

Summary of Results

Final 12/18/03

Table 1: Look Forward - LB CRAC6 for April '04 - September '04	
Increased Revenue Required (LB CRAC%)	25.59%
Total Increase in revenue in dollars	\$136,782,305
Increase in the Slice Rate	25.13%
Increase in the non-Slice Rate	24.63%

Table 2: LB CRAC4 True Up: April '03 to September '03	
Total Bill Adjustment for Slice - 120 Day Rule	\$ -1,354,981
Total Bill Adjustment for non-Slice - (0 Day Rule + 120 Day Rule)	\$ -1,079,737
Total Bill Adjustment Slice + non-Slice	\$ -2,434,718
Adjustment factor for each Slice customer	-0.000859
Adjustment factor for each non-Slice customer	-0.000387

BPA's Current Forecast for Future LB CRAC's			
note: This is being provided for your planning. These numbers will change.			
			<u>CRAC7</u>
LB CRAC%			32%
Increase in Slice Rate			31%
Increase in non-Slice Rate			31%
	<u>CRAC8</u>	<u>CRAC9</u>	<u>CRAC10</u>
LB CRAC%	36%	32%	36%
Increase in Slice Rate	36%	31%	35%
Increase in non-Slice Rate	35%	31%	35%

LB CRAC6

Final 12/18/2003

Table 3

Increased Revenue Required (LB CRAC%)	25.59%	revenue required =	\$136,782,305
--	---------------	--------------------	---------------

Change to Slice Rate	25.13%
-----------------------------	---------------

Change to non-Slice Rate	24.63%
---------------------------------	---------------

Revised Rates						
	Apr-04	May-04	Jun-04	Jul-04	Aug-04	Sep-04
Slice (\$/% Slice per month)	\$1,776,133	\$1,776,133	\$1,776,133	\$1,776,133	\$1,776,133	\$1,776,133
5-yr PF-02 and RL-02 rates						
HLH (\$/MWh)	\$16.43	\$16.36	\$20.50	\$26.96	\$39.91	\$28.59
LLH (\$/MWh)	\$10.99	\$9.04	\$10.97	\$18.31	\$22.35	\$23.42
Demand (\$/kW-mo)	\$1.81	\$1.78	\$2.23	\$2.88	\$2.88	\$2.88
Load Variance (\$/MWh)	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00
Stepped PF-02 Rates						
HLH (\$/MWh)	\$15.68	\$15.62	\$19.75	\$26.21	\$39.16	\$27.84
LLH (\$/MWh)	\$10.24	\$8.29	\$10.22	\$17.56	\$21.60	\$22.67
Demand (\$/kW-mo)	\$1.81	\$1.78	\$2.23	\$2.88	\$2.88	\$2.88
Load Variance (\$/MWh)	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00
IP-02 Rates w IPTAC(A)						
HLH (\$/MWh)	\$21.11	\$21.04	\$25.18	\$31.63	\$44.59	\$33.28
LLH (\$/MWh)	\$15.67	\$13.71	\$15.64	\$22.99	\$27.02	\$28.10
Demand (\$/kW-mo)	\$1.81	\$1.78	\$2.23	\$2.88	\$2.88	\$2.88
IP-02 Rates w IPTAC(B)						
HLH (\$/MWh)	\$22.98	\$22.91	\$27.04	\$33.50	\$46.46	\$35.15
LLH (\$/MWh)	\$17.54	\$15.58	\$17.51	\$24.86	\$28.89	\$29.97
Demand (\$/kW-mo)	\$1.81	\$1.78	\$2.23	\$2.88	\$2.88	\$2.88

Look Forward

Final 12/18/2003

Table 4: Mark-to-Market Prices (\$/MWh)							
	Apr-04	May-04	Jun-04	Jul-04	Aug-04	Sep-04	AVG.
HLH	31.80	24.35	23.75	36.10	45.35	42.65	34.00
LLH	25.80	17.00	16.50	29.30	36.80	35.30	26.78

Look Forward

Final

12/18/2003

Table 5: Average Net Augmentation Need and Net Short Position					
		<u>Apr-04</u> <u>to</u> <u>Jun-04</u>	<u>Jul-04</u> <u>to</u> <u>Sep-04</u>	<u>Apr-04</u> <u>to</u> <u>Sep-04</u>	
1 - Net System Load	aMW	5,945	5,778	5,861	
2 - Net Augmentation Need (w/losses)	aMW	709	603	656	
3 - Net Short Position					
	HLH	aMW	88	0	44
	LLH	aMW	96	0	48

These numbers are approximate due to the use of simple averaging.

1 - Net System Load = System Load - Load reductions

2 - Net Augmentation Need = Net System Load - System Capability (w/transmission losses of 1.8%).

3 - The net short position is the simple average of the HLH and LLH actual net short positions for the given months.

Table 6: Selected 6-mo. Total Cost and Revenue Calculations	
1 - Augmentation Pre-Purchase Costs	\$ 159,600,176
2 - Net Short Costs	\$ 4,773,518
3 - Load Reduction Costs	\$ 101,489,933
4 - Total Gross Augmentation Costs in LB CRAC	\$ 217,551,365
5 - Revenues from Resale of Augmentation Quantity	\$ 80,769,060
6 - Net Augmentation Costs (= 4-5)	\$ 136,782,305
7 - Total Revenues from Slice before LB CRAC	\$ 187,256,173
8 - Total Revenues from non-Slice products before LB CRAC	\$ 347,232,764
9 - Total CRAC'able revenue before LB CRAC (= 7+8)	\$ 534,488,937

1- Sum of augmentation pre-purchases and power buyback for rate mitigation. Cost of rate mitigation deals with Slice/Block included here. IOU power conversion costs here also. (Cost of IOU and DSI load reduction deals are contained in row 3). Rate mitigation buyback costs include both premium portion and cost of deals tied to LB CRAC.

2 - Net short costs = cost of meeting BPA's net short position

3 - All costs associated with load reductions from IOU, DSIs, and load following publics.

4 - If row 4 total is less than sum of rows (1+2+3), some costs in rows 1+2 are being excluded from recovery from LB CRAC.

Chase product is included as a credit in the calculation of Total Gross Augmentation Costs.

8 - Total revenue from non-Slice products that are subject to LB CRAC before application of LB CRAC.

Look Forward

Final

12/18/2003

Table 7: Average 6-mo. Costs and Loads		units	April-June	July-Sept.	April-Sept.
Slice Load		aMW	1,600	1,600	1,600
PF Base Load		aMW			
	HLH	aMW	3,714	3,547	3,630
	LLH	aMW	3,303	3,032	3,167
RL Base Load		aMW			
	HLH	aMW	999	999	999
	LLH	aMW	999	999	999
IP Base Load		aMW			
	HLH	aMW	769	769	769
	LLH	aMW	769	769	769
Augmentation Pre-Purchase Costs					
(note: this includes mkt. Pre-purchase cost + fixed portion of power buybacks)					
	HLH	\$	11,966,179	18,492,525	15,229,352
	LLH	\$	8,671,782	14,069,573	11,370,677
Load Reduction Costs					
	HLH	\$	9,473,112	9,473,112	9,473,112
	LLH	\$	7,438,314	7,445,439	7,441,876
LDD Slice Costs		\$	333,234	333,234	333,234
LDD Non-Slice Costs		\$	684,772	1,170,402	927,587
C&R Slice Costs		\$	580,289	580,289	580,289
C&R Non-Slice Costs		\$	2,306,494	2,289,277	2,297,886

These numbers are approximate due to the use of simple averaging of actual numbers.

Table 8: Average 6-mo. Loads, Rate Mitigation, System Capability					
			<u>April-June</u>	<u>July-Sept.</u>	<u>April-Sept.</u>
1 - System Load		aMW	7,122	6,949	7,036
2 - System Capability		aMW	5,248	5,186	5,217
3 - Load Reduction		aMW	1,178	1,171	1,174
	Public	aMW	0	0	0
	DSI	aMW	506	506	506
	IOU	aMW	622	615	618
	Other	aMW	50	50	50
4 - Augmentation Market Purchases					
	HLH	aMW	490	1,034	762
	LLH	aMW	503	1,091	797
5 - Augmentation Power Buybacks					
	HLH	aMW	122	121	121
	LLH	aMW	127	128	127

These numbers are approximate due to the use of simple averaging of actual numbers. Each row in this table is the simple average of the actual numbers in the analysis for that variable.

1&2 - These numbers are net of 1,600aMW of Slice and do not include losses.

3 - All DSI, IOU and load following publics rate mitigation deals treated as load reductions.

4 - Includes only market purchases.

5 - Includes only rate mitigation with Block/Slice customers.

LB CRAC 4 True Up

April '03 - September '03

Final

12/18/2003

Table 9: Total 6-mo. Incremental Revenue, Incremental Cost, Bill Adjustment Factors		
<i>Rows 1, 2 are the revenues BPA earned only from the LB CRAC part of rates.</i>		
1 - LB CRAC revenues earned from Slice	\$	\$75,160,460
2 - LB CRAC revenues earned from non-Slice products	\$	\$132,336,086
<i>sum</i>	\$	\$207,496,546
<i>Rows 3, 4 are the actual LB CRAC Revenue Requirement</i>		
3 - Revenues required from Slice to cover actual LB CRAC costs	\$	\$73,805,478
4 - Revenues required from non-Slice to cover actual LB CRAC costs	\$	\$130,468,469
<i>sum</i>	\$	\$204,273,947
<i>120 Day Bill Adjustment in Dollars (negative indicates refund to customers)</i>		
5 - Total Bill Adjustment for Slice - 120 Day Rule	\$	-\$1,354,981
6 - Bill Adjustment for non-Slice - 120 Day Rule	\$	-\$1,867,617
7 - Bill Adjustment non-Slice - 0 Day Rule	\$	\$787,881
8 - Total Bill Adjustment for non-Slice - (Sum of 0 Day Rule + 120 Day Rule)	\$	-\$1,079,737
9 - Total Bill Adjustment Slice + non-Slice (row 6 + row 8)	\$	-\$2,434,718
<i>Rows 10, 11 are the adjustment factors used to determine individual customer bill adjustments</i>		
10 - Adjustment factor for each Slice customer bill		-0.000859
11 - Adjustment factor for each non-Slice customer bill		-0.000387

- 1 - Incremental Revenues from the LB CRAC increment to the May 2000 Slice rate for Oct. '01- March '02.
- 2 - Incremental Revenues from the LB CRAC increment to the May 2000 non-Slice rates for Oct. '01- March '02.
- 3 - Incremental Augmentation Costs in LB CRAC above May 2000 rates for Slice
- 4 - Incremental Augmentation Costs in LB CRAC above May 2000 rates for non-Slice
- 5 - Row 3 Table 9 - Row 1 Table 9.
- 6 - Row 4 Table 9 - Row 2 Table 9.
- 7 - Row 6 Table 11 - Row 6 Table 10.
- 10 - Applied to Slice payments from customer minus LDD minus C&R.
- 11 - Applied to payments from customer for products subject to LB CRAC minus LDD minus C&R.

LB CRAC 4 True Up

April '03 - September '03

Final

12/18/2003

Table 10: Total 6-mo. Cost and Revenue Calculations - 120 Day Rule				
1 - Augmentation Pre-Purchase Costs	\$	\$159,220,804	aMW	923
2 - Net Short Costs	\$	\$10,195,142	aMW	0
3 - Load Reduction Costs	\$	\$171,645,351		
4 - Gross Augmentation Costs in LB CRAC	\$	\$300,392,863	aMW	781
5 - Revenues from Resale of Augmentation Quantity	\$	\$96,118,917	aMW	781
6 - Actual Net Augmentation Costs in LB CRAC - 120 Day Rule (= 4-5)	\$	\$204,273,947	aMW	781
Rows 7, 8, 9 revenue calculations are the revenues BPA earned under LB CRAC'ed rates				
7 - Total Revenues from Slice	\$	\$262,878,951	aMW	1,600
8 - Total Revenues from non-Slice products	\$	\$464,700,115	aMW	3,899
9 - Total Revenue with LB CRAC Applied (= 7+8)	\$	\$727,579,065		

1- Sum of augmentation pre-purchases and power buyback for rate mitigation. Cost of rate mitigation deals with Slice/Block included here. IOU power conversion costs here also. (Cost of IOU and DSI load reduction deals are contained in row 3). Rate mitigation buyback costs include both premium portion and cost of deals tied to LB CRAC.

2 - net short costs = cost of meeting BPA's net short position

3 - All costs associated with load reductions from IOU, DSIs, and load following publics are borne by Slice and non-Slice.

4 - If row 4 total is less than sum of rows (1+2+3), some costs in rows 1+2 are being excluded from recovery from LB CRAC. Also, the Chase product is included as a credit in the calculation of Total Gross Augmentation Costs.

5 - Revenue from the resale of the augmentation quantity using the GRSP formula.

7, 8, 9 - Total revenue earned by BPA from Slice and non-Slice products at rates with LB CRAC.

Table 11: Total 6-mo. Cost and Revenue Calculations - 0 Day Rule				
1 - Augmentation Pre-Purchase Costs - 0 Day Rule	\$	\$159,220,804	aMW	923
2 - Net Short Costs - 0 Day Rule	\$	\$10,983,022	aMW	0
3 - Load Reduction Costs	\$	\$171,645,351		
4 - Gross Augmentation Costs in LB CRAC - 0 Day Rule	\$	\$301,180,744	aMW	781
5 - Revenues from Resale of Augmentation Quantity	\$	\$96,118,917	aMW	781
6 - Actual Net Augmentation Costs in LB CRAC 0 Day Rule (= 4-5)	\$	\$205,061,828	aMW	781

1- Sum of augmentation pre-purchases and power buyback for rate mitigation. Cost of rate mitigation deals with Slice/Block included here. IOU power conversions costs here also.

(Cost of IOU and DSI load reduction deals are contained in row 3). Rate mitigation buyback costs include both premium portion and cost of deals tied to LB CRAC.

2 - net short costs = cost of meeting BPA's net short position

3 - All costs associated with load reductions from IOU, DSIs, and load following publics are borne by Slice and non-Slice.

4 - If row 4 total is less than sum of rows (1+2+3), some costs in rows 1+2 are being excluded from recovery from LB CRAC. Also, the Chase product is included as a credit in the calculation of Total Gross Augmentation Costs.

5 - Revenue from the resale of the augmentation quantity using the GRSP formula

LB CRAC 4 True Up
 April '03 - September '03

Final 12/18/03

Table 12: Average Net Augmentation Need and Net Short Position			<u>Apr</u>	<u>July</u>	<u>Apr</u>
			<u>to</u>	<u>to</u>	<u>to</u>
			<u>June</u>	<u>Sept</u>	<u>Sept</u>
1 - Net System Load	aMW		6,072	5,845	5,959
2 - System Capability	aMW		5,225	5,225	5,225
3 - Net Augmentation Need (w/losses)	aMW		862	699	781
4 - Net Short Position	aMW		194	0	97
	HLH		238	0	119
	LLH		151	0	75

These numbers are approximate due to the use of simple averaging.

1 - In the True Up, Net System Load equals the system loads BPA served.

2 - Production from the system established in the rate case.

3 - Net Augmentation Need = Net System Load minus System Capability plus transmission losses of 1.8%. It is the simple average of actual monthly net augmentation need used in the model.

4 - The net short position is the simple average of the HLH and LLH actual net short positions for the given months.

LB CRAC 4 True Up
April '03 - September '03

Final 12/18/03

Table 13: Quarterly Average Loads		units	Apr-June	July-Sept	Apr-Sept
Slice Load Served		aMW	1,600	1,600	1,600
PF Load Served					
	HLH	aMW	3,827	3,563	3,694
	LLH	aMW	3,406	3,084	3,244
RL Load Served					
	HLH	aMW	382	382	382
	LLH	aMW	382	382	382
IP Load Served					
	HLH	aMW	34	34	34
	LLH	aMW	35	35	35

These numbers are approximate due to the use of simple averaging of actual numbers.

Table 14: Quarterly LDD & C&R Dollars		units	Apr-June	July-Sept	Apr-Sept
LDD Slice Costs		\$	417,638	417,638	417,638
LDD Non-Slice Costs		\$	657,478	1,087,499	872,489
C&R Slice Costs		\$	583,841	583,841	583,841
C&R Non-Slice Costs		\$	2,185,844	2,185,973	2,185,909

These numbers are approximate due to the use of simple averaging of actual numbers.

Table 15: Average Pre-Purchase Quantities to Meet Augmentation Need			Apr-June	July-Sept	Apr-Sept
1 - Augmentation Market Purchases - 120 Day Rule					
	HLH	aMW	470	996	733
	LLH	aMW	607	1,014	811
1 - Augmentation Market Purchases - 0 Day Rule					
	HLH	aMW	470	996	733
	LLH	aMW	607	1,014	811
2 - Augmentation Power Buybacks - 120 Day Rule					
	HLH	aMW	154	153	154
	LLH	aMW	154	154	154
2 - Augmentation Power Buybacks - 0 Day Rule					
	HLH	aMW	154	153	154
	LLH	aMW	154	154	154

These numbers are approximate due to the use of simple averaging of actual numbers. Each row in this table is the simple average of the actual numbers in the analysis for that variable.

1 - Includes only market purchases.

2 - Includes only rate mitigation with Block/Slice customers and IOU cash for power conversion.

Compare: Forecast to Actuals for LB CRAC4

April '03 - September '03

Final

12/18/2003

Table 16: Average Monthly Net System Load, Net Augmentation Need, Net Short Position				
		Forecast	Actual	Actual-Fcst
Net System Load	aMW	5,898	5,959	61
System Capability	aMW	5,192	5,192	0
Net Augmentation Need (w/losses)	aMW	719	781	62
Net Short Position	aMW	23	97	74
	HLH	21	119	98
	LLH	26	75	49

Table 17: Selected Total Cost and Revenue Calculations				
		Forecast	Actual (120 Day)	Actual-Fcst
Augmentation Pre-Purchase Costs	\$	225,257,551	159,220,804	-66,036,747
Net Short Costs	\$	2,079,950	10,195,142	8,115,192
Load Reduction Costs	\$	170,797,608	171,645,351	847,743
Gross Augmentation Costs in LB CRAC	\$	299,222,156	300,392,863	1,170,707
Revenues from Resale of Augmentation Quantity	\$	88,411,290	96,118,917	7,707,626
Net Augmentation Costs (= 4-5)	\$	210,810,866	204,273,947	-6,536,919
Revenue Earned from the LB CRAC	\$	210,810,866	207,496,546	-3,314,320

Table 18: Average Monthly Costs and Loads				
		Forecast	Actual	Actual-Fcst
Slice Load to Serve	aMW	1,600	1,600	0
PF Load to Serve	aMW			
	HLH	3,673	3,694	21
	LLH	3,264	3,244	-20
RL Load to Serve	aMW			
	HLH	383	382	-1
	LLH	383	382	-1
IP Load to Serve	aMW			
	HLH	164	34	-130
	LLH	164	35	-129
Augmentation Pre-Purchase Costs -120 Day (note: this includes mkt. Pre-purchase cost + fixed & var. portion of power buybacks)	HLH \$	21,131,579	15,535,240	-5,596,340
	LLH \$	15,911,100	11,001,561	-4,909,539
Load Reduction Costs				
	HLH \$	16,160,300	16,284,779	124,479
	LLH \$	12,305,968	12,322,780	16,812
LDD Slice Costs	\$	427,842	417,638	-10,204
LDD Non-Slice Costs	\$	972,169	872,489	-99,680
C&R Slice Costs	\$	583,860	583,841	-19
C&R Non-Slice Costs	\$	2,537,170	2,185,909	-351,262

note: These numbers are approximate due to the use of simple averaging of actual numbers.

Table 19: Average Monthly Load Reductions and Power Purchases				
		Forecast	Actual	Actual-Fcst
Load Reduction*				
	Public	aMW	131	NA
	DSI	aMW	1,031	NA
	IOU	aMW	616	NA
	Other	aMW	150	NA
Augmentation Market Purchases - 120 Day Rule				
	HLH	aMW	1,065	733
	LLH	aMW	1,218	811
Augmentation Market Purchases - 0 Day Rule**				
	HLH	aMW	NA	733
	LLH	aMW	NA	811
Augmentation Power Buybacks - 120 Day Rule				
	HLH	aMW	152	154
	LLH	aMW	157	154
Augmentation Power Buybacks - 0 Day Rule**				
	HLH	aMW	NA	154
	LLH	aMW	NA	154

* Actual load reductions are not calculated.

** For the forecast, implicitly, the 0 day results = 120 day results.

Forecast Of Future LB CRAC %, Slice and non-Slice Rate Increases

12/11/2003

	CRAC7	CRAC8	CRAC9	CRAC10
	<u>Oct-04</u> to <u>Mar-05</u>	<u>Apr-05</u> to <u>Sep-05</u>	<u>Oct-05</u> to <u>Mar-06</u>	<u>Apr-06</u> to <u>Sep-06</u>
	<u>FY05</u>	<u>FY05</u>	<u>FY06</u>	<u>FY06</u>
Increased Revenue Required (LB CRAC%)	32%	36%	32%	36%
Increase in Slice Rate	31%	36%	31%	35%
Increase in non-Slice Rate	31%	35%	31%	35%
Forecast of DSI Load to Serve (aMW)	238	238	245	245
Forecast of 6-mo. avg. Spot Market Price	\$39	\$32	\$41	\$33

1. These numbers are only a forecast to assist your planning. These estimates will change as input values change over time.
BPA does not intend to engage in extensive discussions regarding changes in forecasts from earlier forecasts. These numbers are being provided in response to request for planning and these numbers are provided in that spirit.
Estimates current as of 12/18/2003.
2. The \$200 million plus interest is built into the numbers above assuming it is paid back between October 1, 2004 and September 30, 2006.
3. These numbers assume a zero SN CRAC for FY05-FY06.