)	(25)	(13)	(5)	7
Hydroelectric	(89)	(81)	(3)	(33)	(70)	(176)	(168)	(167)	(168)	(174)
Class 1 DSM	-	-	-	-	-	-	-	-	-	-
Renewable	(19)	(19)	(19)	(19)	(19)	(19)	(19)	(19)	(19)	(19)
Purchase	94	103	132	137	115	110	114	144	130	156
Qualifying Facilities	24	18	15	15	15	15	15	15	15	15
Transfers	(47)	(136)	203	10	(101)	(34)	244	(325)	92	(325)
West Existing Resources	(42)	(129)	303	73	(97)	(141)	161	(365)	45	(340)
Load	(256)	(254)	(232)	(238)	(263)	(265)	(278)	(305)	(325)	(313)
Sale	-	-	-	-	-	-	-	-	-	-
West Obligation	(256)	(254)	(232)	(238)	(263)	(265)	(278)	(305)	(325)	(313)
Planning Reserves (12%)	(42)	(43)	(44)	(45)	(45)	(45)	(47)	(54)	(55)	(56)
Non-owned reserves	-	-	-	-	-	-	-	-	-	-
West Reserves	(42)	(43)	(44)	(45)	(45)	(45)	(47)	(54)	(55)	(56)
West Obligation + Reserves	(298)	(297)	(276)	(283)	(308)	(310)	(325)	(359)	(380)	(369)
West Position	256	168	579	356	212	169	486	(6)	425	29
West Reserve Margin	7%	5%	15%	8%	4%	3%	12%	(2%)	9%	(1%)
System										
Total Resources	160	220	496	353	(30)	(139)	(97)	(66)	144	171
Obligation	(452)	(368)	(94)	(4)	(196)	(224)	(286)	(335)	(393)	(360)
Reserves	(85)	(84)	(82)	(58)	(42)	(43)	(50)	(58)	(62)	(61)
Obligation + Reserves	(537)	(452)	(176)	(62)	(238)	(267)	(336)	(393)	(455)	(421)
System Position	698	673	672	415	208	128	239	327	599	592
Reserve Margin	6%	6%	6%	3%	1%	1%	1%	2%	4%	4%

Referencing Table 3.10, the significant differences in line item amounts reflect the changes to existing and firm planned resources documented above, as well as the following additional changes.

East Changes

- Thermal – The large increase in 2018 is attributable to a change in the assumed life of the Gadsby gas plants (Units 1-3). The plant life was extended past the planning period rather than ending in 2017. The annual decreases in thermal capacity reflect the 2010 business plan's modified coal and gas plant turbine upgrade schedule.
- Purchases – In addition to new front office transaction contracts, the modeling of the Southeast Idaho exchange contract with the Bonneville Power Administration was updated with new non-owned resource information for the control area, thereby lowering capacity.
- Interruptible contracts – The positive change reflects the inclusion of the operating reserve component of the Monsanto interruptible load contract (90 MW) in addition to the economic curtailment portion previously modeled.
- Market sales – Changes for years 2012 and 2013 are due to the recent front office transaction contract additions.

West Changes

- Thermal – The capacity decreases reflect project deferrals associated with the 2010 business plan's coal plant turbine upgrade schedule.
- Hydro – In addition to the removal of the Swift 1 turbine upgrade project, the decrease in hydro capacity reflects a change to how the Grant PUD Meaningful Priority contract right (107 MW on an average annual basis) is handled. This contract includes an annual physical power election option. Since the Company performs analysis every year to determine whether to elect the physical power, the decision was made to remove it from forward years. The Company still receives the Reasonable Portion Revenues spread whether or not the Meaningful Priority is elected.
- Renewable Resource and Qualifying Facilities – The Oregon Wind Farm I / II were reclassified from the Renewables Resource category to the Qualifying Facility category, explaining the 19 MW capacity decrease shown.
- Purchases – The increase is due to the new load forecast for the Southeast Idaho exchange contract, which reflects the return of energy from the Bonneville Power Administration.

PAC-E-10-07/Rocky Mountain Power
August 27, 2010
Monsanto Data Request 10.1

Monsanto Data Request 10.1

Questions Directed to Steven R. McDougal

Reference page 10.13: Please identify how much of the Idaho monthly "Metered Loads (CP)" are for Monsanto. Please provide all supporting workpapers detailing the Monsanto amount including a narrative description of how that amount was derived.

Response to Monsanto Data Request 10.1

Monsanto's contribution to coincident peak is not identifiable because "Metered Loads (CP)" are developed from the hourly loads and the hourly load is developed at the jurisdictional level.

Recordholder: Pete Eelkema
Sponsor: Pete Eelkema

PAC-E-10-07/Rocky Mountain Power
June 30, 2010
IIPA Data Request 8

IIPA Data Request 8

On Exhibit 2, page 10.13 there is a different coincident peak value for Idaho (406) for January 2010 than the value used on Exhibit 49 pages 6 and 7. Please provide all data, equations, and assumptions used to develop the figure on both Exhibit 2 and Exhibit 49. Please supply this data in Excel format. Explain how, if at all, the jurisdictional data from Exhibit 49 (pages 6 and 7) flows through or is incorporated in Exhibit 2 Tab 10.

Response to IIPA Data Request 8

Idaho jurisdiction loads on Exhibit 2, page 10.13 were developed from adjusted state jurisdictional loads as explained in Company witness Peter C. Eelkema's testimony. Class loads on Exhibit 49, Tab 5, pages 6 and 7 were developed from both sample and direct census Load Research data. Therefore, because they are from different data sources and used for different purposes, class loads do not directly flow through to the Idaho state jurisdiction load.

Please refer to Attachment IIPA 8a for the support for class loads and Attachment IIPA 1f for support for page 10.13 of Exhibit 2.

Recordholder: C. Craig Paice
Sponsor: C. Craig Paice

PAC-E-10-07/Rocky Mountain Power
August 9, 2010
Monsanto Data Request 7.2

Monsanto Data Request 7.2

Referring to tab 5, page 6 (coincident peaks at input) of Craig Paice's exhibit, please provide a detailed narrative explanation and workpapers for the derivation of the CP demands for each class where an adjustment was made on page 10.13 of Steve McDougal's exhibit.

Response to Monsanto Data Request 7.2

The Company's response to IIPA Data Request 8 explains that customer class loads shown in Exhibit 49, Tab 5, page 6 and Idaho jurisdiction loads in Exhibit 2, page 10.13 are developed from different data sources and used for different purposes. Also, please refer to the Company's response to Monsanto Data Request 7.3.

Please refer to Attachment IIPA 8a for support for customer class loads and Attachment IIPA 1(f) for support for Idaho jurisdiction loads.

Recordholder: C. Craig Paice
Sponsor: C. Craig Paice

PAC-E-10-07/Rocky Mountain Power
August 9, 2010
Monsanto Data Request 7.3

Monsanto Data Request 7.3

Please provide a detailed reconciliation of the jurisdictional CP's on page 10.13 of Steve McDougal's testimony and the sum of the class CP loads (noted as State of Idaho) on tab 5, page 6 of Craig Paice's exhibit.

Response to Monsanto Data Request 7.3

The Jurisdictional coincident peaks on page 10.13 of Steve McDougal's testimony are for the test period ending December 31, 2010. These show the projected monthly system peaks for 2010.

The sum of the class CP loads (noted as State of Idaho) on tab 5, page 6 of Craig Paice's exhibit are based on 2009 load research data, ratioed up or down to reflect test year 2010 monthly energy levels. This is true for all schedules except Contract 1 and Schedule 10 customers. Both the Contract 1 and Schedule 10 customer estimates have been normalized over a period of years, based on the historical load research data, before adjustment to test year 2010 monthly energy levels. The "Month" and "Peak Date" and "Peak Time" headings at the top of the workpaper are for calendar year 2009.

Recordholder: Brian Dickman / C. Craig Paice
Sponsor: Steve McDougal / C. Craig Paice

PAC-E-10-07/Rocky Mountain Power
August 27, 2010
Monsanto Data Request 10.4

Monsanto Data Request 10.4

Questions Directed to Steven R. McDougal

Reference page 10.13. Why are the monthly coincident peak dates and times so different from the monthly coincident peak dates and times shown in Exhibit No. 49, Tab 5, page 6? For example, the JAM study shows a January 2010 CP on the 25th at 19:00, while the Exhibit 48 shows a January 2010 CP on the 27 at 9:00. Please explain the differences for each month.

Response to Monsanto Data Request 10.4

Please refer to the Company's response to Monsanto Data Request 7.3.

Recordholder: Steve McDougal / Craig Paice
Sponsor: Steve McDougal / Craig Paice

[CONFIDENTIAL INFORMATION HAS BEEN REDACTED FROM THIS VERSION]

**ELECTRIC SERVICE AGREEMENT
BETWEEN
PACIFICORP
AND
MONSANTO COMPANY**

RECEIVED
2007 NOV -6 AM 10:14
IDAHO PUBLIC
UTILITIES COMMISSION

THIS ELECTRIC SERVICE AGREEMENT ("Agreement"), dated as of November 5, 2007, is by and between PacifiCorp, an Oregon corporation that provides electric service in the State of Idaho (hereinafter referred to as "PacifiCorp"), and Monsanto Company, a Delaware corporation that owns and operates an elemental phosphorus plant at a site near Soda Springs City in Caribou County, Idaho (hereinafter referred to as "Monsanto"). PacifiCorp and Monsanto are also referred to herein individually as a "Party" and jointly as "Parties."

WITNESSETH:

WHEREAS, PacifiCorp is currently the provider of retail electric energy and power to Monsanto's elemental phosphorous production facilities located at Soda Springs, Idaho (the "Plant"), and

WHEREAS, PacifiCorp and Monsanto have agreed that their Agreement dated effective May 18th, 2006 ("2007 Agreement") shall remain in full force and effect through December 31, 2007 and shall be replaced and superseded by this Agreement dated November 5, 2007 ("2008 Agreement") effective January 1, 2008,, and

WHEREAS, Monsanto desires to purchase electric power and electric energy requirements for the Plant under this Agreement, and

WHEREAS, PacifiCorp desires to be the exclusive provider of all electric power and energy to Monsanto's Plant, and

NOW, THEREFORE, the Parties agree as follows:

Section 1: Definitions

As used in this Agreement, the following terms have the meanings specified. Definitions relating to Operating Reserves and System Integrity and Economic Curtailment are contained in Exhibits A and B, and are incorporated in this Agreement by reference.

1.1 Billing Period means the period of approximately thirty (30) days intervening between regular successive meter reading dates.

1.2 Day means calendar day, Pacific Prevailing Time.

1.3 Demand means the rate in kilowatts at which electric energy is delivered by PacifiCorp to Monsanto averaged over a fifteen (15) minute period of time.

1.4 Electric Service Regulations means PacifiCorp's currently effective electric service rules and regulations, on file with and approved by the Idaho Public Utilities Commission ("Commission"), as they may be amended or superseded from time to time with the approval of the Commission.

1.5 Firm Power and Energy means electric power expressed in kilowatts and associated energy expressed in kilowatt-hours intended to have assured availability to Monsanto to meet that portion of Monsanto's load requirements specified in this paragraph. In this Agreement, Firm Power and Energy shall be the first 9,000 kW of Measured Demand and associated energy in any Billing Period as measured at the Point of Delivery. Firm Energy during any Billing Period shall be the amount of energy, in kilowatt-hours, delivered to Monsanto equal to the number of hours in the Billing Period multiplied by the Firm Power.

1.6 Interruptible Power and Energy means electric power expressed in kilowatts and associated energy expressed in kilowatt-hours made available to Monsanto to meet the portion of Monsanto's load requirements subject to interruption of delivery at PacifiCorp's option as set forth in Exhibits A and B of this Agreement. Interruptible Power shall be the Measured Demand in any Billing Period in excess of the Firm Power. Interruptible Energy delivered to Monsanto during any Billing Period shall be the total energy in kilowatt-hours, in that Billing Period, less the Firm Energy, and less any Replacement Energy.

1.7 Measured Demand means the Demand in kilowatts supplied by PacifiCorp as shown by or computed from the readings of PacifiCorp's power meter(s) representing Monsanto's greatest use during the Billing Period.

1.8 Monsanto Electrical Facilities means all facilities and equipment within Monsanto's 138 kV substation at its Plant except for PacifiCorp's metering equipment, under-frequency relays, capacitors and any other equipment owned by PacifiCorp and installed in Monsanto's substation under the terms and conditions of this Agreement or any other agreement.

1.9 Point of Delivery for all power and energy delivered to Monsanto means the termination of PacifiCorp's two 138 kV transmission lines at Monsanto's substation located approximately eight miles from PacifiCorp's Soda (Idaho) hydroelectric station in Caribou County, Idaho, or such other point(s) of metering as PacifiCorp and Monsanto shall agree.

1.10 Prudent Electrical Practices means those practices, methods and equipment, as changed from time to time, that are commonly used in prudent electrical engineering and operations to operate electric equipment lawfully and with safety, dependability, efficiency and economy and that are in accordance with the IEEE Standards, the National Electrical Safety Code or the National Electric Code or any other applicable government code in effect during the term of this Agreement.

1.11 Replacement Energy Charge means the charge for Replacement Energy calculated in accordance with Section 4.1.3 of this Agreement.

1.12 Retail Customer means a PacifiCorp customer who purchases electric power and energy for its own consumption (i.e., not for resale).

1.13 Termination Date means hour ending 2400 on December 31, of the year established in paragraph 2.1.

1.14 Total Contract Demand means the specified Demand in kilowatts that Monsanto contracts with PacifiCorp to supply and that PacifiCorp agrees to have available for delivery to Monsanto. Monsanto may require the delivery of such amounts of Firm and Interruptible Power as Monsanto may require to meet Monsanto's load requirements up to, but not in excess of, the applicable Total Contract Demand, which

shall be 215,000 kW unless otherwise agreed in writing in accordance with the terms of this Agreement.

1.15 WECC means the Western Electricity Coordinating Council or a successor organization which assumes essentially the same functions as the Western Electricity Coordinating Council.

Section 2: Term; Reopeners

2.1 Term. The initial term of this Agreement shall be for a period of three (3) years commencing on January 1, 2008 and ending at 2400 hours on December 31, 2010 (the "Initial Term"). This Agreement shall automatically renew for successive one (1) year terms unless and until either party gives not less than 180 days written notice of termination. Such notice may be given at any time to terminate the Agreement at the end of the Initial Term or the end of any annual renewal year. After the Termination Date PacifiCorp shall continue to provide any electric service to Monsanto as specified in Idaho Electric Service Schedule No. 400 or its successor then in effect until such time as the Commission establishes or approves other terms and conditions and prices.

2.2 Reopeners and Price Adjustments. The charges specified in Section 4.1 of this Agreement shall be adjusted so that the charges equal the Commission-approved rates applicable to Monsanto, including, but not limited to, customer charges, demand charges, energy charges, surcharges, and credits, as specified in Idaho Electric Service Schedule No. 400 or its successor. Adjustments to the charges in Section 4.1 of this Agreement shall become effective on the effective date of any adjustment to Electric Service Schedule No. 400 resulting from any general rate case or other filing by PacifiCorp. Provided, however, that no adjustment to Electric Service Schedule No. 400 shall go into effect prior to January 1, 2011.

2.2.1 This Agreement may be reopened and modified by the Commission, upon application of either PacifiCorp or Monsanto, in the following events: (i) direct access to wholesale electricity markets is implemented in the state of Idaho and available to Monsanto; or (ii) the WECC amends the quantity or requirements of either the contingency reserve or frequency response reserve component of Operating

Reserves or otherwise modifies Operating Reserves requirements in a manner that materially affects the availability or valuation of Operating Reserves under this Agreement.

2.2.2 PacifiCorp may apply to the Commission for a modification of this Agreement if PacifiCorp demonstrates that (i) Monsanto has shut down one or more of its furnaces for economic reasons for a period of 9 months or longer, excluding shut-downs for maintenance, repair or capital improvements, and (ii) PacifiCorp is materially financially harmed by reason of such reduction in furnace load, taking into account the price that could be obtained by PacifiCorp in a market sale of the energy available from the reduced load, among other things. PacifiCorp shall bear the burden of satisfying these conditions. The Commission shall determine whether these conditions have been satisfied and whether and in what respects this Agreement may be modified to address the change in Monsanto's furnace operations and the financial harm to PacifiCorp.

Should Monsanto reduce its furnace operations from the existing 3-furnace level by one furnace or more for a period of 60 continuous days or more, Monsanto agrees to provide PacifiCorp not less than 60 days written notice before resuming the operation of such furnace or furnaces.

Section 3: Purchase and Sale of Power

3.1 Scope of Deliveries. PacifiCorp shall deliver such amounts of power and energy to the Point of Delivery as Monsanto requires to meet its load requirements up to, but not in excess of, Total Contract Demand, subject to the provisions of Exhibits A and B. Subject to the interruption and curtailment provisions of Exhibits A and B.. PacifiCorp shall use its reasonable best efforts to supply Monsanto's Interruptible Power and Energy requirements.

3.2 Delivery Voltage. PacifiCorp shall deliver power and energy at the Point of Delivery in the form of three-phase, alternating current at a nominal frequency of 60 cycles per second, and at a nominal voltage of 138,000 volts, in accordance with Prudent Electrical Practices. Except during temporary emergency conditions, PacifiCorp shall maintain voltage within the limits of 5 percent above and 5 percent below a normal operating voltage, such normal voltage to be established by PacifiCorp

from time to time upon reasonable notice to Monsanto, between the limits of 120,000 volts and 138,000 volts. PacifiCorp reserves the right to modify the voltage standards in this Section to conform to changes in applicable ANSI standards.

3.3 Reactive Requirements. Monsanto shall control and limit the flow of reactive power between PacifiCorp's and Monsanto's system so as to maintain a Power Factor in accordance with Section 4.1.4.

3.4 Phase Balance. Monsanto shall balance its loads among phases to the extent practicable. If the difference between maximum and minimum phase loads regularly or frequently exceeds 10 percent, based upon a defined place of measurement, PacifiCorp may require that Measured Demands be determined on the basis of three times the load in the maximum phase.

3.5 Wave Form. In the design, selection, and operation of equipment using electric power, Monsanto shall observe due precautions to avoid distortion of wave form that, reacting through the system of PacifiCorp, may result in interference to operation of telephone systems or in other injurious effects to PacifiCorp's electrical system or other Retail Customers. If such adverse effects result at any time from distortion of wave form by causes originating in the Monsanto Electrical Facilities, Monsanto shall remediate such effects in accordance with Section 3.7 of this Agreement.

3.6 Cooperation in Operation.

3.6.1 Monsanto shall endeavor to supply PacifiCorp in advance with information as to conditions affecting Monsanto's power load that may aid PacifiCorp in load dispatching and in planning PacifiCorp's power system operation, such as the probable times and durations of substantial daily load changes. Following an unexpected furnace outage, Monsanto shall notify PacifiCorp's dispatcher as quickly as possible of the expected duration of such outage. Such estimates or advance information shall not be binding on either Party.

3.6.2 PacifiCorp shall hold in reserve sufficient generating capacity to supply Monsanto's anticipated load requirements for a period not to exceed thirty (30) minutes beyond Monsanto's estimated time of load increase. If Monsanto's load requirements have not begun to increase within such thirty (30) minute period, PacifiCorp may sell or otherwise dispose of such reserve capacity as surplus energy

until such time as Monsanto is ready to increase load. However, if such a sale is made, Monsanto may not increase load until such sale can be terminated or PacifiCorp is able to obtain additional capacity through some other means. Such restriction to Monsanto's load shall not be accounted for as curtailment, but shall not extend more than one (1) hour beyond the time Monsanto is ready to increase load.

3.6.3 In order to administer the terms and conditions of this Agreement, PacifiCorp and Monsanto shall each designate from time to time in writing their respective representatives for the purpose of giving and receiving informal communications required under this Agreement.

3.6.4 PacifiCorp acknowledges that Monsanto's electric furnaces require shutdowns for maintenance and overhauling, and it is the intent of the Parties that such shutdowns and consequent reduction of power requirements be predetermined insofar as possible by agreement between the Parties. Except as otherwise provided in Exhibits B, Monsanto shall provide PacifiCorp with at least thirty (30) days written notice of all planned shutdowns of the furnaces.

3.7 Remediation. In the event Monsanto's operations fail to comply with technical requirements of this Agreement or the Electric Service Regulations, or adversely affect the operation of PacifiCorp's transmission or distribution system or other PacifiCorp retail customers, PacifiCorp will promptly give Monsanto written notice thereof. Within thirty (30) days after such notice a working team will be formed with members designated by each Party. The working team will then consult and meet as needed to identify and agree upon: (1) the nature and extent of the alleged problem or deficiency; (2) the cause and responsibility for the problem; (3) reasonable alternative solutions together with the costs and implementation time associated with each; and (4) a mutually acceptable remedial action plan. If the Parties fail to agree, either may petition the Commission to resolve any disputes, which determination shall be binding.

Any remedial action agreed upon by the Parties or determined by the Commission shall be promptly undertaken and pursued to completion. Should Monsanto fail to begin to take corrective action within thirty (30) days after the established start date, PacifiCorp may perform the necessary action and Monsanto shall reimburse PacifiCorp the reasonable costs therefor.

Section 4: Payment for Power and Energy

4.1 **Determination of Billing Amounts.**

4.1.1 The following charges apply each Billing Period to all Firm Power and Energy delivered to Monsanto under this Agreement:

Calendar Year 2007

Firm Energy Charge:	19.40 mills per kilowatt hours of Firm Energy
Customer Charge:	\$1,000 per Billing Period
Firm Demand Charge:	\$10.00 per kW of Firm Power

Calendar Year 2008

Firm Energy Charge:	22.02 mills per kilowatt hours of Firm Energy
Customer Charge:	\$1,135 per Billing Period
Firm Demand Charge:	\$11.35 per kW of Firm Power

Calendar Year 2009

Firm Energy Charge:	22.68 mills per kilowatt hours of Firm Energy
Customer Charge:	\$1,169 per Billing Period
Firm Demand Charge:	\$11.69 per kW of Firm Power

Calendar Year 2010

Firm Energy Charge:	23.81 mills per kilowatt hours of Firm Energy
Customer Charge:	\$1,227 per Billing Period
Firm Demand Charge:	\$12.27 per kW of Firm Power

4.1.2 The following charges apply each Billing Period to all Interruptible Power and Energy delivered to Monsanto under this Agreement:

Calendar Year 2007

Interruptible Energy Charge:	19.40 mills per kilowatt hours of Interruptible Energy
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Interruptible Demand Charge: Firm Demand Charge minus Interruptible Credit.
Interruptible Credit: [REDACTED] per kW of Interruptible Power

Calendar Year 2008

Interruptible Energy Charge: 22.02 mills per kilowatt hours of Interruptible Energy
Interruptible Demand Charge: Firm Demand Charge minus Interruptible Credit.
Interruptible Credit: [REDACTED] per kW of Interruptible Power

Calendar Year 2009

Interruptible Energy Charge: 22.68 mills per kilowatt hours of Interruptible Energy
Interruptible Demand Charge: Firm Demand Charge minus Interruptible Credit.
Interruptible Credit: [REDACTED] per kW of Interruptible Power

Calendar Year 2010

Interruptible Energy Charge: 23.81 mills per kilowatt hours of Interruptible Energy
Interruptible Demand Charge: Firm Demand Charge minus Interruptible Credit.
Interruptible Credit: [REDACTED] per kW of Interruptible Power

4.1.3 Replacement Energy Price: The following Replacement Energy Charges apply for each Economic Curtailment Hour in the Billing Period:

Adjusted Index Price multiplied by Replacement Energy.

Monthly Replacement Energy Charges shall equal the sum of hourly Replacement Energy Charges for the Billing Period. An example showing the calculation of the Adjusted Index Price for certain Economic Curtailment Hours under certain stated assumptions is set forth in Exhibit B.

4.1.4 Power Factor: The prices set forth in this Agreement are predicated upon the electric power supplied to Monsanto being taken at a nominal power factor of 0.95 or higher at all times, corresponding to a kilovar demand of 33 kilovars per 100 kW of Demand. Monsanto shall pay PacifiCorp \$0.75 per month for each kilovar of Average Kilovar Demand in excess of 33 kilovars per 100 kW of Measured Demand. Average Kilovar Demand shall be the average of the Daily Kilovar Demands for that Billing

Period. Daily Kilovar Demand means, as to any day, the kilovar demand measured during the 15-minute interval corresponding to the 15-minute interval during which Monsanto's Measured Demand occurs for the Billing Period which includes that day.

4.1.5 Power and energy delivered under this Agreement shall be recorded by appropriate metering devices as installed and described in Section 7. All billing statements for power and energy shall show the amount due for the type and quantity of power and energy purchased and charged in accordance with this Agreement. Total charges for the Billing Period shall be the sum of the charges for Firm Power and Energy, Interruptible Power and Energy and Replacement Energy, and charges for power factor pursuant to section 4.1.4. The billing statement shall also include details on all interruptions and curtailments for the Billing Period, including the following information:

- Type of interruption or curtailment
- Date
- Beginning and end time
- Duration
- Megawatts interrupted or curtailed by Monsanto
- Year-to-date total hours of each type of interruption or curtailment
- Replacement Energy purchased, Index Price and Adjusted Index Price

4.1.6 All payments to PacifiCorp under this Agreement shall be delivered by wire transfer as follows within thirty (30) days of the date of the invoice.

4.2 Billing Disputes. In the event that all or a portion of Monsanto's bill, or of any other claim or adjustment arising hereunder, is disputed, Monsanto shall pay the undisputed portion of the bill when due. At the time of the payment, Monsanto shall provide PacifiCorp with a written explanation of any disputed portion withheld ("Monsanto Notice of Billing Dispute"). Monsanto and PacifiCorp shall seek to make a determination on any disputed amount within sixty (60) days after issuance of Monsanto's Notice of Billing Dispute. If it is determined that the disputed portion is due PacifiCorp, Monsanto shall pay such to PacifiCorp within 15 days following such determination, together with interest from the date the bill was originally due at the rate then specified in the Electric Service Regulations or, if no rate is specified, the then

effective prime rate as established by the Morgan Guaranty Trust Bank of New York.

4.3 Deposits. If at any time either Party becomes aware of information regarding the other Party which it believes will substantially impair the other Party's ability to perform its obligations under this Agreement, such Party may request assurances of performance in writing from the other Party. If such assurances are not satisfactory to the requesting Party, after consultation with the other Party, the requesting Party may petition the Commission for appropriate protections including but not limited to a financial deposit, guarantee or letter of credit.

Section 5. Interruptible or Curtailment Options

Monsanto agrees to provide PacifiCorp with the following three interruptible or curtailment options in the amounts and in accordance with the terms and conditions of Exhibits A and B, Operating Reserves, and System Integrity and Economic Curtialment.

Section 6: Operations and Maintenance

6.1 Licenses. Monsanto hereby licenses to PacifiCorp for its use in connection with this Agreement and during the term of this Agreement, reasonably sufficient space in Monsanto's 138 kV substation to be used solely by PacifiCorp's metering equipment, static capacitors, not to exceed 30,000 kilovars, and associated facilities necessary or useful for PacifiCorp's provision of electric service to Monsanto, consistent with Prudent Electrical Practices, which license shall include reasonable rights of ingress and egress necessary for PacifiCorp's exercise of such license. In the exercise of this license and their rights, PacifiCorp shall, acting consistent with Prudent Electrical Practices, not interfere with the operations of Monsanto, shall schedule and coordinate its activities to avoid such interference and shall abide by Monsanto safety requirements.

6.2 Monsanto's 138 kV Substation. Monsanto shall be responsible for the operation and maintenance of its own facilities and equipment within Monsanto's 138 kV substation. Any equipment supplied by PacifiCorp shall remain the property of PacifiCorp and shall be maintained by PacifiCorp.

6.3 Operation of Monsanto Electrical Facilities.

6.3.1 In order to minimize the hazards to both PacifiCorp's and Monsanto's electrical systems, protective devices, circuit breakers and other Monsanto Electrical Facilities interconnected with PacifiCorp shall be operated by qualified Monsanto personnel only upon prior notification to, and receipt of permission from, PacifiCorp's SCC Region Dispatcher, except as provided in Paragraph 6.4 hereof. PacifiCorp's Dispatcher shall honor Monsanto's verbal requests for permission to operate Monsanto's protective devices and other Monsanto Electrical Facilities if such operation will not, in the opinion of PacifiCorp, impair such facilities and the reliable operation of PacifiCorp's electrical system or impair service to other Retail Customers of PacifiCorp; provided, that Monsanto may operate Monsanto's circuit breakers and other Monsanto Electrical Facilities without prior notification when Monsanto deems it necessary to protect persons or property at its Plant. In such event, Monsanto shall assume full and sole liability for injury or damages to persons or property at the Plant resulting from such operation of the circuit breakers or other Monsanto Electrical Facilities.

6.3.2 Monsanto currently provides potential and current transformers for use in connection with its own relaying and metering operations and PacifiCorp may use such transformers to any reasonable extent for PacifiCorp's metering, relaying, and communication requirements. Should Monsanto's potential and current transformers not meet PacifiCorp's requirements, Monsanto shall install any potential and current transformers required by PacifiCorp that are supplied by PacifiCorp.

6.3.3 PacifiCorp may operate the circuit breakers feeding Monsanto's interconnections to accommodate operation of PacifiCorp's and Monsanto's systems in a manner consistent with Prudent Electrical Practices; provided, that, except as provided in Paragraph 6.4, PacifiCorp shall notify Monsanto prior to operating such circuit breakers and shall keep Monsanto informed as to the operating status of such breakers.

6.3.4 Upon notice to Monsanto, PacifiCorp shall have reasonable access to Monsanto's substation control building(s). PacifiCorp personnel shall comply with all health, safety, and confidentiality rules, regulations and practices that Monsanto has provided to PacifiCorp.

6.3.5 Any failure of the Monsanto Electrical Facilities to operate adequately or properly shall not subject PacifiCorp to liability to Monsanto for any resulting loss or damages, or consequential damages of any kind, and Monsanto hereby releases PacifiCorp from any such liability.

6.4 Emergency Conditions. In the event of an emergency resulting in danger to persons or property, or potential danger to Monsanto's and/or PacifiCorp's systems, either PacifiCorp or Monsanto may open their respective circuit breakers without notice to the other Party. Whenever possible, the Parties shall notify the other Party prior to opening any such device, and notification shall be made as soon as possible after the device has been opened. When corrective actions have been completed, PacifiCorp shall restore service upon receiving notice and being satisfied that all necessary corrections have been made.

6.5 Relays. PacifiCorp may provide and install on Monsanto's relay panel under-frequency relays for the purpose of tripping Monsanto's power circuit breakers at such under-frequencies as may be specified by PacifiCorp in accordance with Prudent Electrical Practices.

6.6 Maintenance of Monsanto Electrical Facilities.

6.6.1 Monsanto shall be solely responsible for the operation and maintenance of the Monsanto Electrical Facilities. Monsanto shall inspect the Monsanto Electrical Facilities on a regularly scheduled basis and maintain them in safe operating condition.

6.6.2 PacifiCorp may, but is not required to, inspect the Monsanto Electrical Facilities during reasonable business hours and if, in the sole judgment of PacifiCorp, the Monsanto Electrical Facilities are not maintained in safe operating condition, thereby creating a hazard to persons or property or to the operation of PacifiCorp's system, PacifiCorp shall notify Monsanto promptly stating the required maintenance, replacement, or repair necessary to put the Monsanto Electrical Facilities in safe operating condition and specifying a reasonable period in which to make repair. Such inspections shall be performed by a person or persons that have been certified as safety trained, when required, and shall be in full compliance with all Monsanto rules and regulations. PacifiCorp will advise Monsanto of the names and titles of persons to

be admitted to the Monsanto site. Monsanto shall make such or equivalent repairs, replacement or maintenance within a reasonable time. In the event specified corrective procedures are not completed as required by the notice, PacifiCorp may, without further notice to Monsanto, discontinue service to Monsanto. In the event PacifiCorp discontinues service under this Section, PacifiCorp shall not be liable to Monsanto for any resulting loss or damage, including, but not limited to, lost profits or consequential damages of any kind, and Monsanto hereby releases PacifiCorp from any such liability. The provisions of this Section for the restoration of safe operating conditions are not subject to the remediation procedures of Section 3.7 of this Agreement.

Section 7: Metering

7.1 **PacifiCorp Obligations.** PacifiCorp shall provide, maintain, and test meters and metering equipment required for purposes of settlement hereunder, except any potential transformers and current transformers owned by Monsanto under Section 6.3.2. Meters, metering equipment and measurement shall be located at the Point of Delivery. Maintenance and periodic testing procedures with respect to meters and metering equipment shall be in accordance with generally accepted practices and the rules and standards established by the Commission. In addition to PacifiCorp's periodic tests, special tests shall be made if requested by Monsanto, which special tests shall be conducted at the expense of Monsanto. Monsanto shall furnish without charge reasonable incidental service, such as removal of tapes and charts, and shall communicate to PacifiCorp the meter readings necessary for operation. PacifiCorp's designated agents shall have access to such metering equipment at all reasonable times and shall be permitted to install and operate from time to time any testing equipment needed in connection with operations or settlements hereunder.

7.2 **Obligations.** If either Monsanto or PacifiCorp provides check-metering equipment, information with respect to registrations thereof will be provided.

7.3 **Meter Testing.** Representatives of PacifiCorp and Monsanto may be present at all routine or special tests of meters and metering equipment and upon occasions when any readings are taken for purpose of settlements.

7.4 Adjustments to Bills. If, at any test of any meter or metering equipment, an inaccuracy is disclosed exceeding two percent, the account for service theretofore supplied shall be adjusted to correct for such inaccuracy for a period of 90 days prior to the date of such test, or for the period during which such inaccuracy may be determined to have existed, whichever period is the shorter. Should any meter at any time fail to register, or should the registration be so erratic as to be meaningless, the quantities shall be determined from PacifiCorp's check meters or otherwise from the best available data.

7.5 Telecommunications Facilities. Upon PacifiCorp's request, Monsanto shall maintain a dedicated telephone line for meter reading purposes without charge to PacifiCorp. Monsanto shall pay all recurring charges related to line operation.

Section 8: Force Majeure

Neither PacifiCorp nor Monsanto shall be subject to any liability or damages for inability to provide or receive service to the extent that such failure shall be due to causes beyond the control of either PacifiCorp or Monsanto, including, but not limited to the following: (a) the operation and effect of any rules, regulations and orders promulgated by any commission, municipality, or governmental agency of the United States, or subdivision thereof (so long as the claiming Party has not applied for or assisted in the application for, and has opposed where and to the extent reasonable, such government action); (b) restraining order, injunction or similar decree of any court; (c) war; (d) explosion; (e) fire; (f) major breakage or failure of equipment; (g) flood; (h) earthquake; (i) act of God; (j) sabotage; or (k) strikes or boycotts (such events constituting a "Force Majeure"). Should a Force Majeure occur, the Party claiming Force Majeure shall have no liability for performance during the period of Force Majeure; provided, the Party claiming Force Majeure shall make every reasonable attempt to remedy the cause thereof as diligently and expeditiously as possible.

Section 9: Resale of Power

Electric power and energy delivered to and purchased by Monsanto pursuant to this Agreement may not be resold directly or indirectly by Monsanto to any person or entity.

Section 10: Liability

10.1 Liability. Each Party hereto (the "liability causing Party") shall defend, indemnify and hold harmless the other Party from and against any liability, damage, loss, costs and expenses, including but not limited to attorneys' fees, on account of injury to or death of persons including, but not limited to, Monsanto's employees and PacifiCorp's employees, or damage to property to the extent caused by or arising from the negligent acts or omissions of the liability causing Party.

10.2 Limitation of Liability. PacifiCorp shall endeavor at all times to provide steady and continuous service to Monsanto and shall make reasonable efforts to prevent irregularities and interruptions. PacifiCorp shall use its best efforts to notify Monsanto prior to or, in any event, immediately after an interruption or irregularity in order that Monsanto may attempt to mitigate its damages resulting therefrom. If due to causes beyond the control of PacifiCorp the supply of electricity is irregular, defective, or fails, PacifiCorp shall not be liable for any physical damages, economic losses, costs or damages resulting therefrom, including but not limited to special, indirect, incidental, consequential, punitive, or exemplary damages.

Section 11: Successors and Assigns

Neither PacifiCorp nor Monsanto shall assign this Agreement without the written consent of the other Party, which consent shall not be unreasonably withheld, except Monsanto may assign this Agreement without any such consent to the acquirer of the majority of the value of the Plant, provided that Monsanto as assignor shall continue to guarantee the performance by the assignee of the Monsanto obligations under this Agreement and further provided that PacifiCorp may assign this Agreement without any such consent to an entity that acquires the majority of the value of PacifiCorp's facilities, in which event PacifiCorp as assignor, shall guarantee the assignee's performance of

PacifiCorp's obligations. Any assignee or successor of Monsanto shall remain subject to such assignee's or successor's qualification as a customer under PacifiCorp's policies and Electric Service Regulations, and shall be bound by this Agreement, the Electric Service Regulations, and assume the obligations of Monsanto from the date of assignment. If assigned with such consent, this Agreement shall inure to the benefit and be binding upon the assignee, its agents and assigns; provided, that nothing herein shall prevent either Party from assigning this Agreement to its parent corporation or to its survivor in connection with a corporate reorganization, provided that such assignee is solvent and is able to meet its obligations hereunder.

Section 12: Jurisdiction of Regulatory Authorities

12.1 Regulatory Authorities. This Agreement is subject to the approval of the Commission.

12.2 Electric Service Regulations. The Electric Service Regulations are incorporated herein and made a part of the Agreement. Once the Commission approves the Agreement, the provisions of the Agreement shall take precedence over any conflicting provisions of PacifiCorp's Electrical Service Regulations. The Parties acknowledge and agree that they are familiar with such existing regulations and agree to abide by them and all amendments and changes thereto so approved by the Commission. In the event that the Commission or any other state, federal, or municipal authority having jurisdiction issues any rules, regulations, or orders that require PacifiCorp to alter or amend any of the terms and conditions of this Agreement or to terminate or curtail the delivery of power and energy to Monsanto, neither Party shall be liable for damages or losses of any kind whatsoever which the other Party may sustain as a result of such rule, regulation or order, including consequential damages.

Section 13: Remedies

Each Party may exercise any or all of its rights and remedies under this Agreement, the applicable Electric Service Regulations and under any applicable laws, rules and regulations. No provision of this Agreement or the Electric Service Regulations shall be deemed to have been waived unless such waiver is in writing

signed by the waiving Party. No failure by any Party to insist upon the strict performance of any provision of this Agreement, the Electric Service Regulations or to exercise any right or remedy consequent upon a breach thereof, shall constitute a waiver of any such breach of such provision or of any other provision. No waiver of any provision of this Agreement or the Electric Service Regulations shall be deemed a waiver of any other provision of this Agreement, the Electric Service Regulations or a waiver of such provision with respect to any subsequent breach, unless expressly provided in writing.

Section 14: Representatives and Notices

For the purposes of this Agreement, any notices required to be given hereunder shall be sent postage prepaid, by registered or certified mail, return receipt requested (or alternately by facsimile or any other method acceptable by both Parties) to the Parties at the respective addresses below and shall be deemed to have been given when received as evidenced by the appropriate receipt verifying delivery:

Representatives of Monsanto:

Plant Manager
Monsanto Company
P.O. Box 816
Soda Springs, Idaho 83276
Tel: (208) 546-4300, ex 201
Fax: (208) 547-3312

Vice President - Procurement
Monsanto Company
800 N. Lindbergh Blvd.
St. Louis, MO 63167
Tel: (314) 694-5756
Fax: (314) 694-2169

Representatives of PacifiCorp:

General Counsel
PacifiCorp dba Rocky Mountain Power
201 S, Main, Suite 2300
Salt Lake City, UT 84111
Fax 801-220-4804

With a copy to:

Director, Contract Administration
PacifiCorp
825 NE Multnomah, Suite 600
Portland, OR 97232
Fax: 503-813-6291

This notice requirement does not apply to regular and ordinary business and operation communications between the Parties' employees.

Section 15: Other Contracts

This Agreement constitutes and contains the entire Agreement of the Parties hereto and supersedes any and all prior negotiations, correspondence, understanding, and agreements between the Parties respecting the subject herein. This Agreement may not be modified, altered, or changed in any manner whatsoever except pursuant to the express provisions of this Agreement or by written agreement between the Parties hereto, subject to Commission approval.

Section 16: Governing Law; Jurisdiction; Venue

All provisions of this Agreement and the rights and obligations of the Parties shall in all cases be governed by and construed in accordance with the laws of the State of Idaho applicable to contracts executed in and to be wholly performed in Idaho by persons domiciled in the State of Idaho. Each Party hereto agrees that any suit, action or proceeding seeking to enforce any provision of, or based on any matter arising out of or in connection with, this Agreement, the Electric Service Regulations or the transactions contemplated hereby or thereby, may only be brought before the Commission, the Federal courts located within the State of Idaho, or state courts of the State of Idaho, and each Party hereby consents to the exclusive jurisdiction of such forums (and of the appellate courts therefrom) in any such suit, action or proceeding.

Section 17: Attorney's Fees

If any suit or action arising out of or related to this Agreement or the Electric Service Regulations is brought by any Party, the prevailing Party shall be entitled to recover the costs and fees (including, without limitation, reasonable attorneys' fees, the fees and costs of experts and consultants, copying, courier and telecommunication costs, and deposition costs and all other costs of discovery) incurred by such Party in such suit or action, including, without limitation, any post-trial or appellate proceeding, or in the collection or enforcement of any judgment or award entered or made in such suit or action.

Section 18: Cooperation

18.1 Whenever this Agreement requires that one Party comply with the rules, regulations, standards or requirements of the other Party, the Parties agree to cooperate with each other in requesting and providing such rules, regulations, standards or requirements on a timely basis.

18.2 In order to facilitate the economic management of PacifiCorp's wholesale power transactions necessary to carry out this Agreement, Monsanto agrees to inform PacifiCorp in a timely manner of planned furnace outages and of the expected return of furnaces to service.

Section 19: Exhibits

The following Exhibits are attached to and incorporated into this Agreement by reference:

- Exhibit A: Operating Reserves and System Integrity Interruption Options
- Exhibit B: Economic Curtailment Option

Section 20: Headings/References

The descriptive headings contained in this Agreement are included for reference only and shall not affect in any way the meaning or interpretation of this Agreement. References in this Agreement to Sections are to Sections of this Agreement unless otherwise stated or evident from the context.

Section 21: Construction of Agreement

This Agreement was drafted as a joint effort of both Parties and may not be construed against one Party over the other in the event of a controversy over its meaning.

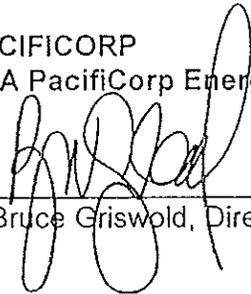
Section 22: Counterparts

This Agreement may be executed as one instrument signed by the Parties or may be executed in separate counterparts. Each separate counterpart is deemed an original.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their authorized officers or representatives as of the date first hereinabove written.

PACIFICORP
DBA PacifiCorp Energy

By



Bruce Griswold, Director

MONSANTO COMPANY

By _____

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**PACIFICORP
DBA PacifiCorp Energy**

By _____
Bruce Griswold, Director

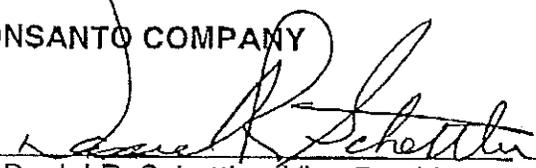
MONSANTO COMPANY
By 
Daniel R. Schettler, Vice President

EXHIBIT "A"

**OPERATING RESERVE
AND SYSTEM INTEGRITY INTERRUPTION OPTIONS**

This Operating Reserve and System Integrity Interruption Options, Exhibit A, is a part of the Electric Service Agreement between PacifiCorp and Monsanto Company, dated as of November 5, 2007, as amended from time to time (the "Agreement"), and is subject to the terms and conditions of the Agreement.

1. Definitions

Capitalized terms used in this Exhibit A shall have the meanings specified below or as contained in the Agreement:

1.1 Operating Reserve means a specific amount of electrical resources that all control areas must have available at all times to ensure the reliable operation of the interconnected electrical system pursuant to WECC guidelines and includes interruptible load as a non-spinning form of contingency Operating Reserves.

1.2 System Integrity means the ability of PacifiCorp's electric generation or transmission system to continue to operate at a high degree of reliability and at voltage levels consistent with Prudent Electrical Practices.

2. Operating Reserve Interruptions

PacifiCorp recognizes that each of Monsanto's electric phosphorus furnaces operate at different electrical rates. Upon telephone notification by PacifiCorp for Operating Reserves interruption, Monsanto will interrupt within six minutes its available furnace load as defined below, subject to the terms of this Exhibit A. At the time of the notification, Monsanto's operator shall inform PacifiCorp's dispatcher of the amount of service it will be interrupting.

2.1 Operating Reserve interruptions shall have priority over Economic Curtailment. If any of Monsanto's furnaces are not in operation, in order for PacifiCorp

to retain the ability to call for Operating Reserves, no furnace shall be considered available for Economic Curtailment during that time.

2.2 Curtailments for Operating Reserve will be as follows depending upon furnace availability at the time of notification:

2.2.1 If three furnaces are operating, Monsanto will curtail █ MW.

2.2.2 If two furnaces are operating and the third is unavailable due to maintenance or overhaul, Monsanto will curtail a minimum of █ MW.

2.2.3 If two furnaces are operating and the third is unavailable due to Economic Curtailment, Monsanto will curtail one furnace. The furnace so curtailed will be the largest operating furnace.

2.2.4 If only one Monsanto furnace is operating, Monsanto will curtail such furnace.

2.3 The interrupted service shall be restored at the earlier of: (1) notice from PacifiCorp's dispatcher, or, (2) the top of the second hour following the Operating Reserve interruption, provided that no interruption shall exceed one hundred and twenty (120) minutes. For example, if the Operating Reserve interruption begins at 1:45 am, the interrupted service shall be restored no later than 3:00 am. As a second example, if the Operating Reserve interruption begins at 1:00 am, the interrupted service shall be restored no later than 3:00 am. As a third example, if the operating reserve event begins at 1:10 am, the interrupted service shall be restored no later than 3:00 am.

3. System Integrity Interruptions

PacifiCorp may request System Integrity Interruptions of up to ¹⁶² █ MW if the System Integrity Interruption is voltage related and up to █ MW if the System Integrity Interruption is caused by a Double Contingency Event. A Double Contingency Event shall mean the forced outage of two or more PacifiCorp generating units totaling 500 MW or more of capacity. To qualify as a Double Contingency Event, two or more forced outages totaling 500 MW or more of capacity must occur within 48 hours of each other and must overlap for at least one hour. Once a Double Contingency Event begins, PacifiCorp may request System Integrity Interruptions at any time during the next 48 hours. After 48 hours after a Double Contingency Event begins, PacifiCorp may no

longer request System Integrity Interruptions in response to that specific Double Contingency Event. Monsanto will interrupt its available furnace load accordingly upon telephone notification. Under emergency conditions, such interruption may occur without advance notice to Monsanto. Otherwise, PacifiCorp shall give Monsanto not less than two (2) hours notice of the potential for interruption for System Integrity purposes and advance notice when such interruption will end.

3.1 System Integrity Interruptions shall be available to PacifiCorp all hours of every day, and have priority over any other interruption or curtailment option implemented at that time.

3.2 The interrupted service shall be restored when no longer needed to maintain System Integrity.

3.3 A System Integrity Interruption shall not relieve Monsanto of any hours under any other interruption or curtailment option. (For example, if a two-hour System Integrity Interruption occurs during a five-hour Economic Curtailment, Monsanto will be considered to have been economically curtailed for only three hours, but the Economic Curtailment shall end at the time stated in the Curtailment Notice.)

3.4 A System Integrity Interruption in response to a Double Contingency Event shall last no longer than two consecutive hours in any 48 hour period.

4. Purpose of Interruption

PacifiCorp may direct such interruptions at any time it concludes, in its sole discretion, that PacifiCorp needs to utilize the Operating Reserves or System Integrity Interruption, subject to the terms of the Agreement and this Exhibit A.

5. Number of Interruptions

5.1 The maximum number of Operating Reserve interruptions that PacifiCorp may direct shall be:

- (1) One hundred eighty-eight (188) hours per calendar year
- (2) Twenty-five (25) interruptions for each calendar month
- (3) Four (4) interruptions in any four (4) hour period
- (4) Up to two (2) hours per interruption

5.2 The maximum number of System Integrity interruptions that PacifiCorp may direct shall be twelve (12) hours per calendar year. Duration of any System Integrity interruption can be longer than one hour.

5.3 Any interruption pursuant to this Agreement including all exhibits shall count as a minimum of one (1) hour. Any Operating Reserve interruption that lasts longer than one (1) hour but shorter than two (2) hours shall count as two (2) hours. Any Operating Reserve interruption that lasts two (2) hours shall count as two (2) hours.

6. Operating Reserves Nonperformance.

6.1 If, for any reason other than as defined in Section 8 of this Exhibit A (Communication of Maintenance Scheduling), Monsanto fails to comply with a request from PacifiCorp to interrupt load for Operating Reserves as specified in this Exhibit A, PacifiCorp shall have the following remedies:

6.1.1 Monsanto shall pay PacifiCorp as damages the amount of \$150,000 for each occurrence, which the Parties agree is a reasonable estimate of the damages expected to be incurred by reason of such nonperformance.

6.1.2 PacifiCorp may request that Monsanto provide assurances in writing that Monsanto will in the future comply with requests to interrupt load for Operating Reserves as specified in this Exhibit A, including any actions Monsanto will take to remedy the cause of such failure to comply.

6.1.3 In the event of a second failure by Monsanto to interrupt load for Operating Reserves as specified in this Exhibit A, PacifiCorp may petition the Commission for appropriate relief.

6.2 If, for any reason PacifiCorp requires Monsanto to interrupt load for Operating Reserves under circumstances not permitted in this Exhibit A, and Monsanto complies with such request, Monsanto shall have the following remedies:

6.2.1 PacifiCorp shall pay Monsanto as damages the amount of \$150,000 for each occurrence, which the Parties agree is a reasonable estimate of the damages expected to be incurred by reason of such load interruption.

6.2.2 Monsanto may request that PacifiCorp provide assurances in writing that PacifiCorp will in the future comply with the requirements for interrupting load for Operating Reserves as specified in this Exhibit A, including any actions PacifiCorp will take to remedy the cause of such failure to comply.

6.2.3 In the event of a second failure by PacifiCorp to comply with the requirements for interrupting load for Operating Reserves as specified in this Exhibit A, Monsanto may petition the Commission for appropriate relief.

6.3 The remedies provided in this Section 6 for the specified failures to comply with Operating Reserves requirements of this Exhibit A are the sole and exclusive remedies for such nonperformance.

7. Maintenance of Dedicated Telephone Line

Monsanto and PacifiCorp shall maintain a dedicated telephone line at their own cost in their respective control rooms. This line shall be solely dedicated for communications between Monsanto furnace operators and PacifiCorp dispatchers. Each party shall have an authorized employee available at all times to immediately respond to telephone notices of interruption or curtailment of operations.

8. Communication of Maintenance Scheduling

8.1 PacifiCorp acknowledges that the electric phosphorus furnaces at Monsanto will be removed from service from time to time during the Term of this Agreement for maintenance and overhauls. As provided for in Section 8 of Exhibit B, Monsanto will submit to PacifiCorp expected maintenance schedules and delays, as well as inform PacifiCorp dispatchers by telephone with a follow-up fax prior to restoring electrical power to a furnace after such a delay.

8.2 If Monsanto has unavailable furnaces due to maintenance or overhaul, and an interruption is called for either Operating Reserve or System Integrity, Monsanto will not resume operation of the unavailable furnaces until the earlier of: 1) notice from

PacifiCorp dispatcher or, 2) sixty (60) minutes after the notification by Monsanto to resume service.

9. Communication

Notwithstanding the minimum notice requirements set forth in this Exhibit, the parties will use best efforts to provide each other with as much notice as possible of interruption or curtailment of operations.

PacifiCorp and Monsanto shall use an agreed-upon written communication script to use during the telephone notice from PacifiCorp's dispatcher requesting such interruption of electrical service for Operating Reserve.

The agreed-upon script may be updated from time to time by written mutual consent by both parties.

10. Contacts

Monsanto operator:

Plant: (direct line)

Fax: 208-547-1197

PacifiCorp dispatch (Real-time desk):

Phone: 503-813- 5374

Fax: 503-813- 5512

EXHIBIT "B"

Economic Curtailment Option

This Economic Curtailment Option, Exhibit B, is a part of the Electric Service Agreement between PacifiCorp and Monsanto Company, dated as of November 5, 2007, as amended from time to time (the "Agreement"), and is subject to the terms and conditions of the Agreement.

1. Definitions

Capitalized terms used in this Exhibit B shall have the meanings specified below or as contained in the Agreement:

1.1 Adjusted Index Price means the Index Price for a given Day times the applicable hourly shaping factor set forth in Exhibit B-1 for each Economic Curtailment Hour. The hourly scalars shall be reviewed annually and if substantial changes occur, the scalars may be revised and updated per mutual agreement.

1.2 Economic Curtailment means an interruption of electric service to Monsanto's Plant made by PacifiCorp in its sole discretion in accordance with this Exhibit B.

1.3 Economic Curtailment Capacity means the MW electric load available for Economic Curtailment under this Exhibit B.

1.4 Economic Curtailment Hours means the hours chosen by PacifiCorp for Economic Curtailment during each Day.

1.5 Economic Curtailment Notice means the notice of curtailment provided to Monsanto by PacifiCorp in accordance with Section 4 of this Exhibit B.

1.6 Economic Curtailment Response means Monsanto's response in accordance with Section 5 of this Exhibit B to an Economic Curtailment Notice.

1.7 Index Price means the price for a given Day as specified for the identified Dow Jones™ index. During those hours that more than MW of PacifiCorp merchant's firm transmission rights (North to South) on Path C go unutilized and are available, as

determined on an after-the-fact basis by comparing PacifiCorp's scheduled usage, as of the beginning of each Economic Curtailment Hour, against firm Path C rights available to PacifiCorp's merchant function for that hour, Monsanto will pay PacifiCorp based on the lower of the appropriate (on-peak or off-peak) Dow Jones™ Mid-Columbia or Palo Verde Index Price for firm power as reported at www.dowjones.com (or a successor site) each Monday through Sunday.

For those hours that less than █ MW of PacifiCorp merchant's firm Path C transmission rights (north to south) on Path C are available, as determined on an after-the-fact basis by comparing PacifiCorp's scheduled usage against firm Path C rights available to PacifiCorp's merchant function for that hour, Monsanto will pay PacifiCorp based on the appropriate (on-peak or off-peak) Dow Jones™ Palo Verde Index Price for firm power; provided, however, that the Palo Verde Index Price, rather than the lower of the Palo Verde or Mid-Columbia Index Price, shall be paid only to the extent such transmission rights are constrained on a scheduled basis for each Economic Curtailment Hour. For example, if during an hour for which Monsanto has elected to buy through █ MW, only 30 MW of such transmission rights are available, Monsanto will pay based on the lower of the Palo Verde or Mid-Columbia Index Price for 30 MWhs of the Replacement Energy delivered for that hour, and will pay based on the Palo Verde Index Price for the remaining Replacement Energy for that hour.

If separate on-peak and off-peak Dow Jones™ indices are not reported for any Day during the Term, the Dow Jones™ indices for the most recent preceding Day (i.e., Saturday for Sunday) shall be used to set the Index Price for the Day on which separate on-peak and off-peak Dow Jones™ indices are not reported. For reference, the Dow Jones description of the Dow Jones™ Mid-Columbia and Palo Verde indices is attached as Exhibit B-3.

If the "Dow Jones™ indices or any replacement of either the Mid-Columbia or Palo Verde index ceases to be reported during the Term, or ceases to be an accurate and reliable index for the types of transactions currently covered, the Parties shall mutually agree upon a substantially equivalent index that, after any appropriate or necessary adjustments, provides the most reasonable substitute for the index in

question. Neither PacifiCorp nor Monsanto shall unreasonably withhold, condition or delay agreement to such an index.

1.8 Path C means the particular high voltage transmission corridor comprised of the Borah-Ben Lomond 345 kV, Brady-Treasureton 230 kV, Goshen-Grace 161 kV and American Falls-Malad 138 kV lines, located in northern Utah and southern Idaho. In accordance with the WECC criteria for rating paths, its transfer capability is based on a simultaneous loss of both the Borah-Ben Lomond 345 kV and the Brady-Treasureton 230 kV lines, which share common right-of-way for approximately 50 miles. The amounts of Path C (North to South) firm and non-firm transfer capability that PacifiCorp's transmission function has available for sale is listed on PacifiCorp's OASIS web site at "<http://www.oasis.pacificorp.com>" under the path name of "W//PPW/PATHC-PACE//". The Parties acknowledge that the information supplied on PacifiCorp's OASIS web site may or may not be indicative of PacifiCorp merchant's actual Path C (North to South) firm right schedule at the beginning of any Economic Curtailment Hour, and PacifiCorp shall not be liable in any manner with respect to any curtailment or buy-through decisions of Monsanto hereunder based on such Path C information.

1.9 Replacement Energy means the energy for any Economic Curtailment Hour that Monsanto elects to buy through rather than physically curtailing its ■ MW electric phosphorous furnace load.

During such hours that Monsanto does not physically curtail its electric phosphorous furnace load, Replacement Energy shall be deemed to be ■ MWh per Economic Curtailment Hour. During Economic Curtailment Hours that notice is provided pursuant to Section 5 below that Monsanto intends to physically curtail electric phosphorous furnace load, Replacement Energy shall be deemed to equal ■ MWh per Economic Curtailment Hour less: (a) ■ MWh per Economic Curtailment Hour if furnace #9 is identified for furnace curtailment, or (b) ■ MWh per Economic Curtailment Hour if furnace #8 is identified for furnace curtailment, or (c) ■ MWh per Economic Curtailment Hour if furnace #7 is identified for furnace curtailment.

2. Amount of Economic Curtailment

2.1 Monsanto agrees to supply PacifiCorp █ MW of Economic Curtailment up to a maximum of 800 hours in calendar year 2007, 800 hours in calendar year 2008, 830 hours in calendar year 2009, and 850 hours in calendar year 2010, upon not less than two (2) hours of fax notice, confirmed by telephone notice.

2.2 If any of Monsanto's furnaces are not in operation, in order for PacifiCorp to retain the ability to call for Operating Reserves, no furnace shall be considered available for Economic Curtailment during that time.

3. Purpose of Curtailment

PacifiCorp may direct an Economic Curtailment at any time, subject to the terms of Exhibit A and this Exhibit B.

4. Curtailment of Monsanto

4.1 PacifiCorp may exercise its right to Economic Curtailment, upon not less than two (2) hours of fax notice from PacifiCorp's dispatcher to Monsanto's control operator at (208) 547-1197, with prompt confirmation by telephone notice through Monsanto's direct line, requesting curtailment of electric service for economic purposes and providing the amount and duration, start and end time. Such fax notice shall utilize the form of curtailment notice attached hereto as Exhibit B-2. If at the time of the telephone notice Monsanto has not received the fax notice, the notice of curtailment shall be deemed given by telephone. With such notice, PacifiCorp will provide to Monsanto information regarding PacifiCorp's estimate of what Dow Jones may publish for the Index Price, prior to any adjustments as provided for herein, for the day associated with such period of curtailment. Such information will be based on market information reasonably known by PacifiCorp's dispatchers at the time with respect to the Index Price, but PacifiCorp shall not be bound by such information and will not be liable in any manner for the accuracy of such information or any differences between such estimates and the actual Index Price.

4.2 If PacifiCorp has not received notice from Monsanto in accordance with Section 5 below in response to an Economic Curtailment Notice, PacifiCorp will use

reasonable efforts to contact Monsanto by telephone, not less than one hour prior to the time the designated Economic Curtailment is to commence; provided, however, that in no event shall failure by PacifiCorp to make such contact relieve Monsanto of its obligation to pay Replacement Energy Charges for the Economic Curtailment Hours designated in PacifiCorp's Economic Curtailment Notice. Further, if notwithstanding PacifiCorp's attempts to provide notice to Monsanto pursuant to Section 4.1 above, and through no fault of PacifiCorp, Monsanto does not receive an Economic Curtailment Notice, Monsanto shall nevertheless pay Replacement Energy Charges for the Economic Curtailment Hours designated in such notice.

4.3 Monsanto shall take action as needed to curtail the electrical supply to up to ■ MW of its electric phosphorus furnace load at the designated curtailment time. The curtailed service shall be restored at the end of the duration of the Economic Curtailment.

5. Buy-Through Replacement Energy

5.1 Monsanto shall have the option to buy-through Economic Curtailment by paying PacifiCorp for Replacement Energy costs at the Adjusted Index Price.

5.2 Monsanto may exercise its right to buy-through an Economic Curtailment, in whole or part, by fax notice to PacifiCorp's dispatcher at (503) 813-5512, with prompt confirmation by telephone notice at (503) 813-5374 (or alternatively, 503-813-5389), requesting such buy-through at any time up to one (1) hour prior to the time the designated Economic Curtailment is to commence. Regardless of whether Monsanto elects to buy through, it shall provide PacifiCorp an Economic Curtailment Response by fax and telephone to PacifiCorp's dispatcher, no later than one (1) hour prior to the time the designated Economic Curtailment is to commence, stating the amounts that Monsanto will curtail, the electric phosphorous furnace that Monsanto plans to curtail (if any), and the amount of Replacement Energy that Monsanto elects to buy through.

If Monsanto has curtailed load in accordance with an Economic Curtailment Notice, it may thereafter elect to buy-through a portion of the Economic Curtailment period by providing fax notice not less than one (1) hour prior to the hour it desires to commence the buy-through. Monsanto shall pay for Replacement Energy for any

amounts not curtailed pursuant to an Economic Curtailment Notice from PacifiCorp. If Monsanto curtails load in accordance with an Economic Curtailment Notice from PacifiCorp, but fails to provide an Economic Curtailment Response as required herein, Monsanto shall pay PacifiCorp an amount equivalent to what would be due for Replacement Energy as though it had elected to buy through the Curtailment Hours for the entire ■ MW, but only for those Curtailment Hours for which Monsanto had not provided an Economic Curtailment Response at least one hour in advance.

5.3 At all times, all furnaces shall remain subject to System Integrity interruption, and Monsanto shall not be obligated to pay for, nor entitled to receive, Replacement Energy during a period of System Integrity interruption, all of the foregoing in accordance with IPUC Order Nos. 29157 and 29206

5.4 All Economic Curtailment Notices and Economic Curtailment Responses to be provided under this Section 5 shall utilize the form of notice attached hereto as Exhibit B-2.

6. Economic Curtailment Nonperformance.

If Monsanto does not fully comply with an Economic Curtailment Notice in accordance with this Exhibit B, Monsanto shall pay for Replacement Energy for those Curtailment Hours of noncompliance as specified in Section 4.1.3 of the Agreement and this Exhibit B

7. Maintenance of Dedicated Telephone Line and Fax Facilities

7.1 Monsanto and PacifiCorp shall maintain a dedicated telephone line at their own cost in their respective control rooms. This line shall be solely dedicated for communications between Monsanto furnace operators and PacifiCorp dispatchers. Each party shall have an authorized employee available at all times to immediately respond to curtailment notices or curtailment of operations. Each party shall also maintain at their own cost fax facilities, with a telephone line dedicated for the fax facilities, necessary for transmitting and receiving fax notices as required herein. While PacifiCorp acknowledges that as of the date of this agreement Monsanto does not have in place a telephone line dedicated for such fax facilities, Monsanto shall with due

diligence obtain the installation of such a line and proper operation of the fax facilities as soon as possible. If such fax facilities cannot be made to function properly within three months, the parties will work in good faith to achieve an alternative means of notice.

7.2 The fax requirements under this agreement shall begin once the fax line to be installed by Monsanto is functioning properly.

8. Communication of Schedules

8.1 PacifiCorp acknowledges that the electric phosphorus furnaces at Monsanto will be removed from service from time to time during the term of this Agreement for maintenance and overhauls. Monsanto will submit to PacifiCorp on the first business day of the month or as soon thereafter as practicable, by fax, expected maintenance schedules and delays, if any, expected during the following calendar month, including scheduled time of curtailment, duration, and electrical load of corresponding furnace. Monsanto shall provide such schedules using the best information reasonably available, but it is understood that they will reflect only an estimate and, therefore, shall not be binding on Monsanto. Further, the failure to provide such scheduling information shall not preclude Monsanto from taking furnaces out of service for maintenance. Monsanto will also inform PacifiCorp by telephone or fax prior to restoring electrical power to a furnace after such a delay.

8.2 In order to enable Monsanto to anticipate possible curtailment, to plan furnace operations and make buy-through decisions in accordance herewith, PacifiCorp shall submit to Monsanto on the first day of each calendar month, or as soon thereafter as practicable, by fax, a schedule showing the estimated times, durations and total hours of economic curtailments, if any, expected during the following calendar month. PacifiCorp shall prepare such schedule using the best information reasonably available, but it is understood that it shall reflect only an estimate of expected conditions and, therefore, shall not be binding upon PacifiCorp. Further, the failure to provide such scheduling information shall not preclude PacifiCorp from implementing Economic Curtailment.

9. Reporting

Simultaneous with PacifiCorp's monthly invoice to Monsanto for power and energy purchased, PacifiCorp shall provide Monsanto with a report detailing all interruptions and curtailments during the previous month, including the following information:

- 1) Type of interruption or curtailment (system emergency or integrity, operating reserves, or Economic Curtailment)
- 2) Date
- 3) Beginning and end time
- 4) Duration
- 5) Megawatts interrupted or curtailed
- 6) Year-to-date total hours of each type of interruption or curtailment
- 7) Buy through charges, rate, source and energy purchased

10. Audit

Monsanto reserves the right to perform audits of records of PacifiCorp related to the Replacement Energy prices and volume charged to Monsanto hereunder, including records regarding constraints on Path C affecting such prices. PacifiCorp will allow Monsanto reasonable access to such records at mutually agreed upon times. Neither party shall be responsible for any expenses incurred by the other party associated with such audits.

HR0100	1.00	1.00	0.98	1.02	1.00	0.95	1.02	1.03	1.09	1.01	1.00	1.00
HR0200	0.96	0.98	0.96	0.94	0.92	0.90	0.98	0.96	0.94	0.95	0.95	0.97
HR0300	0.96	0.98	0.95	0.92	0.88	0.84	0.89	0.84	0.96	0.92	0.94	0.95
HR0400	0.97	0.96	0.96	0.90	0.86	0.85	0.85	0.80	0.86	0.88	0.94	0.93
HR0500	0.97	0.97	0.95	0.90	0.86	0.78	0.82	0.80	0.89	0.89	0.93	0.94
HR0600	1.01	1.01	0.98	0.89	0.86	0.77	0.77	0.81	0.89	0.92	1.01	0.94
HR0700	0.95	0.96	0.86	0.79	0.71	0.57	0.58	0.48	0.80	0.73	0.88	0.82
HR0800	0.98	1.00	0.92	0.83	0.73	0.63	0.58	0.50	0.72	0.74	0.92	0.91
HR0900	1.02	0.99	0.93	0.91	0.81	0.70	0.65	0.59	0.74	0.85	0.94	0.99
HR1000	1.00	0.98	0.95	0.97	0.88	0.76	0.77	0.68	0.85	0.89	0.98	0.96
HR1100	0.99	0.97	1.00	0.99	0.97	0.88	0.88	0.81	0.94	0.95	1.00	0.97
HR1200	0.99	0.97	0.99	1.03	1.00	0.97	0.97	0.93	0.99	1.01	1.01	0.99
HR1300	0.97	0.96	0.99	1.01	1.03	1.08	1.06	1.02	1.06	1.06	0.99	0.98
HR1400	0.95	0.96	0.99	1.01	1.08	1.13	1.12	1.09	1.10	1.05	0.99	0.96
HR1500	0.93	0.94	0.98	1.01	1.09	1.17	1.18	1.32	1.14	1.05	0.98	0.94
HR1600	0.92	0.93	0.97	1.02	1.10	1.20	1.22	1.33	1.14	1.07	0.97	0.95
HR1700	0.92	0.95	1.00	1.03	1.13	1.19	1.24	1.34	1.16	1.07	1.02	1.01
HR1800	1.02	1.03	1.06	1.05	1.15	1.25	1.22	1.34	1.13	1.08	1.06	1.06
HR1900	1.11	1.10	1.11	1.07	1.12	1.16	1.20	1.21	1.13	1.15	1.10	1.12
HR2000	1.12	1.11	1.13	1.09	1.09	1.13	1.16	1.16	1.08	1.13	1.11	1.18
HR2100	1.09	1.09	1.08	1.12	1.07	1.13	1.11	1.13	1.03	1.11	1.07	1.12
HR2200	1.04	1.06	1.05	1.08	1.04	1.05	1.06	1.07	1.01	1.06	0.99	1.06
HR2300	1.10	1.09	1.15	1.25	1.39	1.56	1.38	1.45	1.21	1.25	1.19	1.19
HR2400	1.05	1.01	1.07	1.17	1.22	1.34	1.31	1.31	1.16	1.19	1.04	1.08

Sunday

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
HR0100	0.83	0.88	0.86	0.86	0.73	0.66	0.83	0.75	0.72	0.84	0.87	0.84
HR0200	0.77	0.88	0.81	0.79	0.68	0.63	0.75	0.68	0.66	0.78	0.81	0.82
HR0300	0.75	0.87	0.78	0.71	0.66	0.59	0.67	0.64	0.64	0.74	0.77	0.79
HR0400	0.78	0.86	0.75	0.73	0.62	0.55	0.61	0.63	0.63	0.73	0.76	0.76
HR0500	0.78	0.87	0.76	0.71	0.61	0.54	0.55	0.57	0.62	0.71	0.76	0.76
HR0600	0.81	0.89	0.80	0.73	0.60	0.55	0.53	0.58	0.58	0.69	0.76	0.77

HR0700	0.92	0.95	0.84	0.82	0.69	0.57	0.56	0.61	0.59	0.76	0.87	0.86
HR0800	0.96	0.99	0.86	0.90	0.73	0.63	0.59	0.59	0.65	0.78	0.91	0.93
HR0900	1.00	1.00	0.90	0.94	0.77	0.70	0.63	0.68	0.73	0.83	0.96	0.98
HR1000	1.01	1.00	0.97	0.98	0.83	0.81	0.77	0.75	0.85	0.91	1.02	0.99
HR1100	1.02	1.01	1.00	1.01	0.89	0.92	0.97	0.87	0.97	0.94	1.03	1.00
HR1200	1.03	1.00	1.02	1.02	0.98	1.05	1.06	0.96	1.05	1.03	1.06	0.97
HR1300	1.02	0.99	1.00	1.08	1.03	1.20	1.21	1.10	1.12	1.05	1.06	0.97
HR1400	1.01	0.97	1.02	1.09	1.15	1.25	1.26	1.24	1.27	1.11	1.05	0.96
HR1500	0.99	0.98	1.02	1.10	1.32	1.29	1.33	1.42	1.34	1.15	1.06	0.95
HR1600	1.01	1.00	1.04	1.09	1.55	1.34	1.39	1.45	1.37	1.17	1.04	0.96
HR1700	1.10	1.01	1.03	1.11	1.70	1.36	1.40	1.44	1.39	1.18	1.08	1.09
HR1800	1.17	1.07	1.20	1.19	1.30	1.39	1.42	1.42	1.42	1.24	1.20	1.24
HR1900	1.25	1.18	1.44	1.22	1.54	1.42	1.41	1.47	1.41	1.36	1.26	1.31
HR2000	1.26	1.22	1.30	1.25	1.26	1.44	1.37	1.41	1.38	1.30	1.27	1.34
HR2100	1.24	1.20	1.29	1.28	1.25	1.45	1.29	1.35	1.31	1.30	1.26	1.33
HR2200	1.19	1.16	1.20	1.25	1.22	1.37	1.25	1.30	1.26	1.25	1.15	1.24
HR2300	1.08	1.05	1.09	1.13	1.00	1.20	1.11	1.10	1.06	1.14	1.04	1.15
HR2400	1.03	0.99	1.01	1.01	0.90	1.08	1.02	0.98	0.98	1.01	0.94	1.02

**Exhibit B-2
Economic Curtailment Notice and Response**

PACIFICORP NOTICE:

To: Monsanto Fax 208-547-1197
Voice: Direct Line

Date: _____
(Month/Day/Year)

Time: _____
(Mountain Prevailing Time)

MONSANTO RESPONSE:

To: PacifiCorp Fax 503-813-5512
Voice: 503-813-5374
(alternatively, 503-813-5389)

Date: _____
(Month/Day/Year)

Time: _____
(Mountain Prevailing Time)

Economic Curtailment Notice: PacifiCorp notice must be given no later than two (2) hours prior to the Curtailment Hour(s) during the Day.

Economic Curtailment Response: Monsanto response must be provided no later than one (1) hour from the time stamp on the Notice.

	Month	Day	Year
Day:			

Each Curtailment Hour is one (1) hour in duration.

PacifiCorp's Economic Curtailment Notice			Monsanto's Economic Curtailment Response			
Start of Economic Curtailment	Curtailment Hour		Replacement Energy MW		Physical Curtailment MW	Total MW
Mountain Prevailing (Monsanto) Time	Indicate "X" for Curtailment Hour	Estimated Hourly Price \$/MWH				
1:30 AM				+		=
2:30 AM				+		=
3:30 AM				+		=
4:30 AM				+		=
5:30 AM				+		=
6:30 AM				+		=
7:30 AM				+		=
8:30 AM				+		=
9:30 AM				+		=
10:30 AM				+		=
11:30 AM				+		=
12:30 PM				+		=
1:30 PM				+		=
2:30 PM				+		=
3:30 PM				+		=
4:30 PM				+		=
5:30 PM				+		=
6:30 PM				+		=
7:30 PM				+		=
8:30 PM				+		=
9:30 PM				+		=

10:30 PM				+		=	
11:30 PM				+		=	
12:30 AM				+		=	

Exhibit B-3
Description of Dow Jones™ Market Index



WHOLESALE ELECTRICITY PRICE INDEXES

MID-COLUMBIA

The Dow Jones Mid-Columbia Electricity Price Indexes are volume-weighted averages of specifically defined bilateral, wholesale, physical transactions. Calculations for these indexes average together power transactions from Columbia, Midway, Rocky Reach, Wells, and Wanapum/Vantage, delivery points along the Columbia River.

Index participants provide Dow Jones with their daily volume weighted average prices and total volumes for eligible electricity products sold at the Mid-Columbia delivery points, as well as with any purchases made from entities not contributing to the indexes.

Participants are asked to provide Dow Jones with daily index data by 10 a.m. Pacific Time, the day after the transacted power moves. Although some Mid-Columbia electricity indexes will be calculated for 365 days of the year, publication will occur only on business days. If a holiday falls during the week, data should be transmitted to Dow Jones on the first business day following a break.

Index Categories	
<u>Daily</u> Firm On-peak Firm Off-peak Non-Firm On-peak Non-Firm Off-peak	<u>Sunday and NERC Holidays</u> 24-Hour Firm

The following definitions have been designed to insure that each index category represents a specific power product. Since each category has a unique definition, no single transaction can be included in more than one category. If a transaction does not precisely fit into an index category, it will not be included in our index calculations.

Firm Daily Indexes: The firm daily indexes average together blocks of power sold on a one-day forward pre-scheduled basis. No real-time power is included in these indexes. Transactions are limited to power traded in 16-hour blocks during on-peak hours and 8-hour blocks for off-peak. Transactions which call for delivery for more than one day are not included in calculations for these indexes. Volume should be reported to Dow Jones as total megawatts transacted per hour.

Firm Sunday and NERC Holidays Index: A 24-hour firm index will be published for Sundays and NERC holidays. Transactions included in this index are limited to power traded in 24-hour pre-scheduled blocks.

Non-firm Daily Indexes: The non-firm indexes combine one day ahead pre-scheduled transactions with real-time transactions. The non-firm indexes follow the same convention as the firm indexes with respect to single day delivery. Volumes reported for these indexes should reflect the total number of MWh transacted for the entire ON- or OFF-PEAK reporting period.

Terminology

On-peak Hours: Hours ending 0700 - 2200 (6 a.m. - 10 p.m.) Pacific Time at Mid-Columbia, seven (7) days a week including NERC holidays.

Off-peak Hours: Hours ending 2300 - 0600 (10 p.m. - 6 a.m.) Pacific Time at Mid-Columbia, seven (7) days a week including NERC holidays.

Firm Energy: Firm energy is defined as meeting a minimum criteria of being financially firm and backed with liquidating damages.

Non-firm Energy: Non-firm energy is defined as being subject to curtailment at any time for any reason. Any recall provision would be for less than one hour from the scheduled start of service.

NOTE: Power conforming to any other measures of "firmness" should not be included in the Mid-Columbia indexes.

Index Dates

Daily Indexes: INDEX DATE = POWER DELIVERY DATE

The date on a daily index corresponds to the date the power is delivered. For example, Monday's prescheduled transactions are combined with Tuesday's real-time transactions to form Tuesday's index.

- Both Mid-C FIRM daily indexes are calculated seven days a week, including NERC holidays
- Both Mid-C NON-FIRM daily indexes are calculated seven days a week, including NERC holidays
- The Mid-C 24-Hour FIRM index will be calculated for Sundays and NERC Holidays.

PALO VERDE

The Dow Jones Palo Verde Electricity Price Indexes are volume weighted averages of specifically-defined bilateral, wholesale, physical transactions quoted in either dollars per megawatthour (\$/MWH) or dollars per megawatt (\$/MW). Calculations for these indexes average together power transactions from both Palo Verde and Westwing in Arizona.

Index participants provide Dow Jones with their daily volume weighted average prices and total volumes for eligible electricity products sold at Palo Verde and Westwing, as well as with any purchases made from entities not contributing to the indexes.

Participants are asked to provide Dow Jones with daily index data by 10 a.m. prevailing time at Palo Verde, the day after the transacted power moves. Although some Dow Jones Electricity Indexes are calculated for 365 days year, publication occurs only on business days. If a holiday falls during the week, data is transmitted to Dow Jones on the first business day following a break.

Index Categories	
<u>Daily</u>	<u>Sunday and NERC Holidays</u>
Firm On-peak	24-Hour Firm
Firm Off-peak	
Non-Firm On-peak	
Non-Firm Off-peak	

Firm Daily Indexes: The firm daily indexes average together blocks of power sold on a one-day forward pre-scheduled basis. No real-time power is included in these indexes. Transactions are limited to power traded in 16-hour blocks during on-peak hours and 8-hour blocks for off-peak. Transactions which call for delivery for more than one day are not included in calculations for these indexes. Volume should be reported as total megawatts (MW) transacted per hour.

Firm Sunday and NERC Holiday Index: A 24-hour firm index will be published for Sundays and NERC holidays. Transactions included in this index are limited to power traded in 24-hour pre-scheduled blocks.

Non-firm Daily Indexes: The non-firm indexes combine one day ahead pre-scheduled transactions with real-time transactions. The non-firm indexes follow the same convention as the firm indexes with respect to single day delivery. Volumes reported should reflect the total number of MWh transacted during the ON- or OFF-PEAK reporting period.

Terminology

On-peak Hours: Hours ending 0700 - 2200 (6 a.m. - 10 p.m.) prevailing time at Palo Verde, seven (7) days a week including NERC holidays.

Off-peak Hours: Hours ending 2300-0600 (10 p.m. - 6 a.m.) prevailing time at Palo Verde, seven (7) days a week.

NOTE: Since Arizona does not observe Daylight Savings Time, time-related definitions are based on Palo Verde prevailing time.

Firm Energy: Firm energy is defined as being financially firm and backed with liquidating damages.

Non-firm Energy: Non-firm energy is defined as being subject to curtailment at any time for any reason. Any recall provision would be for less than one hour from the scheduled start of service.

Index Dates

Daily Indexes: INDEX DATE = POWER DELIVERY DATE

The date on a daily index corresponds to the date the power is delivered. For example, prescheduled power transacted on Monday for delivery on Tuesday is averaged to form Tuesday's index. For indexes that include real-time power, Monday's prescheduled transactions are combined with Tuesday's real-time transactions to form Tuesday's index.

- Palo Verde on-peak and off-peak daily indexes are calculated seven days a week, including NERC holidays.
- The Palo Verde 24-Hour FIRM index will be calculated for Sundays and NERC Holidays.

If you have any questions or if any information on this sheet is not expressed clearly, please call Antoine Eustache at (609) 520-7058 or Ernest Onukogu at (609) 520-4663.

*Operating Reserve 2007
System Emergency*

Operating Reserve Curtailment Log									
2007 Operating Reserve Instances Available 224			2007 Total Downtime 107:59				For Additional Hrs Refer to the 2003 Curtailment Located in the ProVox Operating		
Record Curtailment Instances Here	Date	Furnace	Power company Operator Name	Time Called	Time off	Time Called Back	Time back on	Curtailment Time	Downtime Calculation
1	3-Jan-07	7	Ted	13:36	13:36	14:33	15:06	0:56	1:29
	3-Jan-07	8	Ted	13:37	13:37	14:33	14:41	0:56	1:04
2	4-Jan-07	7	Val	23:49	23:49	0:50	0:50	1:00	1:00
	4-Jan-07	8	Val	23:49	23:50	0:50	0:50	1:00	1:00
3	6-Jan-07	8	Val	1:03	1:05	1:53	1:53	0:48	0:39
4	7-Jan-07	7	Ted	1:48	1:49	2:09	2:10	0:19	0:20
	7-Jan-07	8	Ted	1:49	1:49	2:09	2:10	0:19	0:20
5	8-Jan-07	7	val	12:30	12:31	12:34	12:34	0:03	0:03
	8-Jan-07	8	val	12:30	12:31	12:52	13:22	0:21	0:51
6	9-Jan-07	8	val	12:55	12:58	13:23	13:23	0:25	0:25
7	11-Jan-07	7	Val	20:23	20:24	21:08	21:10	0:44	0:46
	11-Jan-07	9	Val	20:23	20:24	21:08	21:22	0:44	0:58
8	12-Jan-07	9	Bob	15:12	15:11	15:48	16:00	0:37	0:48
9	19-Jan-07	7	Rusty	10:04	10:04	10:50	10:50	0:46	0:46
	19-Jan-07	8	Rusty	10:04	10:04	10:50	10:50	0:46	0:46
10	24-Jan-07	8	Bob	11:06	11:08	11:36	11:37	0:28	0:28
	24-Jan-07	7	Bob	11:06	11:04	11:26	11:26	0:22	0:22
11	25-Jan-07	9	Ted	15:59	16:01	16:14	16:50	0:12	0:13
	25-Jan-07	7	Ted	15:59	16:01	16:14	16:14	0:12	0:13
12	27-Jan-07	7	Val	5:39	5:40	5:59	6:14	0:19	0:34
	27-Jan-07	8	Val	5:39	5:40	5:59	5:59	0:19	0:19
13	3-Feb-07	7	Val	12:29	12:29	13:25	13:25	0:56	0:56
	3-Feb-07	8	Val	12:29	12:29	13:25	13:25	0:56	0:56
14	16-Feb-07	8	Bob	7:51	7:56	8:24	8:26	0:28	0:30
15	28-Feb-07	7	Rusty	23:48	23:50	0:37	0:50	0:46	0:59
	28-Feb-07	9	Rusty	23:49	23:50	0:37	0:50	0:46	0:59
16	6-Mar-07	8	Rusty	13:15	13:16	13:50	13:54	0:34	0:38
	6-Mar-07	9	Rusty	13:15	13:16	13:50	14:22	0:34	1:06
17	11-Mar-07	7	Rusty	6:44	6:46	7:15	7:16	0:29	0:30
18	12-Mar-07	8	Rusty	8:04	8:05	8:29	8:30	0:24	0:25
19	12-Mar-07	8	Ted	17:02	17:02	17:47	17:49	0:45	0:46
	12-Mar-07	7	Ted	17:02	17:02	17:47	17:49	0:45	0:47
20	13-Mar-07	7	Ted	8:22	8:24	8:48	8:48	0:24	0:24
	13-Mar-07	8	Ted	8:23	8:25	8:48	9:08	0:22	0:42
21	18-Mar-07	7	Bob	10:22	10:22	10:33	10:43	0:11	0:20
	18-Mar-07	8	Bob	10:22	10:22	10:33	10:33	0:11	0:11
22	23-Mar-07	8	Bob	18:09	18:10	18:46	18:55	0:35	0:44
23	18-Apr-07	7	Val	21:46	21:46	22:36	22:38	0:49	0:52
	18-Apr-07	8	Val	21:47	21:47	22:36	22:46	0:48	0:59
24	8-May-07	7	Bob	13:02	13:03	13:59	14:22	0:56	1:19
	8-May-07	9	Bob	13:02	13:03	13:59	13:46	0:56	0:42
	8-May-07	8	Bob	13:02	13:46	13:59	14:11	0:13	0:25
25	19-May-07		Val	16:36	16:37	17:17	17:18	0:40	0:41
26	30-May-07	7	Val	8:28	8:28	9:02	9:02	0:33	0:33
	30-May-07	8	Val	8:28	8:28	9:02	9:06	0:33	0:37

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27	30-May-07	7	Kit	21:20	21:20	21:47	22:14	0:27	0:54
	30-May-07	8	Kit	21:20	21:21	21:47	21:48	0:26	0:27
28	1-Jun-07	7	Bob	8:58	8:58	9:25	9:26	0:26	0:27
	1-Jun-07	8	Bob	8:58	8:58	9:49	9:49	0:51	0:51
29	1-Jun-07	7	Bob	12:41	12:43	13:42	13:43	0:59	1:00
	1-Jun-07	8	Bob	12:41	12:43	13:42	13:15	0:59	0:32
	1-Jun-07	9	Bob	12:41	13:16	13:42	13:48	0:26	0:32
30	5-Jun-07	9	Bob	20:04	20:04	22:31	23:11	2:27	3:07
	5-Jun-07	7	Bob	20:04	20:07	22:31	22:34	2:24	2:27
31	6-Jun-07	7	Bob	22:24	22:24	22:42	23:01	0:17	0:37
	6-Jun-07	8	Bob	22:24	22:24	22:42	22:43	0:17	0:18
32	19-Jun-07	7	Ted	20:30	20:30	20:52	21:23	0:21	0:52
	19-Jun-07	9	Ted	20:30	20:30	20:52	20:52	0:21	0:21
	25-Jun-07	9	Ted	10:28	10:30	10:51	10:51	0:20	0:21
	25-Jun-07	7	Ted	10:28	10:30	10:50	10:51	0:20	0:21
33	27-Jun-07	7	Ted	15:42	15:42	16:39	16:39	0:56	0:56
	27-Jun-07	8	Ted	15:42	15:42	16:39	16:39	0:56	0:56
34	28-Jun-07	9	Kit	11:28	11:30	11:53	11:54	0:23	0:24
	28-Jun-07	8	Kit	11:28	11:31	11:53	12:05	0:22	0:34
35	19-Jul-07	9	Rusty	1:08	1:09	1:19	1:25	0:09	0:15
	19-Jul-07	7	Rusty	1:09	1:10	1:19	1:19	0:08	0:08
36	19-Jul-07	9	Ted	13:50	13:51	14:48	14:50	0:57	0:59
37	21-Jul-07	9	Ted	14:37	14:37	15:29	15:31	0:51	0:53
38	23-Jul-07	7	Kit	21:05	21:05	21:18	21:18	0:13	0:13
	23-Jul-07	9	Kit	21:05	21:05	21:27	21:29	0:22	0:24
39	28-Jul-07	7	Rusty	2:44	2:44	3:15	3:15	0:30	0:30
	28-Jul-07	8	Rusty	2:44	2:44	3:15	3:15	0:30	0:30
40	6-Aug-07	7	Val	11:56	11:56	12:52	12:52	0:55	0:56
	6-Aug-07	8	Val	11:56	11:56	12:11	12:11	0:14	0:14
41	10-Aug-07	7	Rusty	14:22	14:22	16:01	16:01	1:39	1:39
	10-Aug-07	8	Rusty	14:22	14:22	14:54	14:54	0:32	0:32
42	10-Aug-07	8	Rusty	16:00	16:00	18:47	18:47	2:47	2:47
43	10-Aug-07	8	Rusty	20:00	20:00	0:28	0:28	4:28	4:28
44	11-Aug-07	7	Rusty	14:46	14:46	23:30	23:30	8:43	8:43
45	17-Aug-07	8	Kit	3:16	3:17	3:30	3:59	0:13	0:42
46	17-Aug-07	8	Kit	5:44	5:45	6:07	6:42	0:22	0:57
47	19-Aug-07	9	Rusty	5:56	5:56	6:26	6:50	0:29	0:53
	19-Aug-07	8	Rusty	5:56	5:56	6:26	6:18	0:29	0:21
	19-Aug-07	7	Rusty	5:56	6:18	6:26	6:36	0:07	0:17
48	23-Aug-07	7	Rusty	3:34	3:35	4:05	4:05	0:30	0:30
	23-Aug-07	9	Rusty	3:34	3:35	4:05	4:05	0:30	0:30
49	26-Aug-07	7	Kit	20:51	20:51	21:29	21:29	0:37	0:37
	26-Aug-07	8	Kit	20:51	20:51	21:29	21:29	0:37	0:37
50	27-Aug-07	7	Rusty	11:29	11:30	12:01	12:01	0:31	0:31
	27-Aug-07	8	Rusty	11:29	11:30	12:02	12:02	0:32	0:32
51	29-Aug-07	9	Ted	2:00	2:01	2:50	2:53	0:48	0:51
	29-Aug-07	8	Ted	2:00	2:01	2:50	3:05	0:48	1:03
52	30-Aug-07	9	Ted	1:35	1:36	2:34	2:34	0:57	0:57
	30-Aug-07	7	ted	1:35	1:36	2:34	2:34	0:57	0:57
53	2-Sep-07	8	ted	23:16	23:16	23:35	23:35	0:19	0:19
	2-Sep-07	9	ted	23:16	23:16	23:35	23:41	0:19	0:25
54	3-Sep-07	7	Ted	16:17	16:17	16:47	16:50	0:30	0:33
	3-Sep-07	8	Ted	16:17	16:17	16:47	16:50	0:30	0:33
55	3-Sep-07	8	Rusty	21:00	21:00	21:38	21:42	0:37	0:41
	3-Sep-07	7	Rusty	21:00	21:00	21:38	21:39	0:37	0:38
56	10-Sep-07	8	Val	10:12	10:13	10:52	10:53	0:38	0:39
	10-Sep-07	7	Val	10:13	10:13	10:52	10:53	0:38	0:39
57	16-Sep-07	9	Val	1:34	1:35	2:23	2:23	0:48	0:48
	16-Sep-07	8	Val	1:34	1:35	2:23	2:23	0:48	0:48

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Final
5.8

800 MAX

2007 7/10/07 3

Total Hours of Curtainment	Date	Furnace	Power company Operator Name	Curtainment Start time (per EAA)	Curtainment Stop time (per EAA)	Time Furnace was tripped	Time Furnace brought on	Buy-Through Rate Offered (mils)	Buy-Through Rate Accepted? Y/N	Curtainment Time Calculation	Down Time Calculation
9:00	15-Jan-07	8	Ted	13:30	22:30	13:29	21:53	85.00	N	9:00	8:24
13:00	9-Apr-07	7	bob	19:30	23:30	19:30	23:31	70.00	N	4:00	4:01
18:00	10-Apr-07	9	bob	5:30	10:30	5:29	10:30	70.00	N	5:00	5:00
22:00	10-Apr-07	9	Rusty	10:30	14:30			70.00	Y	4:00	0:00
22:15	9-May-07	7	Bob	14:30	14:45	14:30	14:45	89.00	N	0:15	0:15
26:00	9-May-07	8	bob	14:45	18:30	14:45	18:33	89.00	N	3:45	3:48
28:00	10-May-07	8	Kit	13:30	15:30	13:30	15:30	80.00	N	2:00	2:00
32:00	10-May-07	9	Kit	15:30	19:30			80.00	Y	4:00	0:00
33:00	10-May-07	9	Kit	15:30	19:30	14:30	15:30	84.00	N	1:00	1:00
37:00	11-May-07	7	Kit	14:30	15:30			84.00	Y	4:00	0:00
37:00	11-May-07	9	Kit	15:30	19:30			84.00	Y	5:00	0:00
42:00	15-Jun-07	9	Ted	11:30	16:30			57-94	Y	4:00	4:00
46:00	15-Jun-07	9	Ted	16:30	20:30	16:29	20:30	93-102	N	4:00	4:00
46:00	15-Jun-07	9	Ted	16:30	20:30			75-86	Y	8:00	0:00
54:00	16-Jun-07	9	Ted	12:30	20:30			58-10-77-70	Y	3:00	0:00
57:00	19-Jun-07	9	Rusty	12:30	15:30				N	3:50	3:50
60:50	19-Jun-07	7	Rusty	15:30	19:20	15:30	19:20	95.2-103.6	N	0:23	0:23
61:13	19-Jun-07	8	Rusty	19:20	19:43	19:20	19:43	95.2-103.6	N	0:47	0:46
62:00	19-Jun-07	9	Rusty	19:43	20:30	19:43	20:30	95.2-103.6	N	3:00	0:00
65:00	20-Jun-07	9	Rusty	12:30	15:30			58-77	Y	3:34	3:33
68:34	20-Jun-07	7	Rusty	15:30	19:04	15:30	19:04	79-103	N	3:26	3:26
72:00	20-Jun-07	8	Rusty	19:04	22:30	19:04	22:30	79-103	N	8:00	12:31
80:00	21-Jun-07	8	Val	14:30	22:30	14:30	3:01	92-122	N	10:00	10:00
90:00	22-Jun-07	8	Val	12:30	22:30	12:30	22:30	68-122	N	2:00	0:00
92:00	28-Jun-07	9	Kit	13:30	15:30			80-82	Y	1:17	1:17
93:17	28-Jun-07	9	Kit	15:30	16:47	15:30	16:47	87-107	N	4:09	4:08
97:26	28-Jun-07	8	Kit	16:47	20:56	16:47	20:56	87-107	N	0:34	0:50
98:00	28-Jun-07	9	Kit	20:56	21:30	20:56	21:46	87-107	N	1:00	0:00
99:00	28-Jun-07	9	Val	21:30	22:30			64.75	Y	2:00	0:00
101:00	2-Jul-07	9	Rusty	12:30	14:30			68-80	Y	6:00	6:00
107:00	2-Jul-07	9	Rusty	14:30	20:30	14:30	20:30	87-106	N	2:00	0:00
109:00	2-Jul-07	9	Rusty	20:30	22:30			77-90	Y	3:00	0:00
112:00	5-Jul-07	9	Rusty	13:30	16:30			78-96	Y	2:12	2:12
114:12	5-Jul-07	9	Rusty	16:30	18:42	16:30	18:42	88-104	N	3:03	3:02
117:15	5-Jul-07	8	Kit	18:42	21:45	18:42	21:45	88-104	N	0:13	0:13
117:28	5-Jul-07	7	Kit	21:45	21:58	21:45	21:58	88-104	N	0:32	0:33
118:00	5-Jul-07	9	Kit	21:58	22:30	21:58	22:32	88-104	N	9:00	9:01
127:00	6-Jul-07	7	Ted	13:30	22:30	13:30	22:31	88-135	N	5:00	4:59
132:00	8-Jul-07	7	Kit	15:30	20:30	15:30	20:30	93-110	N	2:00	0:00
134:00	9-Jul-07	9	Kit	13:30	15:30			90-110	Y	1:00	1:00
135:00	9-Jul-07	9	Kit	15:30	16:30	15:30	16:30	90-110	N	4:00	0:00
139:00	9-Jul-07	9	Kit	16:30	20:30			90-110	Y	2:00	0:00
141:00	10-Jul-07	9	Kit	13:30	15:30			90-109	Y	2:00	0:00
143:00	10-Jul-07	9	Kit	15:30	17:30	15:30	19:23	90-109	N	3:00	3:53
146:00	10-Jul-07	9	Kit	17:30	20:30			90-109	Y	3:00	0:00
148:00	10-Jul-07	9	Kit	13:30	15:30			79-96	Y	2:00	0:00
150:00	11-Jul-07	7	Kit	15:30	17:30	15:30	17:30	79-96	N	2:00	2:00
153:00	11-Jul-07	9	Kit	17:30	20:30			79-96	Y	3:00	0:00
155:00	11-Jul-07	9	Kit	17:30	20:30			56-97	N	2:00	2:00
155:00	12-Jul-07	7	Rusty	10:30	12:30	10:30	12:30	56-97	N	10:00	0:00
165:00	12-Jul-07	9	Rusty	12:30	22:30			56-97	Y	1:00	0:00
176:00	13-Jul-07	9	Rusty	10:30	21:30			50-87	Y	1:00	1:08
177:00	13-Jul-07	7	randy	21:30	22:30	21:30	22:38	56.88	N	11:00	0:00
188:00	14-Jul-07	9	Rusty	10:30	21:30			53-75	Y	1:00	0:59
189:00	14-Jul-07	9	Kit	21:30	22:30	21:30	22:30	63.87	N	12:00	0:00
201:00	15-Jul-07	9	Rusty	10:30	22:30			68-100	Y	7:00	6:00
208:00	17-Jul-07	9	Val	13:30	20:30	13:30	19:30	81-99	N		

210:00	17-Jul-07	9	Val	20:30	22:30			64-71	Y	2:00	0:00
218:00	19-Jul-07	9	Ted	14:30	22:30			64-99	Y	8:00	0:00
219:00	20-Jul-07	9	Ted	14:30	15:30	14:30	15:30	82-24	N	1:00	0:59
226:00	20-Jul-07	9	Ted	15:30	22:30			58-88	Y	7:00	0:00
235:00	21-Jul-07	9	Ted	12:30	21:30			71-96	Y	9:00	0:00
236:00	21-Jul-07	7	Kit	21:30	22:30	21:28	22:32	64.61	N	1:00	1:03
239:00	22-Jul-07	9	Ted	12:30	15:30			74-91	Y	3:00	0:00
241:00	22-Jul-07	9	Ted	15:30	17:30	15:30	17:30	98.69	N	2:00	2:00
246:00	22-Jul-07	9	Ted	17:30	22:30			64-96	Y	5:00	0:00
251:00	23-Jul-07	9	Rusty	10:30	15:30			56-91	Y	5:00	0:00
253:00	23-Jul-07	8	Rusty	15:30	17:30	15:30	17:30	98.69	N	2:00	2:00
258:00	23-Jul-07	9	Rusty	17:30	22:30			64-96	Y	5:00	0:00
263:00	24-Jul-07	9	Rusty	10:30	15:30			53-92	Y	5:00	0:00
264:00	24-Jul-07	9	Rusty	15:30	16:30	15:30	16:30	53-92	N	1:00	1:00
270:00	24-Jul-07	9	Rusty	16:30	22:30			53-92	Y	6:00	0:00
282:00	25-Jul-07	9	Rusty	10:30	22:30			49-85	Y	12:00	0:00
283:00	26-Jul-07	9	Val	13:30	14:30	13:30	14:30	66-81	N	1:00	1:00
289:00	26-Jul-07	9	Val	14:30	20:30			66-81	Y	6:00	0:00
292:00	14-Aug-07	9	Kit	11:30	14:30			74-116	Y	3:00	0:00
294:00	14-Aug-07	9	Kit	14:30	16:30	14:31	16:30	108-116	N	2:00	1:58
300:00	14-Aug-07	9	Kit	16:30	22:30			74-116	Y	6:00	0:00
303:00	15-Aug-07	9	Kit	12:30	15:30			82-101	Y	3:00	0:00
305:00	15-Aug-07	9	Kit	15:30	17:30	15:29	17:27	106-107	N	2:00	1:57
310:00	15-Aug-07	9	Kit	17:30	22:30			77-104	Y	5:00	0:00
322:00	16-Aug-07	9	Rusty	10:30	22:30	13:29	19:31	73-120	Y	12:00	6:02
334:00	17-Aug-07	8	Rusty	10:30	22:30	16:29	17:31	58-96	Y	12:00	1:02
335:00	17-Aug-07	8	kit	21:30	22:30	21:29	21:43	68.87	Y	1:00	0:14
336:00	17-Aug-07	7	kit	21:30	22:30	21:43	22:32	68.87	Y	1:00	0:49
348:00	18-Aug-07	9	Rusty	10:30	22:30			58-96	Y	12:00	0:00
359:00	19-Aug-07	9	Rusty	10:30	21:30			63-103	Y	11:00	0:00
360:00	19-Aug-07	7	Kit	21:30	22:30	21:30	22:44	74.21	N	1:00	1:13
361:00	20-Aug-07	9	Val	12:30	13:30			79.56	Y	1:00	0:00
363:00	20-Aug-07	7	Vai	13:30	15:30	12:28	15:35	91-97	N	2:00	3:07
370:00	20-Aug-07	9	Val	15:30	22:30			74-103	Y	7:00	0:00
373:00	21-Aug-07	9	Val	12:30	15:30			81-99	Y	3:00	0:00
374:00	21-Aug-07	9	Val	15:30	16:30	15:30	16:36	103.74	N	1:00	1:06
380:00	21-Aug-07	9	Val	16:30	22:30			75-105	Y	6:00	0:00
391:00	23-Aug-07	9	Ted	11:30	22:30			60-88	Y	11:00	0:00
392:00	24-Aug-07	9	Ted	11:30	12:30	11:30	12:30	55.20	N	1:00	1:00
402:00	24-Aug-07	8	Ted	12:30	22:30			62-81	Y	10:00	0:00
414:00	27-Aug-07	8	Rusty	10:30	22:30			55-90	Y	12:00	0:00
426:00	28-Aug-07	8	Rusty	10:30	22:30			55-90	Y	12:00	0:00
428:00	29-Aug-07	9	Rusty	9:30	11:30	9:30	11:30	81-93	Y	2:00	2:00
429:47	29-Aug-07	9	Rusty	11:30	13:17	11:30	13:17	103-152	N	1:47	1:46
433:14	29-Aug-07	7	Rusty	13:17	16:44	13:17	16:44	103-152	N	3:26	3:26
438:59	29-Aug-07	8	Rusty	16:44	22:30	16:44	22:30	103-152	N	5:45	5:46
441:33	30-Aug-07	9	Val	11:30	14:04	11:29	14:04	103-152	N	2:34	2:35
449:59	30-Aug-07	8	Val	14:04	22:30	14:04	22:30	103-152	N	8:26	8:26
460:59	31-Aug-07	8	Val	11:30	22:30	11:30	22:32	113.00	N	11:00	11:02
467:59	1-Sep-07	9	Val	15:30	22:30	15:30	16:30	85.00	Y	7:00	0:59
477:59	3-Sep-07	9	Ted	12:30	22:30	12:30	13:30	44.50	Y	10:00	1:00
480:59	4-Sep-07	9	Ted	11:30	14:30	11:30	14:30	64-76	N	3:00	2:59
488:59	4-Sep-07	9	Ted	14:30	22:30			64-81	Y	8:00	0:00
490:59	5-Sep-07	9	Ted	13:30	15:30			56-70	Y	2:00	0:00
491:59	5-Sep-07	8	Ted	15:30	16:30	15:48	16:38	70.46	N	1:00	0:50
497:59	5-Sep-07	9	Ted	16:30	22:30			56-68	Y	6:00	0:00
506:59	6-Sep-07	9	Kit	13:30	22:30			58-74	Y	9:00	0:00
509:59	7-Sep-07	9	Kit	12:30	15:30			54-68	Y	3:00	0:00
510:59	7-Sep-07	9	Kit	15:30	16:30	15:30	16:30	68.00	N	1:00	1:00

Operating Reserves
 Emergency
 Supply
 2008

Operating Reserve Curtailment Log									
300 Instances/Year - 05 MW Total (#/Day/31%) - Fees Must be dropped within 60 minutes									
2008 Operating Reserve Instances Available					2008 Total Down Time		For A Refer to the "2003 Located in the ProVo		
239					01:00				
Record Curtailment Instances Here	Date	Furnace	Power company Operator Name	Time Called	Time off	Time Called Back	Time back on	Curtailment Time	Down Time Calculation
1	2-Jan-08	7	Kit	13:05	13:05	13:31	13:53	0:26	0:48
	2-Jan-08	8	Kit	13:05	13:05	13:31	13:46	0:26	0:41
2	5-Jan-08	7	Rusty	8:43	8:43	8:53	9:09	0:10	0:25
	5-Jan-08	9	Rusty	8:43	8:43	8:53	9:05	0:10	0:21
3	10-Jan-08	7	Rusty	4:14	4:17	4:56	4:58	0:39	0:41
	10-Jan-08	9	Rusty	4:14	4:17	4:56	5:12	0:39	0:55
4	19-Jan-08	7	Rusty	4:12	4:12	4:58	4:58	0:46	0:46
	19-Jan-08	8	Rusty	4:12	4:12	4:58	4:58	0:46	0:46
5	21-Jan-08	7	Rusty	22:28	22:29	22:56	23:10	0:27	0:41
	21-Jan-08	9	Rusty	22:28	22:29	22:56	23:23	0:27	0:54
6	24-Jan-08	7	Kit	10:16	10:16	10:30	10:30	0:13	0:13
	24-Jan-08	8	Kit	10:17	10:17	10:46	10:47	0:29	0:29
7	26-Jan-08	7	Ted	0:45	0:45	1:43	1:43	0:57	0:57
	26-Jan-08	8	Ted	0:45	0:45	1:43	1:44	0:57	0:58
8	26-Jan-08	7	Ted	4:20	4:20	5:20	5:20	0:59	0:59
	26-Jan-08	8	Ted	4:20	4:20	5:20	5:20	0:59	0:59
9	4-Feb-08	7	Kit	9:19	9:20	9:56	10:07	0:36	0:47
	4-Feb-08	8	Kit	9:19	9:20	9:56	9:57	0:36	0:37
10	5-Feb-08	7	Kit	15:42	15:43	16:41	16:43	0:57	0:59
	5-Feb-08	8	Kit	15:43	15:44	16:41	16:42	0:57	0:58
11	13-Feb-08	7	Tom	12:07	12:07	13:00	13:07	0:53	0:53
	13-Feb-08	9	Tom	12:07	12:07	13:00	13:00	0:53	0:53
12	14-Feb-08	7	Tom	9:22	9:22	11:49	11:50	2:27	2:28
	14-Feb-08	9	Tom	9:22	9:22	11:52	11:53	2:30	2:31
	14-Feb-08	8	Dave	10:35	10:35	11:52	11:52	1:17	1:17
13	15-Feb-08	7	Tom	8:24	8:25	9:16	9:18	0:51	0:53
	15-Feb-08	8	Tom	8:24	8:25	9:16	9:41	0:51	1:16
14	20-Feb-08	8	ted	23:10	23:10	23:18	0:14	0:07	1:03
	20-Feb-08	7	ted	23:10	23:10	23:18	23:19	0:08	0:08
	23-Feb-08	8	ted	12:18	12:18	13:05	13:09	0:47	0:51
15	23-Feb-08	9	ted	12:18	12:18	12:23	12:23	0:05	0:05
	23-Feb-08	7	ted	12:23	12:23	13:55	13:55	1:32	1:32
16	23-Feb-08	9	rusty	22:42	22:42	22:55	23:19	0:13	0:37
17	29-Feb-08	7	val	2:46	2:47	3:48	3:48	1:00	1:00
	29-Feb-08	9	val	2:46	2:48	3:48	3:48	0:59	0:59
18	2-Mar-08	7	Kit	11:52	11:52	12:49	13:22	0:57	1:30
	2-Mar-08	8	Kit	11:52	11:52	12:49	12:49	0:57	0:57
19	3-Mar-08	7	Ted	2:02	2:05	2:45	2:46	0:39	0:40
	3-Mar-08	9	Ted	2:02	2:05	2:18	2:18	0:13	0:13
	3-Mar-08	8	Ted	2:18	2:18	2:45	2:46	0:27	0:28
20	3-Mar-08	7	Ted	21:09	21:10	21:40	21:45	0:30	0:35
	3-Mar-08	8	Ted	21:09	21:10	21:34	21:34	0:24	0:24
	3-Mar-08	9	Ted	21:34	21:34	21:34	21:54	0:00	0:20
21	7-Mar-08	8	Tom	11:32	11:32	12:19	13:15	0:46	1:42

x1

	7-Mar-08	9	Tom	11:32	11:32	13:11	13:11	1:38	1:38
22	13-Mar-08	8	val	11:44	11:45	12:41	12:42	0:56	0:57
	13-Mar-08	9	val	11:44	11:45	12:41	12:42	0:56	0:57
23	21-Mar-08	7	todd	12:39	12:39	13:39	13:39	1:00	1:00
	21-Mar-08	8	todd	12:39	12:39	13:39	13:40	1:00	1:01
24	24-Mar-08	7	Kit	4:25	4:25	5:15	5:15	0:50	0:50
	24-Mar-08	9	Kit	4:26	4:26	5:15	5:15	0:49	0:49
25	29-Mar-08	7	val	12:05	12:06	12:56	12:57	0:50	0:51
	29-Mar-08	9	val	12:05	12:06	12:12	12:13	0:06	0:07
	29-Mar-08	8	val	12:05	12:12	12:56	12:59	0:44	0:47
26	2-Apr-08	7	Todd	6:24	6:25	7:18	7:18	0:53	0:53
	2-Apr-08	8	Todd	6:24	6:25	7:18	7:36	0:53	1:11
27	4-Apr-08	7	Kit	15:45	15:46	16:44	16:46	0:58	0:59
	4-Apr-08	8	Kit	15:45	15:46	16:44	16:44	0:58	0:58
28	13-Apr-08	7	val	20:35	20:36	21:10	21:18	0:34	0:42
	13-Apr-08	8	val	20:35	20:36	21:10	21:20	0:34	0:44
29	15-Apr-08	7	tom	21:19	21:20	21:59	22:02	0:39	0:42
	15-Apr-08	8	tom	21:19	21:20	21:59	22:01	0:39	0:41
30	27-Apr-08	7	Ted	11:25	11:25	12:15	12:15	0:49	0:49
	27-Apr-08	8	Ted	11:25	11:25	12:15	12:15	0:49	0:49
31	27-Apr-08	7	Ted	12:15	12:15	12:58	12:59	0:43	0:44
	27-Apr-08	8	Ted	12:15	12:15	12:58	13:04	0:43	0:49
32	11-May-08	7	ted	0:58	0:58	1:50	1:51	0:52	0:52
	11-May-08	8	ted	0:58	0:58	1:51	1:59	0:53	1:01
33	12-May-08	7	val	7:45	7:46	8:45	8:46	0:59	1:00
	12-May-08	8	rusty	7:45	7:46	8:45	8:46	0:58	0:59
34	22-May-08	9	rusty	13:36	13:36	13:47	14:26	0:10	0:50
	22-May-08	8	rusty	13:36	13:36	13:47	13:47	0:10	0:10
35	22-May-08	7	Tom	20:54	20:56	21:15	21:15	0:18	0:18
36	23-May-08	7	rusty	6:43	6:44	7:07	7:09	0:23	0:25
	23-May-08	8	rusty	6:43	6:44	7:07	7:11	0:23	0:27
37	23-May-08	7	rusty	14:25	14:25	14:59	14:59	0:34	0:34
	23-May-08	8	rusty	14:25	14:25	14:59	15:00	0:34	0:35
38	25-May-08	8	rusty	8:33	8:33	8:49	9:25	0:15	0:51
	25-May-08	9	rusty	8:33	8:33	8:49	8:51	0:15	0:17
39	25-May-08	7	Kit	18:28	18:28	18:53	19:15	0:25	0:46
	25-May-08	8	Kit	18:28	18:28	18:53	18:53	0:25	0:25
40	26-May-08	7	tom	13:07	13:07	13:10	13:10	0:02	0:02
	26-May-08	9	tom	13:07	13:07	13:10	13:10	0:02	0:02
41	31-May-08	9	tom	22:09	22:09	22:16	22:28	0:06	0:18
	31-May-08	8	tom	22:09	22:10	22:16	22:32	0:05	0:21
42	2-Jun-08	7	rusty	8:18	8:18	8:42	8:42	0:23	0:23
	2-Jun-08	8	rusty	8:18	8:18	8:42	8:42	0:23	0:23
43	4-Jun-08	7	rusty	9:10	9:10	9:52	11:51	0:42	2:41
	4-Jun-08	8	rusty	9:10	9:10	9:52	9:52	0:42	0:42
44	4-Jul-08	9	Ted	8:22	8:22	8:41	8:48	0:19	0:26
45	9-Jul-08	9	rusty	16:42	16:42	17:29	17:03	0:47	0:21
	9-Jul-08	7	rusty	16:42	16:45	17:29	17:46	0:43	1:00
	9-Jul-08	8	rusty	16:42	17:03	17:29	17:46	0:25	0:42
46	24-Jul-08	7	Kit	18:43	18:43	19:02	19:03	0:18	0:19
	24-Jul-08	8	Kit	18:43	18:43	19:02	19:19	0:18	0:35
47	25-Jul-08	7	Kit	3:47	3:47	4:36	4:37	0:48	0:49
	25-Jul-08	8	Kit	3:47	3:48	4:36	4:37	0:48	0:49
48	29-Jul-08	8	Kit	10:15	10:15	10:55	10:55	0:39	0:39
	29-Jul-08	9	Kit	10:15	10:15	10:55	10:55	0:39	0:39
49	1-Aug-08	7	tom	1:03	1:04	1:28	1:28	0:23	0:23
	1-Aug-08	8	tom	1:05	1:05	1:28	1:28	0:23	0:23
50	7-Aug-08	8	Ted	10:00	10:03	10:52	10:52	0:49	0:49
51	29-Aug-08	7	Tom	10:30	10:30	10:48	10:48	0:18	0:18

21

	29-Aug-08	8	Tom	10:30	10:30	10:48	10:48	0:18	0:18
52	4-Sep-08	7	Tom	5:48	5:49	6:08	6:09	0:19	0:20
	4-Sep-08	8	Tom	5:48	5:49	6:08	6:09	0:19	0:20
	4-Sep-08	7	rusty	16:12	16:13	16:31	16:32	0:18	0:19
53	7-Sep-08	7	rusty	17:38	17:40	18:33	18:33	0:53	0:53
	7-Sep-08	8	rusty	17:39	17:40	18:33	19:12	0:52	1:32
54	16-Sep-08	7	rusty	17:56	17:56	18:52	18:53	0:55	0:56
	16-Sep-08	8	rusty	17:56	17:56	18:03	18:03	0:06	0:06
55	29-Sep-08	9	Val	17:11	17:13	17:29	17:29	0:15	0:15
	29-Sep-08	8	Val	17:11	17:13	17:45	17:45	0:31	0:32
	29-Sep-08	7	Val	17:11	17:28	17:45	17:45	0:16	0:17
	7-Oct-08	9	kit	9:10	9:11	9:35	9:35	0:24	0:24
56	11-Oct-08	8	Rusty	10:10	10:10	10:50	10:50	0:40	0:40
57	13-Oct-08	7	Kit	3:42	3:45	4:31	4:31	0:46	0:46
	13-Oct-08	8	Kit	3:42	3:45	4:31	4:33	0:46	0:48
58	24-Oct-08	7	Val	16:19	16:20	16:37	16:38	0:17	0:18
	24-Oct-08	8	Val	16:19	16:20	16:37	16:35	0:17	0:15
59	28-Oct-08	7	Ted	11:30	11:30	11:53	11:53	0:23	0:23
	28-Oct-08	9	Ted	11:30	11:30	11:53	11:53	0:23	0:23
60	1-Nov-08	9	Kit	15:22	15:24	15:54	15:54	0:30	0:30
61	17-Dec-08	7	Kit	6:50	6:50	6:56	6:56	0:06	0:06
								0:00	0:00
								0:00	0:00

GOD MAX

8002
71w0073

Total Hours of Curtailment	Date	Furnace	Power company Operator Name	Curtilment Start time (per FAX)	Curtilment Stop time (per FAX)	Time Furnace was tripped	Time Furnace brought on	Buy-Through Rate Offered (mils)	Buy-Through Rate Accepted? Y/N	Curtilment Time Calculation	
9:00	24-Jun-08	9	Kit	12:30	21:30	12:30	21:30	120-173	N	9:00	
20:50	18-Jul-08	7	Kit	10:30	22:20	10:30	22:14	80-139	N	11:50	
21:00	18-Jul-08	9	Kit	22:20	22:30	22:20	22:34	80-139	N	0:10	
32:00	29-Jul-08	9	Kit	11:30	22:30	11:30	22:30	86.00	N	11:00	
45:00	30-Jul-08	9	Kit	11:30	0:30	11:30	0:30	86.50	N	13:00	
51:00	31-Jul-08	9	Rusty	8:30	14:30	8:30	14:30	51-98	N	6:00	
57:00	31-Jul-08	7	Tom	18:30	0:30	18:30	19:08	78-115	N	6:00	
57:00	31-Jul-08	8	Tom			18:29	19:08	78-115	N	0:00	
57:00	31-Jul-08	9	Tom			19:09	0:30	78-115	N	0:00	
63:00	1-Aug-08	9	Rusty	8:30	14:30	8:30	14:30	53-99	N	6:00	
63:59	7-Aug-08	8	Ted	7:30	8:29	7:30	8:30	44-122	N	0:59	
64:20	7-Aug-08	7	Ted	8:29	8:50	8:29	8:50	44-122	N	0:21	
69:00	7-Aug-08	9	Ted	8:50	13:30	8:52	13:30	44-122	N	4:40	
73:00	7-Aug-08		Ted	17:30	21:30			44-123	Y	4:00	4:00
74:07	7-Aug-08	7	Rusty	21:30	22:38	21:30	22:38	44-122	n	1:07	
74:59	7-Aug-08	8	Rusty	22:38	23:30	22:37	23:30	44-122	n	0:52	
76:59	8-Aug-08	9	Ted	11:30	13:30	11:30	13:50	77-81	n	2:00	
82:59	8-Aug-08	9	Ted	17:30	23:30	17:28	23:30	75-116	n	6:00	
83:59	11-Aug-08	9	Rusty	8:30	9:30	8:29	9:30	50-82	N	1:00	
87:59	11-Aug-08		Rusty	9:30	13:30			50-83	Y	4:00	4:00
93:59	11-Aug-08	9	Rusty	17:30	23:30	17:29	23:30	81-117	N	6:00	
98:59	13-Aug-08	9	Rusty	8:30	13:30	8:31	13:30	81.00	N	5:00	
104:59	13-Aug-08	9	Rusty	17:30	23:30	17:30	23:30	77-119	N	6:00	
109:59	14-Aug-08	7	Val	8:30	13:30	8:30	13:30	81.25	N	5:00	
115:59	14-Aug-08	8	Val	17:30	23:30	17:30	23:30	81.25	N	6:00	
116:59	28-Aug-08	8	Tom	10:30	11:30	9:27	20:30	81.75	N	1:00	
127:59	28-Aug-08		Tom	11:30	22:30			81.75	Y	11:00	11:00
137:59	29-Aug-08	9	Tom	10:30	20:30			77.00	Y	10:00	10:00
142:59	29-Aug-08		Tom	20:30	1:30	20:30	1:30	77.00	N	5:00	
155:59	2-Sep-08	7	Kit	11:30	0:30	11:30	0:32	66-97	N	13:00	
166:59	3-Sep-08	9	Kit	11:30	22:30			63-80	Y	11:00	11:00
170:59	4-Sep-08	9	Rusty	9:30	13:30	9:30	13:30	57-71	N	4:00	
176:59	4-Sep-08	9	Rusty	17:30	23:30			65-96	Y	6:00	6:00
177:59	4-Sep-08	9	Rusty	7:30	8:30			55-71	Y	1:00	1:00
179:59	5-Sep-08	9	Rusty	8:30	10:30	8:30	10:30	55-71	N	2:00	
182:59	5-Sep-08	9	Rusty	10:30	13:30			55-71	Y	3:00	3:00
188:59	5-Sep-08	9	Rusty	17:30	23:30			65-96	Y	6:00	6:00
192:59	17-Sep-08	9	Rusty	9:30	13:30			46-57	Y	4:00	4:00
198:59	17-Sep-08	9	Rusty	17:30	23:30			52-78	Y	6:00	6:00
198:59	17-Sep-08	9	Rusty	17:30	23:30			52-77	Y	5:00	5:00
203:59	18-Sep-08	9	val	18:30	23:30			53-63	N	1:00	
204:59	20-Sep-08	9	Gary	11:30	12:30	11:30	12:30	53-63	Y	10:00	10:00
214:59	20-Sep-08	9	Gary	12:30	22:30			40-63	Y	13:00	13:00
227:59	22-Sep-08	9	Gary	8:30	21:30			54.79	N	1:00	
228:59	22-Sep-08	7	Tom	21:30	22:30	21:30	22:35	50-66	Y	12:00	12:00
240:59	23-Sep-08	9	Ted	10:30	22:30			50-59	Y	3:00	3:00
243:59	24-Sep-08	8	Ted	10:30	13:30	10:14	11:35	54-61	Y	4:00	4:00
247:59	24-Sep-08	9	Ted	18:30	22:30			54-62	Y	1:00	1:00
248:59	25-Sep-08	9	Ted	9:30	10:30			48-65	N	4:00	
252:59	25-Sep-08	9	Ted	10:30	14:30			53.50	Y	7:00	7:00
259:59	26-Sep-08	9	Kit	17:30	0:30			38-58	Y	8:00	8:00
267:59	29-Sep-08	9	Ted	6:30	14:30			54-64	Y	4:00	4:00
271:59	29-Sep-08	9	Ted	19:30	23:30			38-65	Y	6:00	6:00
277:59	30-Sep-08	9	Ted	7:30	13:30			55-81	Y	4:00	4:00
281:59	30-Sep-08	9	Ted	19:30	23:30						

294:59	2-Oct-08	9	Kit	9:30	22:30			54-61	Y	13:00	13:00
296:59	3-Oct-08	9	Kit	8:30	10:30	8:30	10:30	50-74	N	2:00	
311:59	3-Oct-08	9	Tom	10:30	1:30			50-74	Y	15:00	15:00
325:59	6-Oct-08	9	Kit	10:30	0:30			52-72	Y	14:00	14:00
335:59	7-Oct-08	9	Kit	9:30	19:30			50-72	Y	10:00	10:00
336:59	7-Oct-08	7	Tom	19:30	20:30	19:30	21:08	57.00	N	1:00	
341:59	7-Oct-08	9	Tom	20:30	1:30			53-71	Y	6:00	5:00
343:59	8-Oct-08	8	Kit	6:30	8:30			38-45	Y	2:00	2:00
356:59	9-Oct-08	9	Kit	8:30	21:30			46-54	Y	13:00	13:00
358:59	9-Oct-08	9	Tom	21:30	23:30	21:30	23:30	51-67	N	2:00	
362:59	10-Oct-08	9	Tom	8:30	12:30			41-60	Y	4:00	4:00
363:59	10-Oct-08	8	Rusty	12:30	13:30	12:31	13:50	45.00	N	1:00	
373:59	10-Oct-08	9	Rusty	13:30	23:30			45-59	Y	10:00	10:00
385:59	11-Oct-08	9	Kit	8:30	20:30			38-56	Y	12:00	12:00
386:59	11-Oct-08	9	Kit	20:30	21:30	20:30	21:30	38-56	N	1:00	
388:59	11-Oct-08	9	Kit	21:30	23:30			38-56	Y	2:00	2:00
402:59	12-Oct-08	9	Kit	9:30	23:30			34-52	Y	14:00	14:00
417:59	16-Oct-08	9	tom	8:30	23:30			36.75	Y	15:00	15:00
418:59	17-Oct-08	9		10:30	11:30	10:30	11:30	36.75	N	1:00	
430:59	17-Oct-08	9		11:30	23:30			36.75	Y	12:00	12:00
436:59	20-Oct-08	9	Rusty	7:30	13:30			39-59	Y	6:00	6:00
437:59	20-Oct-08	9	Rusty	13:30	14:30	12:30	13:30	39-59	N	1:00	
446:59	20-Oct-08	9	Rusty	14:30	23:30			39-59	Y	9:00	9:00
458:59	27-Oct-08	9	Rusty	7:30	19:30			37-57	Y	12:00	12:00
459:59	27-Oct-08	9	Rusty	19:30	20:30	19:30	20:30	37-57	N	1:00	
462:59	27-Oct-08	9	Rusty	20:30	23:30			37-57	Y	3:00	3:00
478:59	30-Oct-08	9	Rusty	7:30	23:30			31-47	Y	16:00	16:00
484:59	31-Oct-08	9		7:30	13:30			31-48	Y	6:00	6:00
485:59	31-Oct-08	9		13:30	14:30			31-49	N	1:00	
494:59	31-Oct-08	9	Kit	14:30	23:30	13:30	14:30	42.91	Y	9:00	9:00
509:59	1-Nov-08	9		8:30	23:30			31-40	Y	15:00	15:00
517:59	2-Nov-08	9	Kit	12:30	20:30			32-44	Y	8:00	8:00
518:59	2-Nov-08	8		20:30	21:30	20:30	21:40	32-44	N	1:00	
521:59	2-Nov-08	9		21:30	0:30			32-44	Y	3:00	3:00
532:59	8-Nov-08	9	Val	8:30	19:30			47-59	Y	11:00	11:00
533:59	8-Nov-08	7	Val	19:30	20:30	19:30	20:53	56.00	N	1:00	
535:59	8-Nov-08	9	val	20:30	22:30			54-59	Y	2:00	2:00
541:59	10-Nov-08	9	Val	7:30	13:30			48-65	Y	6:00	6:00
551:59	10-Nov-08	9	Val	13:30	23:30	12:30	23:30	48-65	N	10:00	
564:59	13-Nov-08	7	Rusty	10:30	23:30	10:30	23:30	42.38	N	13:00	
565:59	14-Nov-08	9	Rusty	7:30	8:30	7:30	8:42	34.00	N	1:00	
580:59	14-Nov-08	9	Rusty	8:30	23:30			34-46	Y	15:00	15:00
594:59	15-Nov-08	9	Rusty	9:30	23:30			47-57	Y	14:00	14:00
608:59	16-Nov-08	9	Rusty	9:30	23:30			51-63	Y	14:00	14:00
609:59	17-Nov-08	9	Kit	10:30	11:30			48.00	N	1:00	
619:59	17-Nov-08	9	Rusty	11:30	21:30			47-54	Y	10:00	10:00
621:59	20-Nov-08	7	Ted	13:30	15:30	13:30	15:30	44-60	N	2:00	
629:59	20-Nov-08	9	Ted	15:30	23:30			44-60	Y	8:00	8:00
631:59	21-Nov-08	9	Ted	10:30	12:30			44-61	N	2:00	
642:59	21-Nov-08	9	Ted	12:30	23:30	10:30	12:31	43-51	Y	11:00	11:00
643:59	22-Nov-08	7	Ted	9:30	10:30	9:39	10:40	42-52	N	1:00	
656:59	22-Nov-08	9	Ted	10:30	23:30			42-52	Y	13:00	13:00
670:59	23-Nov-08	7	Ted	9:30	23:30	9:29	23:45	44-54	N	14:00	
684:59	24-Nov-08	9	Rusty	9:30	23:30	9:30	23:30	38-50	N	14:00	
698:59	25-Nov-08	9	Rusty	9:30	23:30	9:30	23:30	48-60	N	14:00	
709:59	26-Nov-08	8	Rusty	10:30	21:30	10:30	21:30	59-72	N	11:00	
715:59	1-Dec-08	9	Ted	11:30	17:30	11:31	17:30	41-46	N	6:00	
718:59	1-Dec-08	7	Ted	20:30	23:30	20:30	23:31	47-55	N	3:00	
733:59	6-Dec-08	7	Kit	10:30	1:30	10:29	0:30	40-54	N	15:00	

Operating Reserve 2009
 Temporary Instances

Operating Reserve Curtailment Log

2003 Instances / Year = 95 MW Total (#7/8 & #8 Rec) Fee Must be dropped within 6 minutes

2009 Operating Reserve Instances Available	253	2009 Total Down Time	63:57	For A Refer to the "2003 Located in the ProVo
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Record Curtailment Instances Here	Date	Furnace	Power company Operator Name	Time Called	Time Off	Time Called Back	Time back on	Curtailment Time	Down Time Calculation
1	4-Jan-09	9	Rusty	2:02	2:02	2:30	3:14	0:28	1:12
2	25-Jan-09	7	kit	4:50	4:50	5:52	5:52	1:01	1:01
x	25-Jan-09	8	kit	4:51	4:51	5:52	5:52	1:00	1:00
3	31-Jan-09	9	Ted	14:48	14:49	15:00	15:10	0:11	0:21
4	12-Feb-09	7	Val	4:21	4:22	5:01	5:01	0:39	0:39
5	12-Feb-09	8	Kit	6:44	6:44	7:34	8:13	0:49	1:28
6	12-Feb-09	7	Kit	7:34	7:44	7:54	7:54	0:09	0:09
7	14-Feb-09	7	Kit	13:56	13:56	14:10	14:11	0:14	0:14
x	14-Feb-09	9	Kit	13:56	13:56	14:10	14:21	0:14	0:24
8	12-Mar-09	9	Val	16:58	17:02	17:49	17:50	0:46	0:48
9	23-Mar-09	7	Val	7:25	7:25	7:58	7:58	0:32	0:32
x	23-Mar-09	9	Val	7:25	7:25	7:43	7:46	0:17	0:21
10	14-Apr-09	9	Rusty	17:28	17:30	17:52	17:56	0:21	0:25
11	16-Apr-09	7	Val	13:36	13:36	14:53	14:54	1:16	1:17
x	16-Apr-09	9	Val	13:36	13:36	14:53	14:56	1:16	1:19
12	19-May-09	9	Tom	1:57	1:57	2:54	2:54	0:57	0:57
13	20-May-09	9	Rusty	9:10	9:10	9:55	9:55	0:45	0:45
14	20-May-09	8	Rusty	10:29	10:29	10:56	10:57	0:27	0:28
15	22-May-09	8	Val	15:20	15:20	15:50	15:50	0:30	0:30
x	22-May-09	9	Val	15:20	15:20	15:50	15:50	0:30	0:30
16	17-Jun-09	8	Rusty	12:47	12:48	13:12	13:14	0:24	0:26
17	23-Jun-09	8	Rusty	14:56	14:56	15:19	15:19	0:23	0:23
18	27-Jun-09	9	Rusty	0:35	0:35	0:57	0:57	0:22	0:22
x	27-Jun-09	8	Rusty	0:35	0:35	1:26	1:26	0:51	0:51
19	13-Jul-09	8	Val	22:18	22:18	22:29	22:29	0:10	0:10
20	19-Jul-09	8	Rusty	17:28	17:29	17:50	17:50	0:21	0:21
21	21-Jul-09	8	Val	5:50	5:51	5:54	5:54	0:03	0:03
22	23-Jul-09	8	Rusty	18:10	18:10	18:25	18:27	0:15	0:17
x	23-Jul-09	9	Rusty	18:10	18:10	18:25	18:39	0:15	0:29
23	30-Jul-09	8	VAL	16:20	16:21	16:49	16:50	0:28	0:29
24	3-Aug-09	8	ted	8:42	8:45	9:12	9:45	0:27	1:00
25	5-Aug-09	8	val	1:19	1:19	1:50	1:50	0:30	0:30
26	5-Aug-09	8	ted	16:12	16:12	16:51	16:51	0:39	0:38
27	11-Aug-09	8	Val	10:12	10:12	10:44	10:44	0:31	0:31
28	13-Aug-09	8	Tom	16:07	16:07	16:12	16:14	0:04	0:06
29	14-Aug-09	8	Val	23:09	23:09	23:49	23:50	0:40	0:40
30	4-Sep-09	7	Val	16:08	16:09	16:59	17:01	0:49	0:51
x	4-Sep-09	8	Val	16:09	16:09	16:59	17:06	0:50	0:57
31	6-Sep-09	7	Val	7:33	7:33	7:51	7:52	0:18	0:19
x	6-Sep-09	8	Val	7:33	7:33	7:51	7:51	0:18	0:18
32	17-Sep-09	7	Tom	13:48	13:48	14:02	14:08	0:14	0:20
x	26-Sep-09	8	Tom	9:09	9:09	21:21	21:21	12:12	12:12
33	3-Oct-09	8	Ted	7:20	7:20	7:49	8:15	0:28	0:54
34	3-Oct-09	8	Ted	17:06	17:06	17:50	17:50	0:43	0:43

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390:00	6-Dec-09	9	tom	20:30	23:30			41-60	y	3:00	0:00
406:00	7-Dec-09	9	Val	7:30	23:30			37-51	Y	16:00	0:00
422:00	7-Dec-09	9	Tom	7:30	23:30	9:30	10:37			16:00	1:07
438:00	8-Dec-09	9	Val	7:30	23:30	7:30	10:58	42-57	Y	16:00	3:28
450:00	9-Dec-09	9	Rusty	7:30	19:30			39-54	Y	12:00	0:00
451:00	9-Dec-09	9	Rusty	19:30	20:30	19:30	20:30	39-54	N	1:00	1:00
454:00	9-Dec-09	9	Rusty	20:30	23:30			39-54	Y	3:00	0:00
470:00	10-Dec-09	9	Rusty	7:30	23:30			38-53	Y	16:00	0:00
486:00	11-Dec-09	9	Val	7:30	23:30			42-58	Y	16:00	0:00
487:00	12-Dec-09	7	Val	7:30	8:30	7:29	8:35	50-55	N	1:00	1:05
502:00	12-Dec-09	9	Ted	8:30	23:30			51-65	Y	15:00	0:00
515:00	14-Dec-09	9	Tom	7:30	20:30			48-63	Y	13:00	0:00
517:00	15-Dec-09	9	Tom	7:30	9:30			55.00	Y	2:00	0:00
518:00	15-Dec-09	9	Rusty	9:30	10:30	9:30	10:30	55.00	N	1:00	1:00
520:00	15-Dec-09	9	Rusty	10:30	12:30			55.00	Y	2:00	0:00
527:00	15-Dec-09	9	Rusty	15:30	22:30			55.00	Y	7:00	0:00
529:00	16-Dec-09	9	Rusty	7:30	9:30			42-58	Y	2:00	0:00
530:00	16-Dec-09	9	Rusty	9:30	10:30	9:30	10:30	42-58	N	1:00	1:00
543:00	16-Dec-09	9	Rusty	10:30	23:30			42-58	Y	13:00	0:00
559:00	17-Dec-09	9	Ted	7:30	23:30			41-56	Y	16:00	0:00
565:00	18-Dec-09	8	Val	7:30	13:30			47.00	Y	6:00	0:00
574:00	18-Dec-09	9	Val	14:30	23:30			47.00	Y	9:00	0:00
590:00	19-Dec-09	9	Rusty	7:30	23:30			43-56	Y	16:00	0:00
593:00	20-Dec-09	9	Rusty	7:30	10:30			44-63	Y	3:00	0:00
594:00	20-Dec-09	9	Val	10:30	11:30	10:29	11:30	44-63	N	1:00	1:00
596:00	20-Dec-09	7	Val	11:30	13:30			44-63	Y	2:00	0:00
597:00	20-Dec-09	7	Val	13:30	14:30	14:29	15:31	44-63	N	1:00	1:02
606:00	20-Dec-09	9	Val	14:30	23:30			44-64	Y	9:00	0:00
622:00	21-Dec-09	9	Rusty	7:30	23:30			41-57	Y	16:00	0:00
624:00	22-Dec-09	9	Rusty	7:30	9:30	7:30	9:30	41-57	N	2:00	2:00
626:00	22-Dec-09	9	Rusty	9:30	11:30			40-55	Y	2:00	0:00
638:00	22-Dec-09	9	Rusty	11:30	23:30			41-57	Y	12:00	0:00
644:00	23-Dec-09	9	Val	7:30	13:30			40-55	Y	6:00	0:00
645:00	23-Dec-09	9	Val	13:30	14:30	13:30	14:30	42-58	N	1:00	1:00
654:00	23-Dec-09	9	Val	14:30	23:30			40-55	Y	9:00	0:00
660:00	24-Dec-09	9	Val	7:30	13:30			42-58	Y	6:00	0:00
662:00	24-Dec-09	9	Val	13:30	15:30	13:30	15:30	34-47	N	2:00	2:00
670:00	24-Dec-09	9	Val	15:30	23:30			42-58	Y	8:00	0:00
686:00	25-Dec-09	9	Val	7:30	23:30			34-47	Y	16:00	0:00
702:00	26-Dec-09	9	Ted	7:30	23:30			35-46	Y	16:00	0:00
717:00	27-Dec-09	9	Ted	7:30	22:30			36-52	Y	15:00	0:00
718:00	27-Dec-09	9	Ted	22:30	23:30	22:30	23:30	36-52	N	1:00	1:00
726:00	28-Dec-09	9	Ted	7:30	15:30			42-58	Y	8:00	0:00
727:00	28-Dec-09	9	Ted	15:30	16:30	15:30	16:46	44-62	N	1:00	1:16
734:00	28-Dec-09	9	Ted	16:30	23:30			42-58	Y	7:00	0:00
740:00	29-Dec-09	9	Ted	7:30	13:30			44-62	Y	6:00	0:00
741:00	29-Dec-09	7	Val	13:30	14:30	13:30	14:46	51-61	N	1:00	1:16
748:00	29-Dec-09	9	Ted	14:30	21:30			44-62	Y	7:00	0:00
750:00	29-Dec-09	7	Val	21:30	23:30	21:29	23:30	51-61	N	2:00	2:01
766:00	30-Dec-09	9	Val	7:30	23:30			45-64	Y	16:00	0:00
782:00	31-Dec-09	9	Val	7:30	23:30			42-50	Y	16:00	0:00
782:00										0:00	0:00
782:00										0:00	0:00

35	6-Oct-09	7	Rusty	15:06	15:06	15:44	15:45	0:38	0:39
36	12-Oct-09	7	Ted	11:52	11:55	12:38	12:50	0:43	0:55
x	12-Oct-09	8	Ted	11:52	11:55	12:38	12:50	0:43	0:55
37	13-Oct-09	7	Rusty	0:57	0:58	1:55	1:55	0:56	0:56
x	13-Oct-09	8	Rusty	0:57	0:58	1:55	1:55	0:56	0:56
38	21-Oct-09	8	Rusty	21:20	21:20	21:37	21:42	0:17	0:22
39	29-Oct-09	8	Rusty	13:10	13:10	13:46	13:46	0:35	0:35
x	4-Nov-09	7	Rusty	0:57	0:57	1:55	1:55	0:57	0:58
40	4-Nov-09	8	Rusty	0:57	0:57	1:55	1:55	0:57	0:58
41	16-Nov-09	7	Rusty	4:32	4:32	5:32	5:32	0:59	0:59
	16-Nov-09	8	Rusty	4:32	4:32	5:32	5:32	0:59	0:59
42	16-Nov-09	7	Rusty	5:32	5:32	5:56	5:56	0:23	0:24
	16-Nov-09	8	Rusty	5:32	5:32	5:56	5:56	0:24	0:24
43	16-Nov-09	7	Ted	16:33	16:34	16:42	16:50	0:07	0:15
	16-Nov-09	8	Ted	16:34	16:34	16:42	16:50	0:07	0:15
44	28-Nov-09	7	Val	19:28	19:37	19:48	19:49	0:11	0:12
45	8-Dec-09	9	Tom	8:25	8:30	9:07	9:07	0:37	0:37
46	10-Dec-09	7	Rusty	3:27	3:28	3:44	3:45	0:16	0:16
	10-Dec-09	8	Rusty	3:28	3:28	3:44	3:45	0:16	0:16
	15-Dec-09	7	Rusty	13:09	13:10	13:49	13:50	0:38	0:39
	15-Dec-09	8	Rusty	13:10	13:10	13:49	13:50	0:38	0:39
47	18-Dec-09	8	Val	13:21	13:21	13:59	14:53	0:37	1:31
	18-Dec-09	7	Val	13:21	13:22	13:59	14:00	0:36	0:37
								0:00	0:00
								0:00	0:00

b1

830 MAX

2002 11/01/09

Total Hours of Curtainment	Date	Furnace	Power company Operator Name	Curtainment Start Time (per FAX)	Curtainment Stop Time (per FAX)	Time Furnace was tripped	Time Furnace brought on	Buy-Through Rate Offered (mils)	Buy-Through Rate Accepted? Y/N	Curtainment Time Calculation	Down Time Calculation
10:00	10-Nov-09	9	Rusty	12:30	22:30			34.50	Y	10:00	0:00
23:00	11-Nov-09	9	Rusty	9:30	22:30			31-35	Y	13:00	0:00
24:00	12-Nov-09	9	Ted	7:30	8:30	7:30	8:30	32.00	N	1:00	0:59
39:00	12-Nov-09	9	Ted	8:30	23:30			32-45	Y	15:00	0:00
43:00	13-Nov-09	9	Ted	7:30	11:30			28-38	Y	4:00	0:00
44:00	13-Nov-09	9	Val	11:30	12:30	11:30	12:30	28.67	N	1:00	0:59
55:00	13-Nov-09	9	Val	12:30	23:30			28-38	Y	11:00	0:00
71:00	14-Nov-09	9	Rusty	7:30	23:30			27-36	Y	16:00	0:00
87:00	15-Nov-09	9	Rusty	7:30	23:30			28.25	Y	16:00	0:00
89:00	16-Nov-09	9	Rusty	7:30	9:30			28.25	Y	2:00	0:00
91:00	16-Nov-09	9	Ted	9:30	11:30	9:30	11:30	27-37	N	2:00	2:00
93:00	16-Nov-09	9	Ted	11:30	13:30			27-37	Y	2:00	0:00
95:00	16-Nov-09	9	Ted	13:30	15:30	13:30	15:30	27-37	N	2:00	2:00
103:00	16-Nov-09	9	Ted	15:30	23:30			27-37	Y	8:00	0:00
119:00	17-Nov-09	9	Ted	7:30	23:30			29-39	Y	16:00	0:00
132:00	18-Nov-09	9	Val	7:30	20:30			33-45	Y	13:00	0:00
133:00	18-Nov-09	9	Val	20:30	21:30	20:30	21:41	36.92	N	1:00	1:11
135:00	18-Nov-09	9	Val	21:30	23:30			33-45	Y	2:00	0:00
141:00	19-Nov-09	9	Tom	7:30	13:30			31-43	Y	6:00	0:00
142:00	19-Nov-09	9	Tom	13:30	14:30	13:29	14:32	32.01	N	1:00	1:02
147:00	19-Nov-09	9	Tom	14:30	19:30			31-36	Y	5:00	0:00
148:00	19-Nov-09	9	Val	19:30	20:30	19:30	20:30	35.97	N	1:00	1:00
151:00	19-Nov-09	9	Val	20:30	23:30			32-43	Y	3:00	0:00
152:00	20-Nov-09	9	Val	7:30	8:30	7:29	8:36	32.88	N	1:00	1:06
163:00	20-Nov-09	9	Tom	8:30	19:30			33-38	Y	11:00	0:00
164:00	20-Nov-09	9	Ted	19:30	20:30	19:30	20:30	27-33	N	1:00	0:59
167:00	20-Nov-09	9	Ted	20:30	23:30			33-44	Y	3:00	0:00
168:00	21-Nov-09	9	Ted	7:30	8:30	7:29	8:32	28.98	N	1:00	1:02
179:00	21-Nov-09	9	Tom	8:30	19:30			28-37	Y	11:00	0:00
180:00	21-Nov-09	9	Ted	19:30	20:30	19:28	20:29	34.97	N	1:00	1:01
183:00	21-Nov-09	9	Ted	20:30	23:30			31-37	Y	3:00	0:00
199:00	22-Nov-09	9	Ted	7:30	23:30			27-37	Y	16:00	0:00
200:00	23-Nov-09	9	Ted	7:30	8:30			30-41	Y	1:00	0:00
202:00	23-Nov-09	9	Val	8:30	10:30	8:30	10:30			2:00	2:00
205:00	23-Nov-09	9	Val	10:30	13:30					3:00	0:00
206:15	23-Nov-09	9	Val	13:30	14:45	13:30	14:45			1:15	1:15
215:00	23-Nov-09	9	Val	14:45	23:30					8:44	0:00
231:00	24-Nov-09	9	Ted	7:30	23:30			32-44	Y	16:00	0:00
247:00	25-Nov-09	9	Rusty	7:30	23:30			31-42	Y	16:00	0:00
250:00	26-Nov-09	9	Rusty	7:30	10:30			31-42	Y	3:00	0:00
251:00			tom	10:30	11:30	10:30	11:30		n	1:00	1:00
264:00			tom	10:30	23:30			31-42	Y	13:00	0:00
266:00	27-Nov-09	9	tom	7:30	9:30	7:30	9:47		n	2:00	2:17
280:00			tom	9:30	23:30			31-42	Y	14:00	0:00
296:00	28-Nov-09	9	Val	7:30	23:30			27-35	Y	16:00	0:00
312:00	29-Nov-09	9	Val	7:30	23:30			23-32	Y	16:00	0:00
318:00	30-Nov-09	9	Val	7:30	13:30			30.00	Y	6:00	0:00
320:00	30-Nov-09	9	tom	13:30	16:30				N	2:00	0:00
328:00	30-Nov-09	9	tom	15:30	23:30				Y	8:00	0:00
343:00	1-Dec-09	9	tom	7:30	22:30			34-44	Y	15:00	0:00
358:00	4-Dec-09	9	tom	7:30	22:30			34-44	Y	15:00	0:00
374:00	5-Dec-09	9	tom	7:30	23:30			36-47	Y	16:00	0:00
386:00	6-Dec-09	9	tom	7:30	19:30			41-60	Y	12:00	0:00
387:00	6-Dec-09	9	tom	19:30	20:30	19:30	21:35		n	1:00	2:05

OPERATING RESERVE 2010
 SYSTEM EMERGENCY

Operating Reserve Curtailment Log

138 Instances/Year @ 95 MW Total (77.8 @ 78 Hrs) @ 100% Must be dropped by
 2 Hours Maximum Per Curtailment, Max of 4 in any 4 hour period, Max of 25 for

"2010" Operating Reserve Instances Available 148	"2010" Total Down Time 52:27	For Ac Refer to the "2003" Located in the ProVo:
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Record Curtailment Instances Here	Date	Furnace	Power company Operator Name	Time Called	Time off	Time Called Back	Time back on	Curtailment Time	Down Time Calculation
1	26-Jan-10	7	Ted	11:54	11:54	12:47	12:50	0:53	0:56
X	26-Jan-10	8	Ted	11:54	11:54	12:47	12:51	0:53	0:57
2	27-Jan-10	7	Ted	11:52	11:52	12:50	12:56	0:57	1:04
X	27-Jan-10	9	Ted	11:52	11:52	12:50	12:52	0:57	0:59
3	5-Mar-10	7	Todd	10:14	10:14	10:54	10:54	0:40	0:40
X	5-Mar-10	8	Todd	10:14	10:14	10:54	10:55	0:40	0:40
4	5-Mar-10	7	Todd	17:52	17:52	18:43	18:46	0:50	0:53
X	5-Mar-10	9	Todd	17:52	17:52	18:43	18:59	0:51	1:06
5	16-Mar-10	7		10:47	10:47	11:47	11:47	0:59	1:00
x	16-Mar-10	8		10:47	10:47	11:46	11:46	0:58	0:58
6	18-Mar-10	9	Dave	16:26	16:26	16:57	16:57	0:30	0:30
7	30-Mar-10	7		13:48	13:48	14:48	14:49	0:59	1:00
x	30-Mar-10	8		13:49	13:50	14:48	14:48	0:57	0:57
8	31-Mar-10	7	Todd	12:24	12:27	12:55	13:16	0:28	0:49
x	31-Mar-10	8	Todd	12:24	12:27	12:55	12:56	0:28	0:29
9	26-Apr-10	7	Tom	11:06	11:06	11:57	12:00	0:50	0:53
x	26-Apr-10	8	Tom	11:06	11:06	11:57	12:00	0:50	0:53
10	30-Apr-10	9	Nick	4:49	4:49	5:14	5:15	0:25	0:26
x	30-Apr-10	7	Nick	4:49	4:49	5:14	5:15	0:25	0:26
11	2-May-10	7	Tom	1:32	1:32	1:59	1:59	0:26	0:26
x	2-May-10	8	Tom	1:32	1:33	1:59	1:59	0:26	0:26
12	4-May-10	7	Dave	23:14	23:14	0:24	0:24	1:09	1:09
x	4-May-10	8	Dave	23:14	23:14	0:15	0:15	1:00	1:00
13	6-May-10	7	Val	13:21	13:21	13:46	13:48	0:24	0:26
13	6-May-10	8	Val	13:21	13:21	13:46	13:50	0:24	0:28
14	9-May-10	9	Nick	0:58	0:58	1:53	1:53	0:54	0:54
x	9-May-10	8	Nick	1:00	1:00	1:53	1:53	0:53	0:53
15	20-May-10	7	Tom	8:08	8:09	8:19	8:19	0:10	0:10
X	20-May-10	9	Tom	8:08	8:09	8:19	8:19	0:10	0:10
16	26-May-10	7	Tom	10:09	10:09	10:24	10:32	0:14	0:22
X	26-May-10	8	Tom	10:09	10:09	10:24	10:43	0:14	0:34
17	5-Jun-10	7	Val	23:05	23:05	23:27	23:28	0:21	0:22
X	5-Jun-10	9	Val	23:05	23:06	23:27	0:11	0:21	1:05
18	7-Jun-10	7	Val	1:23	1:23	2:01	2:02	0:37	0:39
x	7-Jun-10	9	Val	1:23	1:23	2:01	2:45	0:38	1:22
19	18-Jul-10	7	Nick	16:58	16:59	17:59	17:59	0:59	0:59
x	18-Jul-10	8	Nick	16:58	16:59	17:59	17:59	0:59	0:59
20	18-Jul-10	7	Val	17:59	17:59	18:15	18:15	0:16	0:16
x	18-Jul-10	8	Val	17:59	17:59	18:15	18:15	0:16	0:16
21	20-Jul-10	7	Nick	17:16	17:17	18:04	18:04	0:47	0:47
x	20-Jul-10	8	Nick	17:16	17:17	18:04	18:04	0:47	0:47
22	20-Jul-10	7	Val	20:13	20:13	20:40	20:42	0:26	0:28
x	20-Jul-10	8	Val	20:13	20:14	20:40	20:40	0:26	0:26

x1

23	23-Jul-10	9	Dave	17:58	17:58	18:58	18:58	0:59	0:59
24	28-Jul-10	7	Dave	6:54	6:55	7:49	7:49	0:53	0:54
x	28-Jul-10	8	Dave	6:55	6:55	7:49	7:49	0:53	0:54
25	1-Aug-10	7	val	2:45	2:47	3:47	3:08	1:00	0:21
x	1-Aug-10	8	val	2:45	2:47	3:47	3:47	1:00	1:00
x	1-Aug-10	9	val	2:45	3:08	3:47	3:47	0:39	0:39
26	2-Aug-10	7	val	20:13	20:13	20:34	20:34	0:20	0:20
x	2-Aug-10	8	val	20:13	20:13	20:29	20:29	0:15	0:15
27	9-Aug-10	7	Nick	10:22	10:22	10:57	10:57	0:34	0:34
x	9-Aug-10	8	Nick	10:22	10:22	10:57	11:12	0:34	0:49
28	18-Aug-10	7	Ted	16:19	16:20	16:47	16:47	0:26	0:26
x	18-Aug-10	8	Ted	16:19	16:20	16:47	16:47	0:26	0:26
29	29-Aug-10	7	Dave	8:00	8:00	8:30	8:37	0:30	0:37
x	29-Aug-10	8	Dave	8:00	8:00	8:30	8:30	0:30	0:30
30	15-Sep-10	7	Dave	1:06	1:08	1:47	1:50	0:39	0:42
x	15-Sep-10	8	Dave	1:06	1:08	1:47	1:50	0:39	0:42
x	15-Sep-10	9	Dave	1:06	1:08	1:47	1:50	0:39	0:42
31	22-Sep-10	7	Ted	10:32	10:32	10:57	10:58	0:25	0:25
32	10-Oct-10	9	Tom	6:30	6:31	8:14	7:28	1:43	0:57
x	10-Oct-10	7	Tom	7:28	7:28	8:14	8:15	0:46	0:47
33	15-Oct-10	7	Dave	23:07	23:08	23:47	0:00	0:38	0:52
x	15-Oct-10	9	Dave	23:07	23:08	23:47	23:53	0:38	0:44
34	4-Nov-10	9	Dave	10:53	10:54	11:55	11:54	1:00	0:59
x	4-Nov-10	9	Dave	11:53	11:54	12:54	12:54	1:00	1:00
35	4-Nov-10	9	Dave	12:16	12:54	13:53	13:53	0:59	0:59
36	12-Nov-10	7	Tom	13:24	13:25	13:37	13:37	0:12	0:12
x	12-Nov-10	9	Tom	13:24	13:24	13:37	13:44	0:12	0:19
37	19-Nov-10	7	Tom	9:53	9:53	10:53	10:53	0:59	0:59
38	19-Nov-10	9	Tom	14:57	14:58	15:11	15:11	0:13	0:13
x	24-Nov-10	7	Tom	7:36	7:36	7:42	7:42	0:06	0:06
39	24-Nov-10	9	Tom	7:36	6:51	7:42	8:25	0:51	1:34
								0:00	0:00
								0:00	0:00

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850

0102
7/11/10
7/11/10

Total Hours of Curtailment	14-Aug-10	Furnace	Power Company Operator Name	Curtaiment Start time (per FAX)	Curtaiment Stop time (per FAX)	Time Furnace was tripped	Time Furnace brought on	Buy-Through Rate Offered (mils)	Buy-Through Rate Accepted? Y/N	Curtaiment Time Calculation	Down Time Calculation
12:00	9-Jul-10	9	Ted	11:30	23:30			38-45	Y	12:00	0:00
13:00	10-Jul-10	9	Ted	11:30	12:30			40.14	Y	1:00	0:00
14:10	10-Jul-10	8	Ted	12:30	13:40	12:30	13:40	37-38	N	1:10	1:10
16:00	10-Jul-10	9	Ted	13:40	15:30	13:40	15:30	38-51	N	1:50	1:49
24:00	10-Jul-10	9	Ted	16:30	23:30				Y	8:00	0:00
26:00	11-Jul-10	7	Ted	12:30	14:30	12:30	14:30	40.00	N	2:00	2:00
34:00	11-Jul-10	9	Ted	14:30	22:30			40-56	Y	8:00	0:00
35:00	11-Jul-10	9	Tom	22:30	23:30	22:30	23:31	2.04	N	1:00	1:01
36:00	12-Jul-10	9	Ted	9:30	10:30	9:30	10:32	42.67	N	1:00	1:02
49:00	12-Jul-10	9	Ted	10:30	23:30			37-51	Y	13:00	0:00
53:00	13-Jul-10	9	Ted	9:30	13:30			27-40	Y	4:00	0:00
54:00	13-Jul-10	9	Ted	13:30	14:30	13:30	14:39	44.46	N	1:00	1:09
63:00	13-Jul-10	9	Ted	14:30	23:30			35-57	Y	9:00	0:00
67:00	14-Jul-10	9	Ted	9:30	13:30			28-46	Y	4:00	0:00
68:00	14-Jul-10	8	Ted	13:30	14:30	13:30	14:31	43-46	N	1:00	1:01
77:00	14-Jul-10	9	Ted	14:30	23:30			52-60	Y	9:00	0:00
94:00	15-Jul-10	9	Tom	7:30	0:30			43.00	Y	17:00	0:00
100:00	16-Jul-10	9	Val	7:30	13:30			26-54	Y	6:00	0:00
101:00	16-Jul-10	9	Val	13:30	14:30	13:30	14:30	26-54	N	1:00	0:59
110:00	16-Jul-10	9	Nick	14:30	23:30			59.00	Y	9:00	0:00
111:00	17-Jul-10	9	Nick	9:30	10:30	9:29	10:31	47-76	N	1:00	1:01
124:00	17-Jul-10	9	Nick	10:30	23:30			36-76	Y	13:00	0:00
125:00	18-Jul-10	9	Nick	8:30	9:30	8:30	9:30	36-76	N	1:00	1:00
139:00	18-Jul-10	9	Nick	9:30	23:30			19.06	Y	14:00	0:00
140:00	19-Jul-10	9	Val	9:30	10:30	9:32	10:31	23-43	N	1:00	0:59
149:00	19-Jul-10	9	Val	10:30	19:30			35-73	Y	9:00	0:00
150:00	19-Jul-10	7	Val	19:30	20:30	19:31	20:30	35-73	N	1:00	0:58
153:00	19-Jul-10	9	Val	20:30	23:30			59.30	Y	3:00	0:00
167:00	20-Jul-10	9	Val	9:30	23:30			33-70	Y	14:00	0:00
174:00	21-Jul-10	7	Nick	9:30	16:30	9:30	16:30	33-61	N	7:00	6:59
181:00	21-Jul-10	9	Nick	16:30	23:30			66-69	Y	7:00	0:00
195:00	22-Jul-10	9	Val	9:30	23:30			33-70	Y	14:00	0:00
210:00	23-Jul-10	9	Ted	8:30	23:30			24-59	Y	15:00	0:00
226:00	24-Jul-10	9	Ted	7:30	23:30			24-58	Y	16:00	0:00
230:00	25-Jul-10	9	Ted	7:30	11:30			31-33	Y	4:00	0:00
231:00	25-Jul-10	9	Ted	11:30	12:30	11:29	12:41	32.74	N	1:00	1:11
233:00	25-Jul-10	9	Ted	12:30	14:30			32.00	Y	2:00	0:00
237:00	25-Jul-10	9	Ted	19:30	23:30			38-45	Y	4:00	0:00
238:00	26-Jul-10	9	Ted	8:30	9:30			25.50	Y	1:00	0:00
243:00	26-Jul-10	9	Ted	9:30	14:30	9:30	14:30	29-48	N	5:00	5:00
247:00	26-Jul-10	9	Dave	19:30	23:30			38-62	Y	4:00	0:00
248:00	27-Jul-10	9	Dave	12:30	13:30			44.89	Y	1:00	0:00
250:00	27-Jul-10	8	Dave	13:30	15:30	13:30	15:30	48-55	N	2:00	1:59
258:00	27-Jul-10	9	Dave	15:30	23:30			38-62	Y	8:00	0:00
269:00	28-Jul-10	9	Dave	12:30	23:30			38-63	Y	11:00	0:00
276:00	29-Jul-10	9	Dave	13:30	20:30			46-60	Y	7:00	0:00
277:00	29-Jul-10	9	Dave	22:30	23:30			59.54	Y	1:00	0:00
286:00	30-Jul-10	9	tom	12:30	21:30			45-62	Y	9:00	0:00
287:00	30-Jul-10	9		22:30	23:30			65.56	Y	1:00	0:00
288:00	30-Jul-10	7	Tom	14:30	15:30			57.53	Y	1:00	0:00
299:00	31-Jul-10	9	val	12:30	23:30			48-61.07	Y	11:00	0:00
300:00	2-Aug-10	9	val	12:30	13:30			45-60	Y	1:00	0:00
301:00	2-Aug-10	8	Tom	13:30	14:30	13:30	14:38	52.66	N	1:00	1:08
308:00	2-Aug-10	9	Tom	14:30	21:30			45-60	Y	7:00	0:00

309:00	2-Aug-10	9	Tom	22:30	23:30			66.00	Y	1:00	0:00
316:00	4-Aug-10	9	val	13:30	20:30			46-56	Y	7:00	0:00
317:00	4-Aug-10	9	val	22:30	23:30			61.00	Y	1:00	0:00
326:00	5-Aug-10	9	mick	12:30	21:30			45-60	y	9:00	0:00
327:00	5-Aug-10	9	mick	22:30	23:30			65.56	y	1:00	0:00
335:00	6-Aug-10	9	Dave	12:30	20:30			40-53	Y	8:00	0:00
336:00	6-Aug-10	9	Dave	19:30	20:30	19:30	20:30	44.00	N	1:00	1:00
337:00	6-Aug-10	9	Dave	22:30	23:30			58.00		1:00	0:00
345:00	7-Aug-10	9	Dave	12:30	20:30			39-52	Y	8:00	0:00
346:00	7-Aug-10	9	Dave	20:30	21:30	20:30	21:30	39.00	N	1:00	1:00
347:00	7-Aug-10	9	Dave	22:30	23:30	22:30	23:30	57.00	N	1:00	1:00
350:00	8-Aug-10	9	Nick	12:30	15:30	12:30	15:30	43-56	N	3:00	3:00
355:00	8-Aug-10	9	Nick	15:30	20:30			43-55	Y	5:00	0:00
356:00	8-Aug-10	9	Dave	22:30	23:30			53.00	Y	1:00	0:00
359:00	9-Aug-10	9	Nick	12:30	15:30	12:30	15:30	43-53	N	3:00	3:00
363:00	9-Aug-10	9	Nick	15:30	19:30			43-56	Y	4:00	0:00
364:00	9-Aug-10	7	Dave	19:30	20:30	19:30	20:31	43.00	N	1:00	1:01
365:00	9-Aug-10	9	Nick	22:30	23:30			62.00	Y	1:00	0:00
368:00	10-Aug-10	8	Dave	12:30	15:30	12:30	15:30	43-57	N	3:00	3:00
374:00	10-Aug-10	9	Dave	15:30	21:30			43-57	Y	6:00	0:00
375:00	10-Aug-10	9	Dave	22:30	23:30	22:30	23:31	62.95	N	1:00	1:00
376:00	10-Aug-10	9	Dave	12:30	13:30			43.00	Y	1:00	0:00
377:00	11-Aug-10	7	Nick	13:30	14:30	13:30	14:43	50.00	Y	1:00	1:13
384:00	11-Aug-10	9	Nick	14:30	21:30			43-57	Y	7:00	0:00
386:00	11-Aug-10	9	Nick	22:30	23:30			63.00	Y	1:00	0:00
394:00	12-Aug-10	9	Dave	12:30	21:30			44-58	Y	9:00	0:00
395:00	12-Aug-10	9	Dave	22:30	23:30			64.00	Y	1:00	0:00
404:00	13-Aug-10	9	ted	12:30	21:30			42-61	Y	9:00	0:00
415:00	14-Aug-10		ted	12:30	23:30			47-68	Y	11:00	0:00
421:00	15-Aug-10	9	ted	17:30	23:30			42-56	Y	6:00	0:00
432:00	16-Aug-10	9	ted	12:30	23:30			45-70	Y	11:00	0:00
433:00	16-Aug-10	9	ted	13:30	14:30	13:30	14:30	55.93	N	1:00	1:00
442:00	19-Aug-10	9	Nick	12:30	21:30			37-49	Y	9:00	0:00
443:00	19-Aug-10	9	Nick	22:30	23:30			54.00	Y	1:00	0:00
456:00	20-Aug-10	9	Nick	10:30	23:30			32-57	Y	13:00	0:00
457:00	20-Aug-10	9	val	21:30	22:30	21:30	22:30	37.59	N	1:00	0:59
468:00	21-Aug-10	9	val	12:30	23:30			44-63	Y	11:00	0:00
480:00	23-Aug-10	9	val	11:30	23:30			40-65	Y	12:00	0:00
481:00	23-Aug-10	9	val	20:30	21:30	20:30	21:30	45.06	N	1:00	1:00
481:00	24-Aug-10	9	val	9:30	11:30			42-88	Y	14:00	0:00
483:00	24-Aug-10	9	Nick	11:30	13:30	11:30	13:42	54-61	N	2:00	2:12
492:00	24-Aug-10	9	Nick	13:30	22:30					9:00	0:00
493:00	24-Aug-10	7	Val	22:30	23:30	22:29	1:28	88.66	N	1:00	#####
507:00	25-Aug-10	9	Val	9:30	23:30				Y	14:00	0:00
518:00	26-Aug-10	9	Val	10:30	21:30			42-52	Y	11:00	0:00
520:00	26-Aug-10	9	Ted	21:30	23:30	21:29	23:30	49-75	N	2:00	2:01
526:00	27-Aug-10	9	Ted	14:30	20:30			41-47	Y	6:00	0:00
527:00	27-Aug-10	9	Ted	22:30	23:30			52.00	Y	1:00	0:00
528:00	28-Aug-10	8	Dave	13:30	14:30	1:26	2:13	44.00	N	1:00	0:47
534:00	28-Aug-10	9	Ted	14:30	20:30			38-44	Y	6:00	0:00
535:00	28-Aug-10	9	Ted	22:30	23:30			48.00	Y	1:00	0:00
541:00	30-Aug-10	9	Ted	13:30	19:30			39-45	Y	6:00	0:00
542:00	30-Aug-10	9	Ted	22:30	23:30			49.00	Y	1:00	0:00
548:00	31-Aug-10	9	Ted	13:30	19:30			37-42	Y	6:00	0:00
549:00	31-Aug-10	8	Dave	15:30	16:30			42.00	N	1:00	0:00
556:00	1-Sep-10	9	Ted	13:30	20:30			38-43	Y	7:00	0:00
557:00	1-Sep-10	9	Ted	22:30	23:30			50.41	Y	1:00	0:00
558:00	2-Sep-10	8	Ted	13:30	14:30	13:29	14:50	37.62	N	1:00	1:20
563:00	2-Sep-10	9	Ted	14:30	19:30			47.00	Y	5:00	0:00

564:00	2-Sep-10	9	Ted	22:30	23:30			47:00		1:00	0:00
568:00	3-Sep-10	9	Val	14:30	18:30			37:38		4:00	0:00
569:00	3-Sep-10	9	Val	22:30	23:30			45:00		1:00	0:00
573:00	8-Sep-10	9	Tom	14:30	18:30			39:40		4:00	0:00
574:00	8-Sep-10	9	Tom	22:30	23:30			47:00		1:00	0:00
576:00	9-Sep-10	9	Val	15:30	17:30			40:00		2:00	0:00
577:00	9-Sep-10	9	Val	22:30	23:30			47:00		1:00	0:00
585:00	10-Sep-10	9	Nick	13:30	21:30			34:39		8:00	0:00
586:00	10-Sep-10	9	Nick	22:30	23:30			46:83		1:00	0:00
594:00	11-Sep-10	9	Dave	13:30	21:30			36:42		8:00	0:00
595:00	11-Sep-10	9	Dave	20:30	21:30	20:28	21:33	1:53		1:00	1:04
596:00	11-Sep-10	9	Dave	22:30	23:30			50:00		1:00	0:00
604:00	12-Sep-10	9	Nick	13:30	21:30			36:42		8:00	0:00
605:00	12-Sep-10	9	Nick	22:30	23:30			50:00		1:00	0:00
613:00	13-Sep-10	9	Dave	13:30	21:30			36:42		8:00	0:00
614:00	13-Sep-10	9	Dave	22:30	23:30			50:00		1:00	0:00
622:00	14-Sep-10	9	Dave	13:30	21:30			36:42		8:00	0:00
623:00	14-Sep-10	9	Dave	22:30	23:30			50:00		1:00	0:00
631:00	15-Sep-10	9	Dave	13:30	21:30			37:44		8:00	0:00
632:00	15-Sep-10	9	Dave	22:30	23:30			51:00		1:00	0:00
640:00	16-Sep-10	9	Dave	13:30	21:30			27:32		8:00	0:00
641:00	16-Sep-10	9	Dave	22:30	23:30			37:00		1:00	0:00
642:00	17-Sep-10	9	Ted	13:30	14:30			43:61		1:00	0:00
643:00	17-Sep-10	7	Ted	14:30	15:30	14:29	15:31	45:90		1:00	1:01
648:00	17-Sep-10	9	Ted	15:30	20:30			41:47		5:00	0:00
648:00										0:00	0:00
648:00										0:00	0:00