

2.3 Rate Design Study

Description of Tables in the Rates Analysis Model (RAM)

RDS_01 Total Allocated Power Revenue Requirement. Table summarizes cost allocations done in the COSA section of the Rates Analysis Model. This table also initiates the Rates Design Study (RDS) section of the Rates Analysis Model, which adjusts the allocated costs shown in this table to meet BPA's rate design objectives.

RDS_05 Average Cost of Nonfirm Energy. Table calculates the average cost of nonfirm energy. The calculation divides the forecasted BPA system costs associated with producing nonfirm energy by the total sales forecasted for the rate period. This amount is shown on the last line of this table. Residential Exchange Program resource costs and sales are not included in this calculation. Projected Trading Floor Sale and Contract Sales numbers come from *Bulk Power Marketing - PSB*; PF and IP sales forecasts are from *Eastern Power Business Area - PSE*.

RDS_06 Bonneville Average System Cost (BASC). Table calculates BASC. This amount is BPA's test period total revenue requirements divided by total power sales, both firm and nonfirm. Residential Exchange Program resource costs and sales are included in this calculation.

RDS_11 SP Revenue Recovery and Excess Revenue Credits. Table summarizes total excess revenue from secondary power sales and the total surplus firm power revenue recovery. Secondary sales data are from *Power Business Risk Management - PR*; FPS sales are forecasted by *Bulk Power Marketing - PSB*; Transmission costs are from *Transmission and Reserve Service - PST*.

RDS_12 Allocated Excess Revenue Credit-Generation. Table allocates excess revenue credit from table RDS_11 to PF, IP, NR, and FPS rate pools. The allocation is based on the service provided by the FBS and NR resources to these rate pools.

RDS_17 Surplus Firm Power Revenues Surplus/(Deficiency). Table calculates the firm surplus sale revenue surplus/deficiency. Generation revenue requirement costs allocated to FPS sales in table COSA_11 are reduced by the excess revenue credit allocated to FPS sales in table RDS_12. The resulting Total Allocated & Adjusted costs are compared with the revenues recovered from FPS sales from table RDS_11 resulting in a revenue deficit. This revenue deficit is allocated in table RDS_18.

RDS_18 Allocated Surplus Firm Power Revenues Surplus/(Deficiency). Table allocates the revenue deficit calculated in RDS_17 to PF, IP, and NR rate pools. The allocation is based on the service provided by the FBS and NR resources to these rate pools.

Description of Tables in the Rates Analysis Model (RAM)

RDS_19 Pre 7(c)(2) Allocated and Adjusted Energy Costs. Table shows the costs allocated to customer classes at this point in the modeling. COSA allocations are adjusted for the Excess Revenue Credit and the Surplus Revenue Surplus/Deficiency. These allocated and adjusted costs are used in RDS_20.

RDS_20 7(c)(2) Delta Initialization. Table calculates values to be used in the 7(c)(2) delta calculation. The 7(c)(2) delta is the difference between the costs allocated to the IP rate class at this point in the modeling and the expected revenues at rates applicable to the IP rate class. At this point in the model, the IP rate is determined by a link to the PF rate. This table calculates IP class revenues at PF rates and revenues at the DSI net margin. The 7(c)(2) delta is calculated by the formula shown in RDS_21 using the results of this table. DSI net margin value from *Power, Products Pricing and Rates -PSP*.

RDS_21 7(c)(2) Delta Calculation. Table solves a formula for calculating the 7(c)(2) delta appropriate for this point in the model.

RDS_22 Allocation of 7(c)(2) Delta. Table allocates the 7(c)(2) delta from RDS_21 to PF and NR rate classes based on allocation factors developed in EAF01_05.XLS.

RDS_23 Industrial Firm Power Floor Rate Calculation. The IP-83 rates are applied to the current DSI test period billing determinants to determine an average rate. Adjustments are made for Transmission, Exchange Cost, and Deferral to yield the DSI floor rate.

RDS_24 Industrial Firm Power Floor Rate Test. Table performs the DSI floor rate test and calculates the DSI floor rate adjustment if applicable. IP revenue under proposed rates is compared with revenue under the DSI floor rate. If DSI floor rate revenues are greater, a DSI floor rate adjustment is required. The amount of the DSI floor rate adjustment is then added to the IP allocated costs and subtracted from the other firm power rate pools allocated costs.

RDS_30 Calculation of 7(b)(2) Protection Amount. Table calculates the 7(b)(2) PF preference protection amount, based on the "7(b)(2) trigger" calculated in the 7(b)(2) rate test. The protection amount is the 7(b)(2) trigger in mills/kWh times the PF preference billing determinants.

RDS_31 Allocation of 7(b)(2) Protection Amount. Table allocates the 7(b)(2) protection amount from RDS_30 to PF Exchange, IP, and NR rate pools. Allocation is based on allocation factors developed in EAF01_05.XLS.

Description of Tables in the Rates Analysis Model (RAM)

RDS_32 Recalculation of 7(c)(2) Delta for 7(b)(2) Industrial Adjustment. Table recalculates IP revenues at the PF preference rate after the 7(b)(2) rate test. This table prepares values to be used in the 7(b)(2) Industrial Adjustment_7(c)(2) Delta Calculation table, RDS_33. The IP-PF link must be recalculated when the PF preference rate is reduced due to the 7(b)(2) rate test.

RDS_33 7(b)(2) Industrial Adjustment_7(c)(2) Delta Calculation. Table calculates the 7(b)(2) Industrial Adjustment_7(c)(2) Delta. The 7(b)(2) Industrial Adjustment_7(c)(2) Delta is the difference between the DSI allocated revenue requirement at this point in the modeling and the expected DSI revenues. Expected DSI revenues are; IP revenues at the PF preference rate; plus revenues at the DSI net margin; plus 7(b)(2) protection amount allocated to the IP class.

RDS_34 7(b)(2) Industrial Adjustment_7(c)(2) Delta Allocation. Table allocates the 7(b)(2) Industrial Adjustment_7(c)(2) Delta, calculated in RDS_33, to PF Exchange and NR rate pools based on allocation factors developed in EAF01_05.XLS.

RDS_34A 7(b)(2) Exchange Cost Adjustment Allocation. Table calculates the increase in the gross Residential Exchange Program cost resulting from the 7(b)(2) rate test and the concomitant increase in the PF Exchange Program rate. The increase is allocated to the PF Exchange and NR rate pools. The allocation is based on allocation factors developed in EAF01_05.XLS.

RDS_35 Priority Firm Preference Rate Schedule Charge Calculation. Table calculates the PF Preference rates, using the unbifurcated PF energy rates from RDS_50 and adjusting them for the 7(b)(2) credits, C&RD costs, LDD costs, and S&I Rate Mitigation costs.

RDS_36 Priority Firm Exchange Rate Schedule Charge Calculation. Table calculates the PF Exchange rates, using the unbifurcated PF energy rates from RDS_50 and adjusting for allocated 7(b)(2) costs.

RDS_40 Summary of COSA and Rate Design Adjustments. Table provides a summary of Rate Design Adjustments and their contras. This table shows where the costs went during the cost adjustment and from where the costs came.

RDS_41 Summary of COSA and Rate Design Adjustments. Table provides a summary of rate design adjustments, totaling information in RDS_40, and provides other adjustments to separate energy from generation demand, load variance and transmission.

RDS_50 Priority Firm Rate Schedule Charge Calculation. Table calculates unbifurcated PF rates. Marginal cost rates are scaled down to produce rates that recover costs allocated to PF energy.

Description of Tables in the Rates Analysis Model (RAM)

RDS_51 Industrial Firm Rate Schedule Charge Calculation. Table calculates IP rates. Marginal cost rates are scaled down to produce rates that recover costs allocated to IP energy.

RDS_52 New Resource Firm Rate Schedule Charge Calculation. Table calculates NR rates. Marginal cost rates are scaled down to produce rates that recover costs allocated to NR energy.

Routing: PSP

RATE DESIGN STUDY
Total Allocated Power Revenue Requirement
Test Period October 2001 - September 2006
(\$ Thousands)

RDS01

	A	B	C	D	E	F
	<u>Grand Total</u>	<u>Transmission Total</u>	<u>Generation Total</u>	<u>Annual Energy</u>	<u>Generation Demand</u>	<u>Load Variance</u>
1 CLASSES OF SERVICE						
2 Power Rates						
3 Priority Firm - Preference	5,821,014	559,266	5,261,747	4,317,232	720,569	223,945
4 Priority Firm - Exchange	6,923,401	-	1,691,185	1,254,897	212,342	-
5 Priority Firm Power Total	7,288,253	559,266	6,728,987	5,572,130	932,912	223,945
6 Industrial Firm Power	1,442,577	87,912	1,354,665	1,235,915	118,751	-
7 New Resources Firm Power	1,369	-	1,369	1,249	120	-
8 Surplus Firm Power	3,887,363	260,417	3,626,946	3,626,946	-	-
9 Nonfirm Energy	-	-	-	-	-	-
10 Sup/Ent Cap; Irr. Pump	3,059	-	3,059	3,059	-	-
11 Entitlement Capacity	-	-	-	-	-	-
12 Total	12,622,621	907,595	11,715,026	10,439,298	1,051,782	223,945
13 Other Power Services						
14 Montana Cap/Energy Exchange	-	-	-	-	-	-
15 Post-Act Exchanges	-	-	-	-	-	-
16 Colville Credit	23,000	-	23,000	23,000	-	-
17 '4(h)(10)(c)	457,935	-	457,935	457,935	-	-
18 FCCF	130,326	-	130,326	130,326	-	-
19 Net Transmission Services Costs	109,849	-	109,849	109,849	-	-
20 Total	721,110	-	721,110	721,110	-	-
21 Miscellaneous Revenue						
22 COE & USBR Project Revenues	40,500	-	40,500	40,500	-	-
23 Energy Efficiency Revenues	66,426	-	66,426	66,426	-	-
24 Property Trnfrs & Misc.	17,080	-	17,080	17,080	-	-
25 Total	124,006	-	124,006	124,006	-	-
26						
27 Grand Total	13,467,737	907,595	12,560,141	11,284,414	1,051,782	223,945

RATE DESIGN STUDY
Average Cost of Nonfirm Energy
Test Period October 2001 - September 2006

A

Total

1	Generation Costs (\$ Thousands)	
2	Federal Base System	9,155,495
3	New Resources	184,978
4	Exchange	
5	Conservation and ESB	752,744
6	BPA Programs	470,262
7	WNP-3 Settlement Plant	15,762
8	Total Generation Costs	10,579,240
9	Transmission Costs For Firm Power	907,595
10	Transmission Costs For Nonfirm Pwr	348,690
11	Total Costs	11,835,526
12		
13	Firm Power Sales (GWh)	
14	Priority Firm	190,208
15	Projected Displacement	
16	Industrial Power/Variable Industrial	43,386
17	Special Industrial Power	
18	New Resources	44
19	Surplus Firm Power - Contracts	126,113
20	Surplus Spot Market Sales	
21	Northwest	
22	Southwest	
23	Irrigation Pumping Power	662
24	Total Firm	360,413
25	Projected Trading Flr Sales	109,643
26	Interchange	
27	Total Sales	470,055
28		
29	Average Cost of Nonfirm (mills/kwh)	25.18

Routing: PSP

RATE DESIGN STUDY
Bonneville Average System Cost (BASC)
Test Period October 2001 - September 2006
(\$Thousands)

RDS06

A

1	Revenue Requirement:	
2	Cost of Service Analysis	13,468,323
3	7(b)(2) Exchange Cost Adj.	1,732
4	Total	13,470,056
5		
6	Sales (GWh)	
7	Firm Power	360,413
8	Residential Exchange	55,411
9	Nonfirm Energy	109,643
10		
11		0
12	Total	525,466
13		
14	Bonneville Average System Cost:	
15	(mills/kwh)	25.63

RATE DESIGN STUDY
SP Revenue Recovery and Excess Revenue Credit
Average of 50 Water Years
Test Period October 2001 - September 2006
(\$ Thousands)

	<u>FY</u> <u>2002</u>	<u>FY</u> <u>2003</u>	<u>FY</u> <u>2004</u>	<u>FY</u> <u>2005</u>	<u>FY</u> <u>2006</u>	<u>Study</u> <u>Total</u>
1 Surplus Power Revenue						
2						
3 FPS Contract-OTFAC PNW	110,179	107,282	98,598	98,187	83,327	497,573
4 FPS Contract-OTFAC PSW	258,921	234,856	186,253	174,131	170,377	1,024,538
5 FPS Sales to PNW	174,771	174,753	175,288	174,766	174,774	874,352
6 FPS Sales East& West Hubs	153,431	155,547	157,388	159,214	160,114	785,693
7 Total FPS Revenues	<u>697,302</u>	<u>672,438</u>	<u>617,527</u>	<u>606,298</u>	<u>588,592</u>	<u>3,182,156</u>
8						
9 FPS Pre-Subscription Adjust.	0	0	0	0	0	0
10 FPS Transmission Charges	43,712	47,560	56,479	56,333	56,333	260,417
11 FPS Generation Revenues	<u>653,590</u>	<u>624,878</u>	<u>561,048</u>	<u>549,965</u>	<u>532,259</u>	<u>2,921,739</u>
12						
13 Nonfirm Energy Revenues:						
14 Revenues PNW Sales	474,349	513,823	510,227	537,464	542,124	2,577,987
15 Revenues PSW Sales	0	0	0	0	0	0
16 Total NF Revenues	<u>474,349</u>	<u>513,823</u>	<u>510,227</u>	<u>537,464</u>	<u>542,124</u>	<u>2,577,987</u>
17						
18 NF Transmission Charges						
19 NF PNW Transmission Charges	79,637	73,146	66,574	64,552	64,781	348,690
20 NF PSW Transmission ET	0	0	0	0	0	0
21 Total NF Transmission ISA	0	0	0	0	0	0
22 Other Transmission	0	0	0	0	0	0
23 Total NF Transmission	<u>79,637</u>	<u>73,146</u>	<u>66,574</u>	<u>64,552</u>	<u>64,781</u>	<u>348,690</u>
24						
25 NF Generation Revenues	394,712	440,677	443,653	472,912	477,343	2,229,297
26						
27 Assured Delivery Mitigation						
28						
29 Total NF Excess Revenues	394,712	440,677	443,653	472,912	477,343	2,229,297

RATE DESIGN STUDY
Allocated Excess Revenue Credit-Generation
Test Period October 2001 - September 2006
(\$Thousands)

	A	B
	<u>aMW</u>	<u>Allocated Amount</u>
1 CLASSES OF SERVICE		
2 Power Rates		
3 Priority Firm - Preference	4,481	(1,176,399)
4 Priority Firm - Exchange	1,302	(341,946)
5 Priority Firm Power Total	5,783	(1,518,345)
6 Industrial Firm Power	686	(180,155)
7 Special Industrial Power		
8 New Resources Firm Power	1	(182)
9 Surplus Firm Contract-FAC		
10 Surplus Firm - Contract OTFAC	2,021	(530,615)
11 Surplus Firm Open Market		
12 Nonfirm Energy		
13 Supplemental Capacity		
14 Entitlement Capacity		
15 Total	8,491	(2,229,297)
16 Other Power Services		
17 Montana Cap/Energy Exchange		
18 Post-Act Exchanges		
19 Irrigation Pumping Power		
20 Interchange		
21 WNP-1 Exchange (Post OY-90)		
22 Unbundled Products & Services		
23 Total		
24 Grand Total	8,491	(2,229,297)

Routing: PSP

RATE DESIGN STUDY
Surplus Firm Power Revenue Surplus/(Deficiency)
Test Period October 2001 - September 2006
(\$Thousands)

RDS 17

	A
	Total
	Allocated
	<u>Costs</u>
1 Allocated Costs:	
2 Federal Base System	1,695,429
3 Exchange Costs	1,475,822
4 New Resources	119,374
5 Conservation	191,144
6 Other Generation	129,258
7 DSM Business Net Cost	15,920
8 Exchange Transmission	0
9 COSA Total	3,626,946
10 Adjustments:	
11 Excess Revenue Credit	(530,615)
12 WNP-3 Credit	
13 Transmission Rev Deficiencies	
14 Federal Trans Reallocation	
15 Federal Unbundled Reallocation	
16 Total Allocated & Adj. Costs	3,096,331
17	
18	
19 Recovered Costs	2,921,739
20	
21 Revenue Surplus/(Deficiency)	(174,592)

RATE DESIGN STUDY
Allocated Surplus Firm Power Revenue Surplus/(Deficiency)
Test Period October 2001 - September 2006
(\$Thousands)

	A	B
	<u>aMW</u>	<u>Allocated Amount</u>
1 CLASSES OF SERVICE		
2 Power Rates		
3 Priority Firm - Preference	4,481	120,911
4 Priority Firm - Exchange	1,302	35,145
5 Priority Firm Power	5,783	156,057
6 Industrial Firm Power	686	18,516
7 Special Industrial Power		
8 New Resources Firm Power	0.7	19
9 Surplus Firm Contract-FAC		
10 Surplus Firm - Contract OTFAC		
11 Surplus Firm Open Market		
12 Nonfirm Energy		
13 Supplemental Capacity		
14 Entitlement Capacity		
15 Total	6,470	174,592
16 Other Power Services		
17 Montana Cap/Energy Exchange		
18 Post-Act Exchanges		
19 Irrigation Pumping Power		
20 Interchange		
21 WNP-1 Exchange (Post OY-90)		
22 Unbundled Products & Services		
23 Total		
24 Grand Total	6,470	174,592

	COSA <u>Total</u>	WNP-3 Excess Rev Credit <u>Adjustment</u>	Nonfirm Excess Revenue <u>Credit</u>	SP Contractual Rev Surplus <u>Adjustment</u>	Pre 7(c)(2) Total Allocated & Adjusted <u>Costs</u>
1 CLASSES OF SERVICE					
2 Power Rates					
3 Priority Firm Power - Preference	4,317,232	0	(1,176,399)	120,911	3,261,745
4 Priority Firm Power - Exchange	1,254,897	0	(341,946)	35,145	948,097
5 Priority Firm Total	5,572,130	0	(1,518,345)	156,057	4,209,841
6 Industrial Firm Power	1,235,915	0	(180,155)	18,516	1,074,277
7 Special Industrial Power			0	0	0
8 New Resources Firm Power	1,249	0	(182)	19	1,085
9 Surplus Firm Contract-FAC			0	0	0
10 Surplus Firm - Contract OTFAC	3,626,946	0	(530,615)	0	3,096,331
11 Surplus Firm Open Market			0	0	0
12 Nonfirm Energy			0	0	0
13 Supplemental Capacity	3,059		0	0	3,059
14 Entitlement Capacity	0		0	0	0
15 Total	10,439,298	0	(2,229,297)	174,592	8,384,593
16 Other Power Services					
17 Montana Cap/Energy Exchange					0
18 Post-Act Exchanges					0
19 Colville Credit	23,000				23,000
20 '4(h)(10)(c)	457,935				457,935
21 FCCF	130,326				130,326
22 Net Transmission Services Costs	109,849				109,849
23 Total	721,110	0	0	0	721,110
24 Miscellaneous Revenue					
25 COE & USBR Project Revenues	40,500				40,500
26 Energy Efficiency Revenues	66,426				66,426
27 Other Miscellaneous Revenue	17,080				17,080
28 Total	124,006	0	0	0	124,006
29 Grand Total	11,284,414	0	(2,229,297)	174,592	9,229,709

A

1 IP Allocated Costs	1,280,939
2 IP Revenues @ Net Margin	18,222
3 IP Trans, Demand & Unbundled Revenues	206,663
4 IP Marginal Cost Rate Revenues	1,278,484
5 PF Marginal Cost Rate Revenues	7,394,019
6 PF Allocated Energy Costs	4,209,841
7 Numerator: 1-2-3-((4/5)*6)	328,140
8	0
9 PF Allocation Factor for Delta	5,783
10 NR Allocation Factor for Delta	1
11 Total Allocation Factors for Delta	5,784
12 Denominator: 1.0 + ((9/11)*(4/5))	1
13	
14 DELTA: (7/12)	279,771

$$\text{DELTA} = \frac{(\text{DSI Allocated Cost} - \text{Net Margin Rev.} - \text{Demand Rev.}) - \frac{(\text{DSI Marginal Rate Revenues})}{(\text{PF Marginal Rate Revenues})} \times \text{PF Allocated Costs}}{1 + \frac{\text{PF Allocation Factors}}{\text{PF} + \text{NR Allocation Fctrs}} \times \frac{\text{DSI Marginal Cost Rate Revenues}}{\text{PF Marginal Cost Rate Revenues}}}$$

	<u>Avg</u> <u>MW</u>	<u>Allocated</u> <u>Amount</u>
1 CLASSES OF SERVICE		
2 Power Rates		
3 Priority Firm - Preference	4,481	216,738
4 Priority Firm - Exchange	1,302	63,000
5 Priority Firm Power	5,783	279,738
6 Industrial Firm Power		(279,771)
7 Special Industrial Power		
8 New Resources Firm Power	1	34
9 Surplus Firm Contract-FAC		
10 Surplus Firm - Contract OTFAC		
11 Surplus Firm Open Market		
12 Nonfirm Energy		
13 Supplemental Capacity		
14 Entitlement Capacity		
15 Total	5,784	0
16 Other Power Services		
17 Montana Cap/Energy Exchange		
18 Post-Act Exchanges		
19 Irrigation Pumping Power		
20 Interchange		
21 WNP-1 Exchange (Post OY-90)		
22 Unbundled Products & Services		
23 Total		
24 Grand Total	5,784	0

Allocation Factors are Federal Base System and NR

RATE DESIGN STUDY
Industrial Firm Power Floor Rate Calculation
Test Period October 2001 - September 2006
(\$ Thousands)

	A	B	C	D	E	F
	DEMAND		ENERGY		Customer	Total/
	<u>Winter</u> (Dec-Apr)	<u>Summer</u> (May-Nov)	<u>Winter</u> (Sep-Mar)	<u>Summer</u> (Apr-Aug)	<u>Charge</u>	<u>Average</u>
1 IP Billing Determinants	24,750	34,650	25,214	18,171	59,400	43,386
2 IP-83 Rates	4.62	2.21	14.70	12.20	7.34	0.00
3 Revenue	114,345	76,577	370,650	221,692	435,996	1,219,260
4						
5 Exchange Adj Clause for OY 1985						
6 New ASC Effective Jul 1, 1984						
7 Actual Total Exchange Cost (AEC)	938,442					
8 Actual Exchange Revenue (AER)	772,029					
9 Forecasted Exchange Cost (FEC)	1,088,690					
10 Forecasted Exchange Revenue (FER)	809,201					
11 Total Under/Over-recovery (TAR)						
12 (TAR=(AEC-AER)-(FEC-FER))	(113,076)					
13 Exchange Cost Percentage for IP (ECP)	1					
14 Rebate or Surcharge for IP (CCEA=TAR*ECP)	(58,913)					
15 OY 1985 IP Billing Determinants	24,368					
16						
17 OY 1985 DSI Transmission Costs	92,960					
18						
19 Adjustment for Transmission Costs	(3.81)					
20 Adjustment for the Exchange (mills/kWh)	(2.42)					
21 Adjustment for the Deferral (mills/kWh)	(0.90)					
22 IP-83 Average Rate (mills/kWh)	28.10					
23 Floor Rate (mills/kWh)	20.98					

- 1 Demand billing determinants are the test period DSI load expressed in noncoincidental demand MWs.
- 15 Billing determinants as forecast in the 1983 Rate Case Final Proposal (WP-83-FS-BPA-07, p. 82).
- 17 Transmission Costs as forecast in the 1983 Rate Case Final Proposal (WP-83-FS-BPA-07, p. 80).
- 19 Line 17 / Line 15
- 20 Line 14 / Line 15
- 21 1985 Final Rate Proposal (WP-85-FS-BPA-08A, p. 15).
- 22 Line 3, Col F / Line 1, Col F
- 23 IP-83 Avg Rate adjusted for the effects of the Exchange and Deferral, Lines 19 + 20 + 21 + 22

RATE DESIGN STUDY
Industrial Firm Power Floor Rate Test
Test Period October 2001 - September 2006
(\$ Thousands)

	A	B	C	D	E	F
	Unbundled	Transmission	Generation	Energy		Average
	<u>Requirements</u>	<u>Total</u>	<u>Demand</u>	<u>Total</u>	<u>Total</u>	<u>Rate</u>
	<u>Products</u>		<u>Total</u>	<u>Total</u>		
1 IP Billing Determinants				43,386		
2 Floor Rate (mills/kWh)				20.98		
3 Value of Reserves Credit (mills/kWh)						
4 Revenue at Floor Rate Less VOR Credit				910,022	910,022	20.98
5 IP Revenue Under Proposed Rates	0	0	118,751	952,269	1,071,020	24.69
6 Difference					0	

6 Line 4 - Line 5. If difference is negative, Floor Rate does not trigger and difference is set to zero.

Routing: PSP

RATE DESIGN STUDY
Calculation of 7(b)(2) Protection Amount
Test Period October 2001 - September 2006
(\$Thousands)

RDS 30

	A	B	C
	<u>Mills/KWH</u>	Energy <u>GWH</u>	Amount <u>(\$ 000)</u>
1 7(b)(2) Protection from			
2 7(b)(2) Study	3.4		
3 PF Preference Energy Billing Determinants		190,208	
4			
5 PF Preference Protection Amount			646,708

Routing: PSP

RATE DESIGN STUDY
Allocation of 7(b)(2) Protection Amount
Test Period October 2001 - September 2006
(\$Thousands)

RDS 31

	A	B
	Allocation Factor	Allocated Amount
		<u>(\$ 000)</u>
1 CLASSES OF SERVICE		
2 Power Rates		
3 Priority Firm Power (Preference)		(646,708)
4 Priority Firm Power (Exchange)	1,302	362,838
5 Industrial Firm Power	1,018	283,583
6 Special Industrial Power		
7 New Resources Firm Power	1	287
8 Surplus Firm Contract-FAC		
9 Surplus Firm - Contract OTFAC		
10 Surplus Firm Open Market		
11 Nonfirm Energy		
12 Supplemental Capacity		
13 Entitlement Capacity		
14 Total	2,321	0
15 Other Power Services		
16 Montana Cap/Energy Exchange		
17 Post-Act Exchanges		
18 Irrigation Pumping Power		
19 Interchange		
20 WNP-1 Exchange (Post OY-90)		
21 Unbundled Products & Services		
22 Total		
23 Grand Total	2,321	0

RATE DESIGN STUDY
7(b)(2) Industrial Adjustment 7(C)(2) Delta Calculation
Test Period October 2001 - September 2006
(\$Thousands)

Delta = DSI Allocated Revenue Requirement - DSI Revenues

DSI Allocated Revenue Requirement = Allocated Costs after 7(c)(2) Adjustment + DSI Share of 7(b)(2) Amt

DSI Revenues = Revenues at PF Preference rate + Revenues at Margin + DSI Share of 7(b)(2) Amount

	A
	Amount (\$ 000)
1 DSI Allocated Revenue Requirement	
2 after 7(c)(2) Adjustment	794,505
3 DSI Share of 7(b)(2) Adjustment	283,583
4	0
5 Total DSI Revenue Requirement	1,078,088
6	
7 DSI Revenues at PF Preference Rate	628,772
8 Revenues at Net Margin	18,222
9 DSI Share of 7(b)(2) Adjustment	283,583
10	0
11 Total DSI Revenues	930,577
12	
13 Delta (5 - 11)	147,512

RATE DESIGN STUDY
7(b)(2) Industrial Adjustment 7(C)(2) Delta Allocation
Test Period October 2001 - September 2006
(\$Thousands)

	A	B
	Annual Energy <u>AMW</u>	Allocated <u>Amount</u>
1 CLASSES OF SERVICE		
2 Power Rates		
3 Priority Firm Power Preference		
4 Priority Firm Power Exchange	1,302	147,395
5 Priority Firm Total		
6 Industrial Firm Power		-
7 Special Industrial Power		-
8 New Resources Firm Power	1	116
9 Surplus Firm Contract-FAC		-
10 Surplus Firm - Contract OTFAC		-
11 Surplus Firm Open Market		-
12 Nonfirm Energy		-
13 Supplemental Capacity		-
14 Entitlement Capacity		-
15 Total	1,303	147,512
16 Other Power Services		
17 Montana Cap/Energy Exchange		
18 Post-Act Exchanges		
19 Irrigation Pumping Power		
20 Interchange		
21 WNP-1 Exchange (Post OY-90)		
22 Unbundled Products & Services		
23 Total		
24 Miscellaneous Revenue		
25 COE & USBR Project Revenues		
26 Operations & Maintenance		
27 Energy Efficiency Revenues		
28 Total		
29 Grand Total	1,303	147,512

RATE DESIGN STUDY
7(b)(2) Exchange Cost Adjustment Allocation
Test Period October 2001 - September 2006
(\$Thousands)

1	Gross Exchange Costs W/O 7(b)(2)		2,234,426	
2	Gross Exchange Costs With 7(b)(2)		2,236,158	
3	Increase in Gross Exchange Costs		1,732	
4				
5				
6		Allocation		Allocated
7		<u>Factor</u>		<u>Amount</u>
8	CLASSES OF SERVICE			
9	Power Rates			
10	Priority Firm Power Preference			
11	Priority Firm Power Exchange	1,302		1,731
12	Priority Firm Total			
13	Industrial Firm Power			
14	Special Industrial Power			
15	New Resources Firm Power	1		1
16	Surplus Firm Contract-FAC			
17	Surplus Firm - Contract OTFAC			
18	Surplus Firm Open Market			
19	Nonfirm Energy			
20	Supplemental Capacity			
21	Entitlement Capacity			
22	Total	1,303		1,732
23	Other Power Services			
24	Montana Cap/Energy Exchange			
25	Post-Act Exchanges			
26	Irrigation Pumping Power			
27	Interchange			
28	WNP-1 Exchange (Post OY-90)			
29	Unbundled Products & Services			
30	Total			
31	Miscellaneous Revenue			
32	COE & USBR Project Revenues			
33	Energy Efficiency Revenues			
34	Other Miscellaneous Revenue			
35	Total			
36	Grand Total	1,303		1,732

RATE DESIGN STUDY
Priority Firm Exchange Rate Schedule Charge Calculation
Test Period October 2001 - September 2006
(\$Thousands)

PRIORITY FIRM EXCHANGE RATE ENERGY

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total HLH	Total HLH+LLH
1 Billing Determinants (GWH)	2,549	3,113	3,729	3,717	3,139	3,085	2,755	2,535	2,443	2,506	2,733	2,524	34,830	55,411
2 PF Energy Charges (unbifurcated)	17.15	22.93	23.59	21.04	19.48	17.72	14.03	13.98	17.33	22.56	33.05	23.89		
3 PF Exchange Base Energy Revenues	43,715	71,401	87,968	78,202	61,153	54,668	38,666	35,436	42,334	56,534	90,311	60,298	720,686	1,017,679
4 7(b)(2) Adj. Allocated to PF Exchange	15,586	25,457	31,364	27,882	21,803	19,491	13,786	12,634	15,094	20,156	32,199	21,498	256,950	362,838
5 7(b)(2) Indust Adj Alloc. to PF Exchange	6,331	10,341	12,741	11,326	8,857	7,918	5,600	5,132	6,131	8,188	13,080	8,733	104,380	147,395
6 7(b)(2) Exch Cost Adj. Alloc to PF Exch	74	121	150	133	104	93	66	60	72	96	154	103	1,226	1,731
7 Total PF Exchange After 7(b)(2) Adjustments	65,707	107,321	132,222	117,544	91,917	82,170	58,117	53,263	63,631	84,974	135,744	90,632	1,083,241	1,529,643
8 Unbundled Reqmts Not in Energy Charge	2,802	4,577	5,639	5,013	3,920	3,505	2,479	2,272	2,714	3,624	5,789	3,865	46,200	65,239
9 Total PF Exchange Energy Revenue Reqmt	68,509	111,898	137,861	122,557	95,837	85,674	60,596	55,535	66,345	88,599	141,533	94,497	1,129,442	1,594,883
10 PF Exchange Energy Rate	26.88	35.94	36.97	32.97	30.53	27.77	21.99	21.91	27.16	35.35	51.79	37.43		
11														
12 Weighted Average PF Exchange Energy Rate	24.18	33.45	33.95	29.22	27.18	24.53	19.47	18.30	22.84	31.34	44.27	35.08		

14 **Effective Demand Charge**

3.799

15 **PRIORITY FIRM EXCHANGE RATE DEMAND**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	annual
16 Monthly Coincidental Peak MW	7,656	9,501	10,916	11,521	10,630	9,266	8,387	7,734	7,316	7,323	7,639	7,574	105,464
17 Adjusted Marginal Cost \$/KW/Mo	1.76	2.31	2.31	2.16	2.03	1.82	1.45	1.43	1.79	2.31	2.31	2.31	2.01
18 Demand Revenues (\$ Thousands)	\$ 13,475	\$ 21,948	\$ 25,215	\$ 24,886	\$ 21,579	\$ 16,864	\$ 12,161	\$ 11,060	\$ 13,095	\$ 16,917	\$ 17,645	\$ 17,496	\$ 212,342

21 **LLH**

22 **PRIORITY FIRM EXCHANGE RATE ENERGY**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total LLH
24 Billing Determinants (GWH)	1,555	1,805	2,110	2,447	1,998	1,872	1,587	1,603	1,355	1,442	1,393	1,415	20,581
25 PF Energy Charges (unbifurcated)	12.60	18.60	18.26	15.00	13.99	12.25	9.62	8.04	9.61	15.56	18.82	19.70	
26 PF Exchange Base Energy Revenues	19,589	33,582	38,528	36,714	27,951	22,939	15,271	12,887	13,011	22,429	26,212	27,881	296,993
27 7(b)(2) Adj. Allocated to PF Exchange	6,984	11,973	13,737	13,090	9,966	8,179	5,445	4,594	4,639	7,997	9,346	9,940	105,889
28 7(b)(2) Indust Adj Alloc. to PF Exchange	2,837	4,864	5,580	5,317	4,048	3,322	2,212	1,866	1,884	3,248	3,796	4,038	43,015
29 7(b)(2) Exch Cost Adj. Alloc to PF Exch	33	57	66	62	48	39	26	22	22	38	45	47	505
30 Total PF Exchange After 7(b)(2) Adjustments	29,444	50,476	57,910	55,183	42,013	34,479	22,953	19,369	19,557	33,712	39,399	41,907	446,402
31 Unbundled Reqmts Not in Energy Charge	1,256	2,153	2,470	2,354	1,792	1,471	979	826	834	1,438	1,680	1,787	19,039
32 Total PF Exchange Energy Revenue Reqmt	30,700	52,628	60,380	57,537	43,805	35,950	23,932	20,195	20,391	35,150	41,079	43,694	465,441
33 PF Exchange Energy Rate	19.75	29.16	28.61	23.51	21.92	19.20	15.08	12.60	15.05	24.38	29.50	30.87	

41 **PRIORITY FIRM EXCHANGE TRANSMISSION**

	Network	Point to Point	Delivery	Load Regulation Charge Revenue	Total Costs
42 Billing Determinants:	MCP MWs	Ctrct Demand	MCP MWs		
43 Quantity	111,792				
44 Rate (From TRDS)	1.480				
45 Transmission Revenues	165,452			22,834	188,285

48 **PRIORITY FIRM EXCHANGE AVERAGE RATE**

	Cost Component	Contribution Per KWH
49 Energy Costs	1,594,883	28.78
50 Demand Costs	212,342	3.83
51 Transmission Costs	188,285	3.40
52 Unbundled Reqmts Costs	0	0.00
53 Total Costs	1,995,510	36.01
54		
55 Energy Billing Determinants Total GWH	55,411	
56		
57 Average PF Exchange Rate	36.01	

RATE DESIGN STUDY
Summary of COSA and Rate Design Adjustments
Test Period October 2001 - September 2006
(\$ Thousands)

	A	B	C	D	E	F	G
	<u>COSA</u> <u>Results</u>	WNP-3 Excess Revenue Credit Adjustment <u>Amount</u>	<u>Contra</u>	Nonfirm Excess Revenue Credit Adjustment <u>Amount</u>	<u>Contra</u>	SP Contractual Revenue Surplus Adjustment <u>Amount</u>	<u>Contra</u>
1 CLASSES OF SERVICE							
2 Power Rates							
3 Priority Firm - Preference	4,317,232			(1,176,399)		120,911	
4 Priority Firm - Exchange	1,254,897			(341,946)		35,145	
5 Priority Firm Total	5,572,130			(1,518,345)		156,057	
6 Industrial Firm	1,235,915			(180,155)		18,516	
7 New Resource Firm	1,249			(182)		19	
8 Surplus Firm Contract-FAC							
9 Surplus Firm Contract-OTFAC	3,626,946			(530,615)			(174,592)
10 Surplus Firm Open Market							
11 Nonfirm Energy					2,229,297		
12 Supplemental Capacity	3,059						
13 Entitlement Capacity	0						
14 Total	10,439,298			(2,229,297)	2,229,297	174,592	(174,592)
15 Other Power Services							
16 Montana Cap/Enr Exchange							
17 Post-Act Exchange							
18 Colville Credit	23,000						
19 '4(h)(10)(c)	457,935						
20 FCCF	130,326						
21 Net Transmission Services Costs	109,849						
22 Total	721,110						
23 Miscellaneous Revenue							
24 COE & USBR Proj. Revenues	40,500						
25 Energy Efficiency Revenues	66,426						
26 Other Misc Revenue	17,080						
27 Total	124,006						
28							
29 Grand Total	11,284,414			(2,229,297)	2,229,297	174,592	(174,592)

RATE DESIGN STUDY
Summary of COSA and Rate Design Adjustments
Test Period October 2001 - September 2006
 (\$ Thousands)

	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
	7(c)(2) Delta Adjustment		7(c)(2) Floor Rate Adjustment		7(b)(2) Adjustment		7(b)(2) Industrial Adjustment		7(b)(2) Exchange Cost Adjustment		Total Allocated and Adjusted Costs		Grand Total	Grand Total
	Amount	Contra	Amount	Contra	Amount	Contra	Amount	Contra	Amount	Contra	Amount	Contra	Total	w/o 7(b)(2)
1 CLASSES OF SERVICE														
2 Power Rates														
3 Priority Firm - Preference	216,738				(646,708)						2,831,775	-	2,831,775	3,478,483
4 Priority Firm - Exchange	63,000				362,838		147,395		1,731		1,523,061	-	1,523,061	1,011,096
5 Priority Firm Total	279,738				(283,869)		147,395		1,731		4,354,836	-	4,354,836	4,489,579
6 Industrial Firm		(279,771)			283,583		(147,512)				1,210,348	(279,771)	930,577	794,505
7 New Resource Firm	34				287		116		1		1,523	-	1,523	1,119
8 Surplus Firm Contract-FAC											-	-	-	-
9 Surplus Firm Contract-OTFAC											3,096,331	(174,592)	2,921,739	2,921,739
10 Surplus Firm Open Market											-	-	-	-
11 Nonfirm Energy											-	2,229,297	2,229,297	2,229,297
12 Supplemental Capacity											3,059	-	3,059	3,059
13 Entitlement Capacity											-	-	-	-
14 Total	279,771	(279,771)			0		0		1,732		8,666,097	1,774,933	10,441,031	10,439,298
15 Other Power Services														
16 Montana Cap/Enr Exchange											-	-	-	-
17 Post-Act Exchange											-	-	-	-
18 Colville Credit											23,000	-	23,000	-
19 '4(h)(10)(c)											457,935	-	457,935	-
20 FCCF											130,326	-	130,326	-
21 Net Transmission Services Costs											109,849	-	109,849	-
22 Total	-	-			-		-		-		721,110	-	721,110	-
23 Miscellaneous Revenue														
24 COE & USBR Proj. Revenues											40,500	-	40,500	-
25 Energy Efficiency Revenue											66,426	-	66,426	-
26 Other Misc Revenue											17,080	-	17,080	-
27 Total	-	-			-		-		-		124,006	-	124,006	-
28														
29 Grand Total	279,771	(279,771)			0		0		1,732		9,511,213	1,774,933	11,286,146	

RATE DESIGN STUDY
Summary of COSA and Rate Design Adjustments
Test Period October 2001 - September 2006
(\$ Thousands)

	A	B	C	D	E	F	G	H
	Grand <u>Total</u>	<u>Energy</u>	Rate Design <u>Contra</u>	Total <u>Energy</u>	Generation <u>Demand</u>	Load <u>Variance</u>	Total <u>Generation</u>	Total <u>Transmission</u>
1 CLASSES OF SERVICE								
2 Power Rates								
3 Priority Firm Preference	4,335,556	2,831,775	-	2,831,775	720,569	223,945	3,776,290	559,266
4 Priority Firm Exchange	1,735,403	1,523,061		1,523,061	212,342		1,735,403	-
5 Priority Firm Total	6,070,959	4,354,836		4,354,836	932,912	223,945	5,511,693	559,266
6 Industrial Firm	1,137,239	1,210,348	(279,771)	930,577	118,751	-	1,049,327	87,912
7 New Resource Firm	1,643	1,523	-	1,523	120		1,643	-
8 Surplus Firm Contract-FAC	-	-	-	-		-	-	-
9 Surplus Firm Contract-OTFAC	3,182,156	3,096,331	(174,592)	2,921,739			2,921,739	260,417
10 Surplus Firm Open Market	-	-	-	-			-	-
11 Nonfirm Energy	2,577,987	-	2,229,297	2,229,297			2,229,297	348,690
12 Supplemental Capacity	3,059	3,059	-	3,059			3,059	-
13 Entitlement Capacity	-	-	-	-			-	-
14 Total	12,973,044	8,666,097	1,774,933	10,441,031	1,051,782	223,945	11,716,758	1,256,285
15 Other Power Services								
16 Montana Cap/Enr Exchange	-	-	-	-			-	-
17 Post-Act Exchange	-	-	-	-			-	-
18 Colville Credit	23,000	23,000	-	23,000			23,000	-
19 '4(h)(10)(c)	457,935	457,935	-	457,935			457,935	-
20 FCCF	130,326	130,326	-	130,326			130,326	-
21 Net Transmission Services Costs	109,849	109,849	-	109,849			109,849	-
22 Total	721,110	721,110	-	721,110	-	-	721,110	-
23 Miscellaneous Revenue								
24 COE & USBR Proj. Revenues	40,500	40,500	-	40,500			40,500	-
25 Energy Efficiency Revenues	66,426	66,426	-	66,426			66,426	-
26 Other Misc Revenue	17,080	17,080	-	17,080			17,080	-
27 Total	124,006	124,006	-	124,006	-	-	124,006	-
28								
29 Rate Design Total	13,818,159	9,511,213	1,774,933	11,286,146	1,051,782	223,945	12,561,874	1,256,285
30								
31 Less 7(b)(2) Exchange Cost Adj.	1,732	1,732		1,732			1,732	
32								
33 Rate Design Total After 7(b)(2)	13,816,427	9,509,480	1,774,933	11,284,414	1,051,782	223,945	12,560,141	1,256,285

RATE DESIGN STUDY
Priority Firm Rate Schedule Charge Calculation
Test Period October 2001 - September 2006
 (\$ Thousands)

													Total HLH	Total HLH+LLH	Years
															5
1	PRIORITY FIRM RATE ENERGY														
2	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep			
3	28.25	37.77	38.85	34.65	32.08	29.18	23.11	23.02	28.54	37.15	54.43	39.34	37%	100%	
4	11,220	12,994	16,390	17,634	16,155	15,338	14,029	9,945	8,785	8,706	10,868	12,361	154,424	245,619	avg. MC rate
5	\$ 316,958	\$ 490,774	\$ 636,736	\$ 611,025	\$ 518,239	\$ 447,560	\$ 324,208	\$ 228,943	\$ 250,737	\$ 323,412	\$ 591,547	\$ 486,279	\$ 5,226,417	\$ 7,394,019	30.10 with DSI floor
6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
9	Total Energy Revenue Requirement												\$ 4,489,579		0 4,489,579
10	Ratio of Rev Reqmt to MC Revenues												0.6072		k_addr scale_adj
11	17.15	22.93	23.59	21.04	19.48	17.72	14.03	13.98	17.33	22.56	33.05	23.89	0	0.00	0
12	\$ 192,454	\$ 297,994	\$ 386,620	\$ 371,009	\$ 314,670	\$ 271,754	\$ 196,856	\$ 139,012	\$ 152,245	\$ 196,373	\$ 359,182	\$ 295,264	\$ 3,173,432	\$ 4,489,579	
13	Transmission Charges Included												\$ -		
14	Net Energy Recovery												\$ 3,173,432		
15															
16	PRIORITY FIRM RATE DEMAND														
17	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Total	
18	36,414	40,022	49,443	55,017	52,239	40,079	38,900	28,471	25,298	27,884	31,665	36,526		461,957	
19	1.76	2.31	2.31	2.16	2.03	1.82	1.45	1.43	1.79	2.31	2.31	2.31		2.02	
20	\$ 64,088	\$ 92,451	\$ 114,213	\$ 118,836	\$ 106,046	\$ 72,944	\$ 56,405	\$ 40,713	\$ 45,283	\$ 64,412	\$ 73,145	\$ 84,374		\$ 932,912	
21															
22															
23	PRIORITY FIRM RATE ENERGY														
24	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Total LLH	
25	20.75	30.64	30.07	24.71	23.04	20.18	15.85	13.24	15.82	25.62	31.00	32.44		63%	
26	6,816	7,503	9,243	11,593	10,264	9,284	8,052	6,261	4,826	4,964	5,489	6,900		91,195	
27	\$ 141,428	\$ 229,886	\$ 277,951	\$ 286,453	\$ 236,481	\$ 187,354	\$ 127,627	\$ 82,890	\$ 76,350	\$ 127,188	\$ 170,151	\$ 223,844		\$ 2,167,602	
28	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	
29	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	
30	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	
31	Total Energy Revenue Requirement												\$ 1,316,148		
32	Ratio of Rev Reqmt to MC Revenues												1.316148		
33	12.60	18.60	18.26	15.00	13.99	12.25	9.62	8.04	9.61	15.56	18.82	19.70		1.316148	
34	\$ 85,874	\$ 139,584	\$ 168,769	\$ 173,932	\$ 143,589	\$ 113,760	\$ 77,494	\$ 50,330	\$ 46,359	\$ 77,228	\$ 103,314	\$ 135,916		\$ 1,316,148	
35	Transmission Charges Included												\$ -		
36	Net Energy Recovery												\$ 1,316,148		
37															
38															
39															
40	PRIORITY FIRM TRANSMISSION														
41	Network	Point to Point	Delivery	Exchange									Total		
42	MCP MWs	Ctrct Demand	MCP MWs										Costs		
43	377,883	-	-	111,792											
44	1.480	1.480		1.480											
45	559,266	-	-	165,452									825,933		
46	78,381	-	-	22,834											
47	PRIORITY FIRM UNBUNDLED														
48	PRODUCTS & SERVICES - RQMTS														
49	Preference		Exchange	Total											
50	223,945		65,239	289,185											
51															
52	PRIORITY FIRM AVERAGE RATE														
53	Component											Cost	Contribution		
54	Energy Costs											\$ 4,489,579	18.28		
55	Demand Costs											\$ 932,912	3.80		
56	Transmission Costs											\$ 825,933	3.36		
57	Unbundled Reqmts Costs											\$ 289,185	1.18		
58	Total Costs											\$ 6,537,608	26.62		
59	Energy Billing Determnts Total GWH											\$ 245,619			
60															
61	Average PF Rate											26.62			

RATE DESIGN STUDY
Industrial Firm Power Rate Schedule Charge Calculation
 Test Period October 2001 - September 2006
 (\$ Thousands)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total HLH	Total HLH+LLH	
HLH															
1 INDUSTRIAL FIRM RATE ENERGY															
2 Marginal Costs of Firm Power	28.25	37.77	38.85	34.65	32.08	29.18	23.11	23.02	28.54	37.15	54.43	39.34	24,679	43,386	avg. MC rate
3 Billing Determinants (GWH)	2,107	2,012	2,075	2,091	1,901	2,107	2,043	2,091	2,028	2,091	2,107	2,028	24,679	43,386	
4 Revenues at Marginal Cost Rates	\$ 59,515	\$ 75,981	\$ 80,615	\$ 72,449	\$ 60,978	\$ 61,474	\$ 47,222	\$ 48,132	\$ 57,865	\$ 77,676	\$ 114,669	\$ 79,763	\$ 836,339	\$ 1,278,484	with DSI floor
5 Conservation and Renewables Credit Cost	\$ 1,010	\$ 1,289	\$ 1,368	\$ 1,229	\$ 1,035	\$ 1,043	\$ 801	\$ 817	\$ 982	\$ 1,318	\$ 1,946	\$ 1,353	\$ 14,191	\$ 21,693	21,693
6 Total Energy Revenue Requirement													952,269	952,269	21.95
7 Ratio of Rev Reqmt to MC Revenues													0.7448	0.7448	
8 Scaled MC Rates to Equal Rev Reqmt	21.04	28.13	28.94	25.81	23.89	21.73	17.21	17.15	21.26	27.67	40.54	29.30			k_addr_ip
9 Revenues at Scaled Rates	\$ 44,329	\$ 56,594	\$ 60,046	\$ 53,963	\$ 45,419	\$ 45,789	\$ 35,173	\$ 35,851	\$ 43,101	\$ 57,857	\$ 85,410	\$ 59,411	\$ 622,941	\$ 952,269	0.00
10 Transmission Charges Included															
11 Net Energy Recovery															
12															
13															
LLH															
14 INDUSTRIAL FIRM RATE DEMAND															
15 Monthly Coincidental Peak MW	4,950	4,950	4,950	4,950	4,950	4,950	4,950	4,950	4,950	4,950	4,950	4,950	4,950	4,950	
16 Adjusted Marginal Cost \$/KW/Mo	1.76	2.31	2.31	2.16	2.03	1.82	1.45	1.43	1.79	2.31	2.31	2.31		2.00	
17 Demand Revenues	\$ 8,712	\$ 11,435	\$ 11,435	\$ 10,692	\$ 10,049	\$ 9,009	\$ 7,178	\$ 7,079	\$ 8,861	\$ 11,435	\$ 11,435	\$ 11,435		\$ 118,751	
18															
19															
LLH															
20 INDUSTRIAL FIRM RATE ENERGY															
21 Marginal Costs of Firm Power	20.75	30.64	30.07	24.71	23.04	20.18	15.85	13.24	15.82	25.62	31.00	32.44	18,707		
22 Billing Determinants (GWH)	1,581	1,552	1,608	1,592	1,449	1,576	1,516	1,592	1,536	1,592	1,576	1,536	18,707		
23 Revenues at Marginal Cost Rates	\$ 32,806	\$ 47,563	\$ 48,345	\$ 39,336	\$ 33,393	\$ 31,805	\$ 24,024	\$ 21,077	\$ 24,307	\$ 40,785	\$ 48,858	\$ 49,843	\$ 442,144		
24 Conservation and Renewables Credit Cost	\$ 557	\$ 807	\$ 820	\$ 667	\$ 567	\$ 540	\$ 408	\$ 358	\$ 412	\$ 692	\$ 829	\$ 846	\$ 7,502		
25 Total Energy Revenue Requirement															
26 Ratio of Rev Reqmt to MC Revenues															
27 Scaled MC Rates to Equal Rev Reqmt	15.46	22.82	22.40	18.41	17.16	15.03	11.81	9.86	11.78	19.08	23.09	24.16			
28 Revenues at Scaled Rates	\$ 24,436	\$ 35,427	\$ 36,010	\$ 29,299	\$ 24,873	\$ 23,690	\$ 17,894	\$ 15,699	\$ 18,105	\$ 30,378	\$ 36,392	\$ 37,126	\$ 329,328		
29 Transmission Charges Included															
30 Net Energy Recovery															
31															
32															
33															
34															
35															
36 INDUSTRIAL FIRM TRANSMISSION															
37 Billing Determinants:	Network	Point to Point	Delivery	Exchange	Transmission	Recovered	Through Enrg	Total							
38 Quantity	MCP MWs	Ctrct Demand	MCP MWs												
39 Rate (From TRDS)	1.480	1.480													
40 Transmission Revenues		87,912						87,912							
41															
42															
43 INDUSTRIAL FIRM UNBUNDLEI															
44 PRODUCTS & SERVICES - RQMTS															
45 Total Revenues															
46															
47															
48 INDUSTRIAL FIRM AVERAGE RATE	Cost	Contribution													
49 Energy Costs	\$ 952,269	Per KWH	21.95												
50 Demand Costs	\$ 118,751		2.74												
51 Transmission Costs	\$ -		-												
52 Unbundled Reqmts Costs	\$ -		-												
53 Total Costs	\$ 1,071,020		24.69												
54															
55 Energy Billing Determnts Total GWH	\$ 43,386														
56															
57 Average IP Rate	24.69														

