# Summary of Results

Final 6/10/04

Table 1: Look Forward - LB CRAC7 for October '04 - I	March '05
Increased Revenue Required (LB CRAC%)	22.34%
Total Increase in revenue in dollars	\$142,670,469
Increase in the Slice Rate	21.93%
Increase in the non-Slice Rate	21.66%

Table 2: LB CRAC5 True Up: October '03 to March '04	
Total Bill Adjustment for Slice - 120 Day Rule	\$ \$344,437
Total Bill Adjustment for non-Slice - (0 Day Rule + 120 Day Rule)	\$ -\$1,942,635
Total Bill Adjustment Slice + non-Slice	\$ -\$1,598,198
Adjustment factor for each Slice customer	0.000251
Adjustment factor for each non-Slice customer	-0.000588

BPA's Current Forecast for Future LB CRAC's						
note: This is being provided for your planning. These numbers will change.						
	CRAC8	CRAC9	CRAC10			
LB CRAC%	26%	23%	26%			
Increase in Slice Rate	26%	23%	25%			
Increase in non-Slice Rate	25%	23%	25%			

Page 1

Bonneville Power Administration, Power Business Line

Final 6/10/04

LB CRAC7

Final 6/10/2004

Table 3

Increased Revenue Required 22.34% revenue required = \$142,670,469 (LB CRAC%)

21.93%

Change to Slice Rate

Change to non-Slice Rate 21.66%

	Revised Rates									
	Oct-04 Nov-04 Dec-04 Jan-05 Feb-05 Mar-05									
Slice	(\$/% Slice per month)	\$1,730,711	\$1,730,711	\$1,730,711	\$1,730,711	\$1,730,711	\$1,730,711			
5-yr PF-02 an	d RL-02 rates									
HĹH	(\$/MWh)	\$19.79	\$26.77	\$27.56	\$24.48	\$22.60	\$20.48			
LLH	(\$/MWh)	\$14.31	\$21.55	\$21.13	\$17.20	\$15.99	\$13.89			
Demand	(\$/kW-mo)	\$2.14	\$2.81	\$2.81	\$2.63	\$2.47	\$2.21			
Load Variance	(\$/MWh)	\$0.97	\$0.97	\$0.97	\$0.97	\$0.97	\$0.97			
Stepped PF-0	2 Rates									
HLH	(\$/MWh)	\$20.89	\$27.86	\$28.65	\$25.57	\$23.70	\$21.57			
LLH	(\$/MWh)	\$15.40	\$22.64	\$22.23	\$18.30	\$17.08	\$14.99			
Demand	(\$/kW-mo)	\$2.14	\$2.81	\$2.81	\$2.63	\$2.47	\$2.21			
Load Variance	(\$/MWh)	\$0.97	\$0.97	\$0.97	\$0.97	\$0.97	\$0.97			
IP-02 Rates w	/ IPTAC(A)									
HLH	(\$/MWh)	\$24.37	\$31.34	\$32.13	\$29.05	\$27.17	\$25.05			
LLH	(\$/MWh)	\$18.88	\$26.12	\$25.71	\$21.78	\$20.56	\$18.47			
Demand	(\$/kW-mo)	\$2.14	\$2.81	\$2.81	\$2.63	\$2.47	\$2.21			
IP-02 Rates w	/ IPTAC(B)									
HLH	(\$/MWh)	\$26.19	\$33.16	\$33.96	\$30.88	\$28.99	\$26.87			
LLH	(\$/MWh)	\$20.71	\$27.96	\$27.53	\$23.60	\$22.39	\$20.29			
Demand	(\$/kW-mo)	\$2.14	\$2.81	\$2.81	\$2.63	\$2.47	\$2.21			

Page 2

Bonneville Power Administration, Power Business Line

# Look Forward: LB CRAC7

Final 6/10/2004

	Table 4: Mark-to-Market Prices (\$/MWh)									
	Oct-04	Nov-04	Dec-04	Jan-05	Feb-05	Mar-05	AVG.			
HLH	56.35	57.95	62.45	63.65	59.87	53.78	59.01			
LLH	49.55	49.95	53.80	53.99	51.08	47.75	51.02			

Page 3

Bonneville Power Administration, Power Business Line

#### Look Forward: LB CRAC7

Final 6/10/2004

Table 5: Average Net Augmentation Need and Net Short Position								
Oct-04 Jan-05 Oct-0								
		to	<u>to</u>	to				
		Dec-04	<u>Mar-05</u>	<u>Mar-05</u>				
1 - Net System Load	aMW	6,249	6,768	6,509				
2 - Net Augmentation Need (w/losses)	aMW	721	932	826				
3 - Net Short Position								
HLH	aMW	0	0	0				
LLH	aMW	0	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.

Table 6: Selected 6-mo. Total Cost and Revenue C	alculatio	ns
1 - Augmentation Pre-Purchase Costs	\$	195,878,501
2 - Net Short Costs	\$	0
3 - Load Reduction Costs	\$	109,628,564
4 - Total Gross Augmentation Costs in LB CRAC	\$	244,145,841
5 - Revenues from Resale of Augmentation Quantity	\$	101,475,371
6 - Net Augmentation Costs (= 4-5)	\$	142,670,469
7 - Total Revenues from Slice before LB CRAC	\$	187,811,688
8 - Total Revenues from non-Slice products before LB CRAC	\$	450,839,397
9 - Total CRAC'able revenue before LB CRAC (= 7+8)	\$	638,651,085
LB CRAC% (= 6/9)		22.34%

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.

Bonneville Power Administration, Power Business Line 6/10/2004 Page 4

### Look Forward: LB CRAC7

Final

6/10/2004

Table 7: Average 6-mo. Costs and Loa	ads	units	Oct-Dec	Jan-Mar	Oct-Mar
Slice Load		aMW	1,600	1,600	1,600
PF Base Load		aMW			
	HLH	aMW	4,321	4,811	4,563
	LLH	aMW	3,795	4,271	4,031
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	HLH	\$	18,731,757	18,439,605	18,585,681
+ fixed portion of power buybacks)	LLH	\$	14,310,377	13,811,095	14,060,736
Load Reduction Costs					
	HLH	\$	10,604,938	10,706,079	10,655,509
	LLH	\$	7,623,022	7,608,816	7,615,919
LDD Slice Costs		\$	238,433	238,433	238,433
LDD Non-Slice Costs		\$	1,101,482	1,051,526	1,076,504
C&R Slice Costs		\$	582,504	582,504	582,504
C&R Non-Slice Costs		\$	2,397,485	2,393,016	2,395,251

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 Oc							
1 - System Load	aMW	7,508	8,065	7,786			
2 - System Capability	aMW	5,541	5,852	5,697			
3 - Load Reduction	aMW	1,259	1,297	1,278			
Public	aMW	0	0	0			
DSI	aMW	504	504	504			
IOU	aMW	613	628	620			
Other	aMW	142	165	153			
4 - Augmentation Market Purchases							
HLH	aMW	1,049	1,063	1,056			
LLH	aMW	1,111	1,093	1,102			
5 - Augmentation Power Buybacks							
HLH H	aMW	121	123	122			
LLH	aMW	128	127	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.

Page 5

Bonneville Power Administration, Power Business Line

October '03 - March '04

Table 9: Total 6-mo. Incremental Revenue, Incremental Cost, Bill Adjustment Factors						
Rows 1, 2 are the revenues BPA earned only from the LB CRAC part of rates.						
1 - LB CRAC revenues earned from Slice	\$	\$40,994,885				
2 - LB CRAC revenues earned from non-Slice products	\$	\$98,976,822				
sum	\$	\$139,971,707				
Rows 3, 4 are the actual LB CRAC Revenue Requirement						
3 - Revenues required from Slice to cover actual LB CRAC costs	\$	\$41,339,322				
4 - Revenues required from non-Slice to cover actual LB CRAC costs	\$	\$99,777,277				
sum	\$	\$141,116,599				
120 Day Bill Adjustment in Dollars (negative indicates refund to customers)		\$1,144,891				
5 - Total Bill Adjustment for Slice - 120 Day Rule	\$	\$344,437				
6 - Bill Adjustment for non-Slice - 120 Day Rule	\$	\$800,454				
7 - Bill Adjustment non-Slice - 0 Day Rule	\$	-\$2,743,089				
8 - Total Bill Adjustment for non-Slice - (Sum of 0 Day Rule + 120 Day Rule)	\$	-\$1,942,635				
9 - Total Bill Adjustment Slice + non-Slice (row 6 + row 8)	\$	-\$1,598,198				
Rows 10, 11 are the adjustment factors used to determine individual customer bill adjustments						
10 - Adjustment factor for each Slice customer bill						
11 - Adjustment factor for each non-Slice customer bill		-0.000588				

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.

Page 6

Bonneville Power Administration, Power Business Line

6/10/2004

Final

October '03 - March '04

Table 10: Total 6-mo. Cost and Revenue Calculations - 120 Day Rule 1 - Augmentation Pre-Purchase Costs \$184,156,491 aMW 1,169 2 - Net Short Costs \$ \$8,850,542 aMW 0 3 - Load Reduction Costs \$ \$107,464,979 4 - Gross Augmentation Costs in LB CRAC \$ \$255,798,476 aMW 925 5 - Revenues from Resale of Augmentation Quantity \$ \$114,681,877 aMW 925 6 - Actual Net Augmentation Costs in LB CRAC - 120 Day Rule (= 4-5) \$141,116,599 \$ aMW 925 Rows 7, 8, 9 revenue calculations are the revenues BPA earned under LB CRAC'ed rates 7 - Total Revenues from Slice \$228,263,329 aMW 1.600 \$ 8 - Total Revenues from non-Slice products \$550,940,173 \$ aMW 4,969 9 - Total Revenue with LB CRAC Applied (= 7+8) \$779,203,502 \$

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	\$	\$184,156,491	aMW	1,169			
2 - Net Short Costs - 0 Day Rule	\$	\$6,107,452	aMW	0			
3 - Load Reduction Costs	\$	\$107,464,979					
4 - Gross Augmentation Costs in LB CRAC - 0 Day Rule	\$	\$253,055,386	aMW	925			
5 - Revenues from Resale of Augmentation Quantity	\$	\$114,681,877	aMW	925			
6 - Actual Net Augmentation Costs in LB CRAC 0 Day Rule (= 4-5)	\$	\$138,373,509	aMW	925			

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

Page 7

Bonneville Power Administration, Power Business Line

6/10/2004

6/10/2004

Final

6/10/2004 Final

October '03 - March '04

Table 12: Average Net Augmentation Need and Net Short Position							
		Oct	Jan	Oct			
		<u>to</u>	<u>to</u>	<u>to</u>			
		Dec	Mar	Mar			
1 - Net System Load	aMW	6,578	6,689	6,633			
2 - System Capability	aMW	5,639	5,639	5,639			
3 - Net Augmentation Need (w/losses)	aMW	956	895	925			
4 - Net Short Position	aMW	67	2	34			
HLH	aMW	69	3	36			
LLH	aMW	64	0	32			

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.

Page 8

Bonneville Power Administration, Power Business Line

October '03 - March '04

Final 6/10/2004

Table 13: Quarterly Average Loads		units	Oct-Dec	Jan-Mar	Oct-Mar
Slice Load Served		aMW	1,600	1,600	1,600
PF Load Served					
	HLH	aMW	4,357	4,671	4,513
	LLH	aMW	3,873	4,191	4,031
RL Load Served					
	HLH	aMW	382	382	382
	LLH	aMW	382	382	382
IP Load Served					
	HLH	aMW	312	289	301
	LLH	aMW	312	289	300

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

Table 14: Quarterly LDD & C&R Dollars	units	Oct-Dec	Jan-Mar	Oct-Mar
LDD Slice Costs	\$	417,638	417,638	417,638
LDD Non-Slice Costs	\$	1,007,205	930,963	969,084
C&R Slice Costs	\$	583,841	583,841	583,841
C&R Non-Slice Costs	\$	2,363,218	2,361,028	2,362,123

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

Table 15: Average Pre-Purchase Quantities to Meet Augmentation Need					
		Oct-Dec	Jan-Mar	Oct-Mar	
1 - Augmentation Market Purchases - 120 Day	Rule				
HLH	aMW	1,011	1,063	1,037	
LLH	aMW	1,018	1,088	1,053	
1 - Augmentation Market Purchases - 0 Day Ru	ule				
HLH	aMW	1,011	1,063	1,037	
LLH	aMW	1,018	1,088	1,053	
2 - Augmentation Power Buybacks - 120 Day R	lule				
HLH	aMW	124	124	124	
LLH	aMW	124	124	124	
2 - Augmentation Power Buybacks - 0 Day Rule	e				
HLH	aMW	124	124	124	
LLH	aMW	124	124	124	

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.

Page 9

Bonneville Power Administration, Power Business Line 6/10/2004

# **Compare: Forecast to Actuals for LB CRAC5**

· · ·	October '03 - March '04		Final	6/10/2004	
Table 16: Average Monthly Net System Load, Net Augmentation Need, Net Short Position					
	Actual	Actual-Fcst			
Net System Load	aMW	6,508	6,633	125	
System Capability	aMW	5,724	5,724	0	
Net Augmentation Need (w/losses)	aMW	798	925	128	
Net Short Position	aMW	0	34	34	
HLH	aMW	0	36	36	
LLH	aMW	0	32	32	

Table 17: Selected Total Cost and Revenue Calculations				
		Forecast	Actual (120 Day)	Actual-Fcst
Augmentation Pre-Purchase Costs	\$	196,315,038	184,156,491	-12,158,546
Net Short Costs	\$	0	8,850,542	8,850,542
Load Reduction Costs	\$	112,899,204	107,464,979	-5,434,225
Gross Augmentation Costs in LB CRAC	\$	233,555,900	255,798,476	22,242,575
Revenues from Resale of Augmentation Quantity	\$	98,410,365	114,681,877	16,271,512
Net Augmentation Costs (= 4-5)	\$	135,145,536	141,116,599	5,971,063
Revenue Earned from the LB CRAC	\$	135,145,536	139,971,707	4,826,172

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	aMW	4,650	4,513	-137
	LLH	aMW	4,104	4,031	-73
RL Load to Serve		aMW			
	HLH	aMW	381	382	1
	LLH	aMW	381	382	1
IP Load to Serve		aMW			
	HLH	aMW	31	301	270
	LLH	aMW	31	300	269
Augmentation Pre-Purchase Costs -120 Day					
(note: this includes mkt. Pre-purchase cost	HLH	\$	18,708,209	17,765,303	-942,906
+ fixed & var. portion of power buybacks)	LLH	\$	14,010,964	12,927,445	-1,083,518
Load Reduction Costs					
	HLH	\$	10,531,654	10,248,978	-282,676
	LLH	\$	8,284,880	7,661,852	-623,028
LDD Slice Costs		\$	550,965	417,638	-133,327
LDD Non-Slice Costs		\$	1,200,417	969,084	-231,333
C&R Slice Costs		\$	579,643	583,841	4,198
C&R Non-Slice Costs		\$	2,252,477	2,362,123	109,646

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

Table 19: Average Mon	thly Load Redu	ctions and Pov	ver Purchases	
-		Forecast	Actual	Actual-Fcst
Load Reduction*				
Public	aMW	18	NA	
DSI	aMW	884	NA	
IOU	aMW	618	NA	
Augmentation Market Purchases - 120 Day Rule				
, HLH	aMW	1,131	1,037	-94
LLH	aMW	1,180	1,053	-127
Augmentation Market Purchases - 0 Day Rule**				
μLΗ ΄	aMW	NA	1,037	
LLH	aMW	NA	1,053	
Augmentation Power Buybacks - 120 Day Rule				
HLH	aMW	124	124	0
LLH	aMW	122	124	2
Augmentation Power Buybacks - 0 Day Rule**				
HLH	aMW	NA	124	
LLH	aMW	NA	124	

\* Actual load reductions are not calculated.

\*\* For the forecast, implicitly, the 0 day results = 120 day results. Page 10 Bonneville Power Administration, Power Business Line

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

6/10/2004

Final

	CRAC8	CRAC9	CRAC10
	<u>Apr-05</u>	<u>Oct-05</u>	<u>Apr-06</u>
	to	to	to
	<u>Sep-05</u>	<u>Mar-06</u>	<u>Sep-06</u>
	<u>FY05</u>	<u>FY06</u>	<u>FY06</u>
Increased Revenue Required (LB CRAC%)	26%	23%	26%
Increase in Slice Rate	26%	23%	25%
Increase in non-Slice Rate	25%	23%	25%

 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 6/10/2004.

Page 11 Bonneville Power Administration, Power Business Line