

Summary of Results

FINAL - REVISED 6/28/02

Table 1: Look Forward - LB CRAC3 for October '02 - March '03

October '02 - March '03

Increased Revenue Required (LB CRAC%)	32.94%
Total Increase in revenue in dollars	\$210,350,282
Increase in Slice Rate	32.35%
Increase in non-Slice Rate	31.88%

Table 2: LB CRAC True Up: January '02 to March '02

Total Bill Adjustment for Slice - 120 Day Rule	\$	-\$4,566,244
Total Bill Adjustment for non-Slice - (Sum of 0 Day Rule + 120 Day Rule)	\$	-\$10,484,963
Total Bill Adjustment Slice + non-Slice (row 6 + row 8)	\$	-\$15,051,207
Adjustment factor for each Slice customer bill applied to revenue		-0.005515
Adjustment factor for each non-Slice customer bill applied to revenue		-0.005874

BPA's Current Forecast for LB CRAC4

(note: This is being provided for your planning. These numbers will change. The official analysis to develop these numbers will occur in December '02).

Forecasted LB CRAC4% = 38.97%

Forecasted Slice Rate Increase for CRAC4 = 38.26%

Forecasted non-Slice Rate Increase for CRAC4 = 37.40%

Note: Highlighted cells represent revised data posted June 28, 2002.

Look Forward
Table 3

LB CRAC3 FINAL - REVISED 6/28/02

Note: All numbers on this page are revised.

October '02 - March '03

Increased Revenue Required (LB CRAC%)	32.94%	revenue required =	\$210,350,282
--	--------	--------------------	---------------

Change to Slice Rate	32.35%
----------------------	--------

Change to non-Slice Rate	31.88%
--------------------------	--------

Revised Rates						
	Oct-02	Nov-02	Dec-02	Jan-03	Feb-03	Mar-03
Slice (\$/% Slice per month)	\$1,878,616	\$1,878,616	\$1,878,616	\$1,878,616	\$1,878,616	\$1,878,616
5-yr PF-02 and RL-02 rates						
HLH (\$/MWh)	\$21.46	\$29.01	\$29.87	\$26.53	\$24.50	\$22.20
LLH (\$/MWh)	\$15.51	\$23.36	\$22.91	\$18.65	\$17.33	\$15.06
Demand (\$/kW-mo)	\$2.32	\$3.05	\$3.05	\$2.85	\$2.68	\$2.40
Load Variance (\$/MWh)	\$1.06	\$1.06	\$1.06	\$1.06	\$1.06	\$1.06
Stepped PF-02 Rates						
HLH (\$/MWh)	\$20.67	\$28.22	\$29.08	\$25.74	\$23.71	\$21.40
LLH (\$/MWh)	\$14.72	\$22.56	\$22.12	\$17.86	\$16.54	\$14.27
Demand (\$/kW-mo)	\$2.32	\$3.05	\$3.05	\$2.85	\$2.68	\$2.40
Load Variance (\$/MWh)	\$1.06	\$1.06	\$1.06	\$1.06	\$1.06	\$1.06
IP-02 Rates w IPTAC(A)						
HLH (\$/MWh)	\$26.42	\$33.97	\$34.83	\$31.49	\$29.45	\$27.15
LLH (\$/MWh)	\$20.47	\$28.31	\$27.87	\$23.61	\$22.29	\$20.02
Demand (\$/kW-mo)	\$2.32	\$3.05	\$3.05	\$2.85	\$2.68	\$2.40
IP-02 Rates w IPTAC(B)						
HLH (\$/MWh)	\$28.39	\$35.95	\$36.81	\$33.47	\$31.43	\$29.13
LLH (\$/MWh)	\$22.45	\$30.31	\$29.84	\$25.58	\$24.27	\$22.00
Demand (\$/kW-mo)	\$2.32	\$3.05	\$3.05	\$2.85	\$2.68	\$2.40

Table 4: Mark-to-Market Prices (\$/MWh)							
	Oct-02	Nov-02	Dec-02	Jan-03	Feb-03	Mar-03	AVG.
HLH	35.09	35.15	42.24	41.25	36.23	33.47	37.24
LLH	29.55	29.70	34.30	34.51	30.34	27.95	31.06

		<u>Oct-02</u>	<u>Jan-02</u>	<u>Oct-02</u>
		<u>to</u>	<u>to</u>	<u>to</u>
		<u>Dec-02</u>	<u>Mar-03</u>	<u>Mar-03</u>
1 - Net System Load	aMW	6,627	6,924	6,776
2 - Net Augmentation Need (w/losses)	aMW	950	1,134	1,042
3 - Net Short Position				
	HLH	aMW	0	0
	LLH	aMW	0	0

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.

1 - Augmentation Pre-Purchase Costs	\$	271,031,782
2 - Net Short Costs	\$	0
3 - Load Reduction Costs	\$	165,717,926
4 - Total Gross Augmentation Costs in LB CRAC	\$	338,128,316
5 - Revenues from Resale of Augmentation Quantity	\$	127,778,034
6 - Net Augmentation Costs (= 4-5)	\$	210,350,282
7 - Total Revenues from Slice before LB CRAC	\$	186,772,871
8 - Total Revenues from non-Slice products before LB CRAC	\$	451,720,367
9 - Total CRAC'able revenue before LB CRAC (= 7+8)	\$	638,493,238
LB CRAC% (= 6/9)		32.94%

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 rows (1+2+3), some costs in rows 1+2 are being excluded from recovery from LB CRAC.

Chase product 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.

Table 7- LF: Average 6-mo. Costs and Loads		units	Oct-Dec	Jan-Mar	6 months
Slice Load		aMW	1,600	1,600	1,600
PF Base Load		aMW			
	HLH	aMW	4,576	5,008	4,789
	LLH	aMW	3,995	4,409	4,200
RL Base Load		aMW			
	HLH	aMW	999	999	999
	LLH	aMW	999	999	999
IP Base Load		aMW			
	HLH	aMW	1,486	1,486	1,486
	LLH	aMW	1,486	1,486	1,486
Augmentation Pre-Purchase Costs					
(note: this includes mkt. Pre-purchase cost	HLH	\$	26,563,195	25,217,121	25,890,158
+ fixed portion of power buybacks)	LLH	\$	18,690,026	18,772,643	18,731,335
Load Reduction Costs					
	HLH	\$	15,605,790	15,360,758	15,483,274
	LLH	\$	12,355,084	11,917,677	12,136,381
LDD Slice Costs		\$	410,161	410,161	410,161
LDD Non-Slice Costs		\$	1,467,932	1,379,597	1,423,764
C&R Slice Costs		\$	583,912	583,912	583,912
C&R Non-Slice Costs		\$	2,562,260	2,554,869	2,558,565

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

Table 8: Average 6-mo. Loads, Rate Mitigation, System Capability					
			Oct-Dec	Jan-Mar	6 months
1 - System Load		aMW	8,687	9,005	8,846
2 - System Capability		aMW	5,693	5,811	5,752
3 - Load Reduction		aMW	2,060	2,080	2,070
	Public	aMW	137	134	136
	DSI	aMW	1,161	1,161	1,161
	IOU	aMW	612	634	623
	Other	aMW	150	150	150
4 - Augmentation Market Purchases					
	HLH	aMW	1,442	1,438	1,440
	LLH	aMW	1,475	1,553	1,514
5 - Augmentation Power Buybacks					
	HLH	aMW	164	156	160
	LLH	aMW	174	161	167

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 True Up
January '02 - March '02

FINAL- 6/28/02

Table 9: Total 3-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	\$	\$44,077,001
2 - LB CRAC revenues earned from non-Slice products	\$	\$95,699,226
<i>Rows 3, 4 are the actual LB CRAC Revenue Requirement</i>		
3 - Revenues required from Slice to cover actual LB CRAC costs	\$	\$39,510,758
4 - Revenues required from non-Slice to cover actual LB CRAC costs	\$	\$85,183,243
<i>Bill Adjustment in Dollars (negative indicates refund to customers)</i>		
5 - Total Bill Adjustment for Slice - 120 Day Rule	\$	-\$4,566,244
6 - Bill Adjustment for non-Slice - 120 Day Rule	\$	-\$10,515,983
7 - Bill Adjustment non-Slice - 0 Day Rule	\$	\$31,020
8 - Total Bill Adjustment for non-Slice - (Sum of 0 Day Rule + 120 Day Rule)	\$	-\$10,484,963
9 - Total Bill Adjustment Slice + non-Slice (row 6 + row 8)	\$	-\$15,051,207
<i>Rows 10, 11 are the adjustment factors used to determine individual customer bill adjustments</i>		
10 - Adjustment factor for each Slice customer bill		-0.005515
11 - Adjustment factor for each non-Slice customer bill		-0.005874

- 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 True Up

FINAL- 6/28/02

January '02 - March '02

Table 10: Total 3-mo. Cost and Revenue Calculations - 120 Day Rule				
1 - Augmentation Pre-Purchase Costs	\$	\$124,869,824	aMW	1,731
2 - Net Short Costs	\$	\$0	aMW	0
3 - Load Reduction Costs	\$	\$115,497,084		
4 - Gross Augmentation Costs in LB CRAC	\$	\$176,252,052	aMW	848
5 - Revenues from Resale of Augmentation Quantity	\$	\$51,558,051	aMW	848
6 - Actual Net Augmentation Costs in LB CRAC - 120 Day Rule (= 4-5)	\$	\$124,694,001	aMW	848
Rows 7, 8, 9 revenue calculations are the revenues BPA earned under LB CRAC'ed rates				
7 - Total Revenues from Slice	\$	\$137,991,293	aMW	1,600
8 - Total Revenues from non-Slice products	\$	\$297,502,416	aMW	4,835
9 - Total Revenue with LB CRAC Applied (= 7+8)	\$	\$435,493,709		

- 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 rows (1+2+3), some costs in rows 1+2 are being excluded from recovery from LB CRAC. Also, the Chase product 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 3-mo. Cost and Revenue Calculations - 0 Day Rule				
1 - Augmentation Pre-Purchase Costs - 0 Day Rule	\$	\$133,401,670	aMW	1,862
2 - Net Short Costs - 0 Day Rule	\$	\$0	aMW	0
3 - Load Reduction Costs	\$	\$115,497,084		
4 - Gross Augmentation Costs in LB CRAC - 0 Day Rule	\$	\$176,283,071	aMW	848
5 - Revenues from Resale of Augmentation Quantity	\$	\$51,558,051	aMW	848
6 - Actual Net Augmentation Costs in LB CRAC 0 Day Rule (= 4-5)	\$	\$124,725,020	aMW	848

- 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 rows (1+2+3), some costs in rows 1+2 are being excluded from recovery from LB CRAC. Also, the Chase product 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

Table 12: Average 3-mo. Net Augmentation Need and Net Short Position		
		<u>Jan</u> <u>to</u> <u>Mar.</u>
1 - Net System Load	aMW	6,699
2 - System Capability	aMW	5,865
3 - Net Augmentation Need (w/losses)	aMW	848
4 - Net Short Position	aMW	0
HLH	aMW	0
LLH	aMW	0

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 True Up FINAL- 6/28/02
January '02 - March '02

Table 13: Quarterly Average Loads		units	Jan.-March
Slice Load		aMW	1,600
PF Load			
	HLH	aMW	4,658
	LLH	aMW	4,164
RL Load			
	HLH	aMW	350
	LLH	aMW	350
IP Load			
	HLH	aMW	60
	LLH	aMW	59

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

Table 14: Quarterly LDD & C&R Dollars		units	Jan.-March
LDD Slice Costs		\$	436,838
LDD Non-Slice Costs		\$	1,014,756
C&R Slice Costs		\$	583,841
C&R Non-Slice Costs		\$	2,210,881

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

Table 15: Average Pre-Purchase Quantities to Meet Augmentation Need			Jan.-March
1 - Augmentation Market Purchases - 120 Day Rule			
	HLH	aMW	1,401
	LLH	aMW	1,435
1 - Augmentation Market Purchases - 0 Day Rule			
	HLH	aMW	1,435
	LLH	aMW	1,469
2 - Augmentation Power Buybacks - 120 Day Rule			
	HLH	aMW	278
	LLH	aMW	354
2 - Augmentation Power Buybacks - 0 Day Rule			
	HLH	aMW	339
	LLH	aMW	491

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 CRAC1 Jan. - Mar. True Up)

January '02 - March '02

Table 16: Average Monthly Net System Load, Net Augmentation Need, Net Short Position				
January '02 - March '02		Forecast	Actual	Actual-Fcst
Net System Load	aMW	7,407	6,699	-708
System Capability	aMW	5,865	5,865	0
Net Augmentation Need (w/losses)	aMW	1,569	848	-721
Net Short Position	aMW	29	0	-29
	HLH	58	0	-58
	LLH	0	0	0

Table 17: Selected Total Cost and Revenue Calculations				
January '02 - March '02		Forecast	Actual (120 Day)	Actual-Fcst
Augmentation Pre-Purchase Costs	\$	129,193,131	124,869,824	-4,323,307
Net Short Costs	\$	10,269,785	0	-10,269,785
Load Reduction Costs	\$	105,749,549	115,497,084	9,747,535
Gross Augmentation Costs in LB CRAC	\$	235,891,157	176,252,052	-59,639,106
Costs excluded from LB CRAC	\$	9,321,308	64,114,856	54,793,548
Revenues from Resale of Augmentation Quantity	\$	91,405,167	51,558,051	-39,847,116
Net Augmentation Costs (= 4-5)	\$	144,485,990	124,694,001	-19,791,989

Table 18: Average Monthly Costs and Loads				
January '02 - March '02		Forecast	Actual	Actual-Fcst
Slice Load to Serve	aMW	1,600	1,600	0
PF Load to Serve	aMW			
	HLH aMW	4,664	4,658	-6
	LLH aMW	4,208	4,164	-45
RL Load to Serve	aMW			
	HLH aMW	309	350	41
	LLH aMW	288	350	62
IP Load to Serve	aMW			
	HLH aMW	288	60	-228
	LLH aMW	253	59	-194
Augmentation Pre-Purchase Costs (note: this includes mkt. Pre-purchase cost + fixed portion of power buybacks)	HLH \$	22,041,013	21,706,535	-334,478
	LLH \$	17,415,312	16,308,688	-1,106,624
Load Reduction Costs				
	HLH \$	19,855,051	21,881,917	2,026,865
	LLH \$	15,394,798	16,617,111	1,222,313
LDD Slice Costs	\$	255,062	436,838.00	181,776
LDD Non-Slice Costs	\$	816,642	1,014,756.33	198,115
C&R Slice Costs	\$	490,596	583,841.00	93,245
C&R Non-Slice Costs	\$	1,544,446	2,210,881.00	666,435

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	269	
	DSI	aMW	1,213	
	IOU	aMW	701	
Augmentation Market Purchases - 120 Day Rule				
	HLH	aMW	1,442	1,401
	LLH	aMW	1,485	1,435
Augmentation Market Purchases - 0 Day Rule**				
	HLH	aMW	1,435	
	LLH	aMW	1,469	
Augmentation Power Buybacks - 120 Day Rule				
	HLH	aMW	152	278
	LLH	aMW	241	354
Augmentation Power Buybacks - 0 Day Rule**				
	HLH	aMW	339	
	LLH	aMW	491	

* Actual load reductions are not calculated.

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