

2002 Supplemental Power Rate Proposal Administrator's Final Record of Decision

WP-02-A-09

June 2001



ATTACHMENT TO CHAPTER 8

METHODOLOGY TO CALCULATE SLICE RATE AND SLICE TRUE-UP ADJUSTMENT CHARGE

Section 1. PURPOSE

The Slice Methodology is designed as a means for providing a consistent method of calculating the rate for Slice and conducting the annual true-up for 10 years of the contract. Because there is some uncertainty regarding the calculation of the Slice rate in a rate period subsequent to the FY 2002-2006 rate period, the Slice Methodology is intended to bring some stability to the calculation of the rate. The Slice Methodology is not intended to predetermine the actual rate a Slice purchaser will pay in any rate period; rather, the Slice Methodology proposes a set of cost categories that will make up the Slice Revenue Requirement and the manner in which such costs may be trued up annually.

Section 2. TERM OF THE METHODOLOGY

After FERC approval, this methodology shall take effect on October 1, 2001, and shall terminate on the earlier of midnight September 30, 2011, or a date established by FERC.

Section 3. DEFINITIONS

Actual Slice Revenue Requirement means the use of audited actual financial data in the cost categories comprising the Slice Revenue Requirement.

Capital Expenses means depreciation expense (recovery of the investment) and net interest expense (recovery of financing costs). Depreciation standards (*e.g.*, duration of useful life) used for the recovery of capital investments under the Slice contract will be the same as those used by BPA to set power rates generally, and will not change from those used in the development of Table 1, Slice Product Costing and True-Up Table, unless BPA adopts a new depreciation study.

Contracted Loads for each five-year rate period shall be the average of five Fiscal Year (FY) loads contracted for in annual aMW for the Public Agency customers, DSI customers to be served with FBS resources, IOU customers to be served with FBS resources, and the Preexisting Multiyear Contracts that are known to BPA.

Forecasted Loads for each five-year rate period shall be the average of five forecasted FY loads in annual aMW that was included in the applicable Final Power Rate Proposal for the Public Agency loads, DSI loads to be served with FBS resources, IOU loads served with FBS resources, and Preexisting Multiyear Contracts.

Initial Implementation Expenses means the expenses of implementing the Slice product for which BPA was reimbursed, prior to October 1, 2001, pursuant to the Master Agreement to Enable the Technical Development of a Slice of System Power Sale (Master Agreement).

Minimum Required Net Revenues means the amount by which BPA's payments to the U.S. Treasury for generation amortization and irrigation assistance exceed the total non-cash expenses in the Actual Slice Revenue Requirement.

Preexisting Multiyear Contracts means BPA's contracts for power sales, which have been executed as of June 21, 1999, with a term length that extends beyond the first year of the FY 2002-2006 rate period.

Slice Revenue Requirement means the operating and Capital Expenses and credits included in the Slice Rate which are established in the generation Revenue Requirement Study for the applicable rate periods and are subject to the criteria for inclusion of new costs or credits. The costs and credit categories included in the Slice Revenue Requirement are listed in Table 1, Slice Product Costing and True-Up Table.

Slice System Resources means the FBS resources identified in the Slice contract.

System Obligations means those operational or contractual obligations of the FBS that are identified in the Slice contract.

Section 4. METHODOLOGY

A. Slice Rate Calculation

The monthly rate for the Slice product will be calculated in the following manner:

Monthly rate for the Slice product per 1 percent of the Slice System = (Annual Average Slice Revenue Requirement / 12) /100 where the Slice Revenue Requirement is calculated as described in section B below. The monthly rate for the Slice product will be adjusted by the application of the Load-Based Cost Recovery Adjustment Clause (LB CRAC). -The LB CRAC is applicable for the FY 2002-2006 rate period; as defined in the 2002 Final Supplemental Proposal for Wholesale Power Rates.

For the FY 2002-2006 rate period, the Slice Revenue Requirement will contain the costs and credits displayed in Table 1, Slice Product Costing and True-Up Table.

For the FY 2007-2011 rate period, the Slice Revenue Requirement will contain the costs and credits estimated in the FY 2007 rate case for the cost and credit categories identified in Table 1, Slice Product Costing and True-Up Table, and any other currently unidentified cost or credit, as described in section B. 3. below.

B. Slice Revenue Requirement

1. Uniform Application Throughout the Rate Period

The Slice Revenue Requirement is a five-year annual average amount for the applicable rate period. The Slice Rate will remain constant during the applicable rate period.

2. Cost and Credit Categories Used to Set the Slice Revenue Requirement

The cost and credit categories used to set the Slice Revenue Requirement and the Actual Slice Revenue Requirement shall be those defined in the generation Revenue Requirement Study for the 2002 Final Power Rate Proposal and listed in Table 1, Slice Product Costing and True-Up Table.

For FY 2002 only, the total of all Initial Implementation Expenses that BPA received under the Master Agreements shall be included in the Actual Slice Revenue Requirement.

3. Inclusion of New Costs or Credits

PBL costs or credits not otherwise specifically dealt with in the Slice Revenue Requirement, or excluded therefrom as specified in section B. 4. below, may be included in both the Slice Revenue Requirement and the Actual Slice Revenue Requirement, if and to the extent that:

Such PBL costs or credits could be properly includable in PBL's wholesale power rates; and either

a) Such PBL costs or credits are: (1) incurred by PBL to provide service to customers other than Slice purchasers; and (2) incurred to provide service to or otherwise benefit Slice purchasers;

OR

b) Such PBL costs or credits are not incurred to provide service to customers other than Slice purchasers, nor to provide service to or otherwise benefit Slice purchasers.

4. Costs Excluded from the Slice Revenue Requirement

Excluded costs include, but are not limited to the following:

- All transmission costs (other than those associated with the transmission of System Obligations and GTAs);
- All power purchase costs (with the exception of net Inventory Solution costs);
- All PNRR and hedging costs, with the exception of those hedging costs incurred to implement the forecasted Inventory Solution; and
- All costs not permitted to be included in the Slice Revenue Requirement as specified by section B. 3. above.

5. Credits

a. Systemwide Credits

Systemwide credits are any monetary credits that PBL forecasts to receive that are associated with the costs identified in the Slice Revenue Requirement. Systemwide credits shall be included in both the Slice Revenue Requirement and the Actual Slice Revenue Requirement as a credit. The credits include, but are not limited to:

- Credits from the U.S. Treasury for PBL's settlement payment to the Colville Tribe;
- Credits from the U.S. Treasury for section 4(h)(10)(c) of the Northwest Power Act;
- Credits from the U.S. Treasury for the FCCF; and
- Revenues BPA receives for meeting System Obligations (including revenues received for Congestion Management or PNCA transactions).

b. Transmission Surcharge

As provided for under separate rate and contract, BPA's TBL may impose a transmission surcharge on the Slice purchaser's use of the BPA transmission system. Any revenues received by the TBL pursuant to such surcharge will be credited to PBL's total Actual Slice Revenue Requirement, and will be reflected in the Slice purchaser's True-Up Adjustment. Repayment of such funds by the PBL to TBL, if any, shall be included in the Actual Slice Revenue Requirement.

c. Purchaser-Specific Credits and Other Contract Related Charges

All Slice purchaser-specific credits and other Slice purchaser-specific charges resulting from the implementation of the Slice contract shall be applied as an adjustment to the Slice True-Up Adjustment Charge for each specific Slice purchaser. The adjustment for credits and charges associated with the implementation of the Slice contract will be defined in the Slice contract.

6. Inapplicability of <u>Financial-Based</u> Cost Recovery Adjustment Clause <u>(FB CRAC)</u>, the <u>Safety Net Cost Recovery Adjustment Clause (SN CRAC)</u>, the <u>Targeted Adjustment Clause (TAC)</u>, and the Dividend Distribution Clause <u>(DDC)</u>

Neither the Slice Rate nor the Slice True-up Adjustment Charge paid by Slice purchasers will be subject to the <u>FB</u> CRAC, the <u>SN CRAC</u>, the <u>TAC</u>, or the DDC identified in the GRSPs or any successor thereto.

7. Applicability of the Load-Based CRAC

For the FY 2002- 2006 period, the LB CRAC will apply to -the Slice Rate.

7.8. Net Cost of the Inventory Solution

BPA has forecasted firm energy purchases that supplement the capability of FBS Resources (Inventory Solution) to meet the forecasted loads. The cost of the Inventory Solution shall be included in both the Slice Revenue Requirement and the Actual Slice Revenue Requirement on a net cost basis. The forecasted net cost of the Inventory Solution (NCIS) shall be calculated as: (1) the total expenses for the Inventory Solution; less (2) the total revenues for the sale of such power; both as projected by BPA. Since Slice purchasers bear the responsibility for their proportionate share of any loss of FBS resources or capability thereof, the Inventory Solution will not include such replacements. The forecasted net cost of the Inventory Solution to be included in the Slice Revenue Requirement for the FY 2002-2006 rate period is identified in Table 1. An additional adjustment is included in the Actual Slice Revenue Requirement that is based on the change in the magnitude of the Inventory Solution expressed in MW, the calculation of which is described in section C. 2. below.

C. Slice True-Up Adjustment Charge

The Slice True-Up Adjustment Charge is a monthly charge applied to the Slice product that is expressed in terms of dollars per percent Slice selected. The Slice True-Up Adjustment Charge consists of two components: (1) an Inventory Solution True-Up Adjustment that is calculated once for each rate period and is applied as a constant adjustment in each month of the rate period; and (2) the Annual Slice True-Up Adjustment that is calculated once each fiscal year and is applied to specific months of the fiscal year. The Slice True-Up Adjustment Charge for each month shall be calculated in the following manner:

 $STUAC_M = \frac{(ISTU_R + ASTU_M)}{(ISTU_R + ASTU_M)}$

Where:

STUAC_M is the Slice True-Up Adjustment Charge for month M of the rate period.

ISTU_R is the Inventory Solution True-Up Adjustment for rate period R.

ASTU_M is the portion of the Annual Slice True-Up Adjustment applicable for month M.

1. Annual Slice True-Up Adjustment

The Annual Slice True-Up Adjustment shall be calculated for each fiscal year as soon as independently audited actual financial data are available. As necessary, the Actual Slice Revenue Requirement shall include a Minimum Required Net Revenues component to ensure coverage of annual cash requirements. The Annual Slice

True-Up Adjustment shall be calculated to be the annual Slice Revenue Requirement for the FY subtracted from the Actual Slice Revenue Requirement for such FY as shown in Attachment 1. The Annual Slice True-Up Adjustment shall be applied either as a one month credit (if the adjustment is negative) or as a three-month charge (if the adjustment is positive, and spread equally across the three months) following the month the Annual Slice True-Up Adjustment is calculated.

2.Inventory Solution True-Up Adjustment

The Inventory Solution True Up Adjustment (ISTU) is calculated once during each rate period and is calculated in the following manner:

ISTU_R = (CL_R - FL_R)/ ISMW_R * NCIS_R/12

Where:

ISTU_R is the Inventory Solution True-Up Adjustment for the rate period R.

CL_R is the annual average Contracted Loads for the rate period R.

FL_R is the annual average Forecasted Loads for the rate period R.

(CL_R-FL_R) cannot be a value less than zero.

 $\overline{\text{ISMW}}_R$ is the annual average MW associated with the Inventory Solution for the rate period R.

NCIS_R is the annual average net cost of the Inventory Solution for the rate period R.

D. IOU Settlement Charge

Each monthly Slice bill will include a line item to account for the proposed increment in the IOU cash settlement above the cash settlement amount included in the Slice Revenue Requirement in the May Proposal. The revenues from this incremental amount will not be included in any calculation of the LB CRAC.

The monthly adjustment per one-percent Slice will be:

[Incremental amount of IOU Settlement costs in the Supplemental Rate Case ROD/12/100] = \$ per month per one-percent Slice.

TABLE 1

Table 1

		SLIC	SLICE PRODUCT COSTING AND TRUE-UP TABLE										
			Α	В		С		D		E			F
1	PBL Costs (\$000)	2002-2006	2002		2003		2004		2005		2006		TOTAL
2	GENERATION COSTS	Audited	Projected	-		-	•						
3	Federal Base System	Actuals											
4	Hydro		e 4.000		2.050		2 444		0.474		2.240		40.50
5	Upstream benefits	_	\$ 1,990 \$ 100,000		2,050		2,111	\$ \$	2,174		2,240	\$	10,58
6 7	Corps of Engineers O&M Corps Depreciation	-	\$ 108,000 \$ 73,329	\$	112,000 75,497	\$	112,000 78,292	\$	112,000 81,258	\$	112,000 83,620	\$ \$	556,00 391,99
8	U.S. Fish & Wildlife O&M		\$ 75,329 \$ 15,400		16,197		16,995	\$	17,892	5	18,789	\$	85,27
9	Bureau of Reclamation O&M		\$ 47,000		48,300		48,300	\$	48,300	\$	48,300	\$	240,20
, 10	Bureau Depreciation				20,043		20,535	\$	21,009	\$	21,516	\$	102,57
11	Colville Settlement		\$ 16,000		16,000		16,000	\$	16,000	\$	16,000	\$	80,00
12	Packwood Dam		\$ 2,343		2,577		2,835	\$	3,118		3,430	\$	14,30
13	Net Interest Expense		\$ 157,914		158,579		166,657	\$		\$	177,170	\$	836,54
14	Subtotal		\$ 441,446		451,243		463,724	\$		\$	483,065	\$	2,317,45
15	Fish and Wildlife		,	Ť	101,210	Ť	,	Ť	,	Ť	100,000	Ť	_, ,
16	Expense		\$ 131,700	\$	138,000	\$	140,100	\$	142,900	\$	144,400	\$	697,10
17	Amortization		\$ 19,772		21,842		23,737	\$	25,394	\$	26,407	\$	117,15
18	Net Interest Expense		\$ 6,540		6,759		7,181	\$	7,259	\$	7 166	\$	34,90
19	Subtotal		\$ 158,012		166,601		171,018	\$	175,553		177,973	\$	849,1
20	Trojan				,	Ė			,		,	<u> </u>	
1	Decommissioning		\$ 9,600	\$	4,200	\$	2,600	\$	2,600	\$	2,600	\$	21,60
22	Debt Service		\$ 9,947	\$	9,954	\$	9,964	\$	9,989	\$	10,009	\$	49,86
23	Subtotal		\$ 19,547		14,154		12,564	\$	12,589		12,609	\$	71,40
4	WNP #1												
25	M&O		\$ 400	\$	384	\$	384	\$	384	\$	384	\$	1,93
26	Debt Service		\$ 177,704	\$	167,856	\$	174,623	\$	167,910	\$	179,992	\$	868,08
7	Subtotal		\$ 178,104	\$	168,240	\$	175,007	\$	168,294	\$	180,376	\$	870,02
8	WNP #2												
9	O&M/Capital Requirements		\$ 154,094	\$	163,824	\$	170,724	\$	173,824	\$	179,824	\$	842,29
80	Debt Service		\$ 197,442	\$	244,980	\$	233,624	\$	187,825	\$	211,976	\$	1,075,84
31	Subtotal			\$	408,804	\$	404,348	\$	361,649	\$	391,800	\$	1,918,13
32	WNP #3												
33	Debt Service		\$ 153,720	\$	152,993	\$	149,232	\$	149,480	\$	147,836	\$	753,28
34	Total		\$ 1,302,364	\$	1,362,035	\$	1,375,894	\$	1,345,542	\$	1,393,659	\$	6,779,49
35													
86	New Resources												
37	Idaho Falls		\$ 3,740	\$	3,737	\$	3,744	\$	3,754	\$	3,754	\$	18,72
88	Cowlitz		\$ 14,914	\$	14,987	\$	15,051	\$	15,123	\$	15,196	\$	75,27
39	Firm Purchased Power		\$ 17,723		17,953	\$	18,187	\$	18,435	\$	18,681	\$	90,97
10	Competitive Acquisitions		\$ 12,158	\$	12,340	\$	12,526	\$	12,713	\$	12,904	\$	62,64
11	Columbia Hills (CARES)		\$ 4,323	\$	4,359	\$	4,397	\$	4,446	\$	4,490	\$	22,01
12	Wheeling Power Purchase		\$ 1,242		1,253		1,264	\$	1,275	\$	1,287	\$	6,32
13	Other Acquisitions		\$ -	\$	-	\$	-	\$	-	\$	-	\$	-
14	Total		\$ 36,377	\$	36,677	\$	36,982	\$	37,312	\$	37,631	\$	184,97
5													
6	Legacy Conservation												
7	Conservation expense		\$ 18,201	\$	16,613		16,913	\$	17,313		17,613	\$	86,68
18	Generation Billing Credits		\$ 7,934		7,898	\$	7,866	\$	7,834		7,785	\$	39,3
19	Conservation Financing		\$ 5,578		5,577	\$	5,577	\$	5,577	\$	5,577	\$	27,88
0	Conservation Amortization		\$ 59,337	\$	55,586	\$	47,125	\$	43,179	\$	37,650	\$	242,87
1	Conservation Interest		\$ 38,822		39,345		35,237	\$	34,779	\$	32,001	\$	180,18
2	Subtotal		\$ 129,872		125,019		112,718	\$	108,681		100,626	\$	576,9
3	Energy Services Business		\$ 11,663	5	11,690	\$	11,601	\$	11,475	\$	11,444	\$	57,87
14	Other Generation Costs											_	
5	BPA Programs					-						-	
6	CSRS Pension Expense		\$ 27,600		17,550		15,450		13,250		11,600	\$	85,45
7	Power Marketing		\$ 16,000		15,700		8,800	\$	6,800		5,000	\$	52,30
8	Power Scheduling		\$ 20,900		12,800		12,100	\$	12,800		12,700	\$	71,30
9	Inventory Solution Hedging Activities		\$ -	\$		\$		\$	-	\$	-	\$	
0	Generation Oversight		\$ 2,964		2,950	\$	3,050	\$	3,050	\$	3,150	\$	15,16
1	Administrative & Support Services		\$ 17,350		16,650		16,650	\$	16,650	\$	16,650	\$	83,96
2	Power Planning Council		\$ 5,100		5,100		5,100		5,100		5,100	\$	25,50
3	Miscellaneous Depreciation		\$ 4,296		4,693		4,383	\$	3,411		2,973	\$	19,75
4	Geothermal Demonstration		\$ 15,768		15,768	\$	15,768	\$	15,768		15,768	\$	78,8
55	Renewables		\$ 3,091		2,870		2,683	\$	2,551	\$	2,459	\$	13,65
6	Contingency Resources		\$ 391		369		317	\$	395		342	\$	1,8
7	Net Interest Expense		\$ 406		359	\$	325	\$	312		308	\$	1,7
8	Between Business Line Expense		\$ 4,000	\$	4,000	\$	4,000	\$	4,000	\$	4,000	\$	20,0
9	Other			-		_		_		_		-	
'O	WNP #3 Plant		\$ 3,086		3,169		3,169		3,169	\$	3,169	\$	15,78
14	Total Other Generation Costs		\$ 120,952	\$	101,978	\$	91,795	\$	87,256	- \$	83,218	\$	485,19
'1 '2	Minimum Required Net Revenues		\$ -	\$		\$		\$		\$		\$	

Table 1 (continued)

			Α		В		С		D		E			F
	PBL Costs (\$000)	2002-2006		2002		2003		2004		2005		2006		TOTAL
		Audited		Projected	-		-	•						
74		Actuals												
75	Net Residential Exchange Costs	1	\$	-	\$	-	\$	-	\$	-	s	-	\$	-
76	Subscription Settlement Costs (900 aMW's in \$)		\$	69,725	\$	69,725	\$	69,725	\$	69,725	\$	69,725	\$	348,626
77	(,	Ť	,	Ť			,		,	Ť	
78	Slice Initial Implementation Expenses	*	\$	-	No	ot applicable	No	t applicable	No	t applicable	No	t applicable	\$	-
79	Slice Implementation Expenses		\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
80					Ť						Ť		Ť	
81	CEA Transmission Costs		5	13.514	\$	17.105	\$	26,685	\$	26.685	s	26,685	\$	110.675
82	Ancillary and Reserve Service Costs		\$	10,000	\$	10,000	\$	8,000	\$	8,000	\$	8,000	\$	44,000
	PBL PF Trans. Pass-Through Costs		\$	-	\$	-	\$		\$	-	\$	-	\$	
	PNCA & NTS Transmission Costs		\$	1,815	\$	1,815	\$	1,815	\$	1,815	\$	1.815	\$	9,075
	General Transfer Agreement Costs		\$	47,200		47,200		47,200		47,200		47,200	\$	236,000
86	3					·								
87	REVENUE REQUIREMENT CHECK		\$	1,743,482	\$	1,783,243	\$	1,782,414	\$	1,743,692	\$	1,780,003	0 \$	8,832,833
88														
89	PF Conservation and Renewables Credit Costs												\$	95,104
90	IP Conservation and Renewables Credit Costs												\$	31,536
91	RL Conservation and Renewables Credit Costs												\$	21,900
92	LDD		\$	14,000	\$	14,000	\$	14,000	\$	14,000	\$	14,000	\$	70,000
93	S & I Rate Mitigation Costs		\$	4,000		4,000		4,000	\$	4,000		4,000	\$	20,000
94	Non-COSA Table Subtotal				Ė	·			Ė			·	\$	238,540
95														·
96	Total PBL Revenue Requirement												\$	9,071,373
97			T											-,,
98	Revenue Credits (\$000)													
99	Ancillary and Reserve Service Revs.		5	80.380	or.	80.293	or .	81,127	\$	81,098	or .	81,025	\$	403,924
	PBL PF Trans. Pass-Through Revs.		\$	- 00,300	\$	00,293	\$	01,127	\$	01,030	\$	01,025	\$	403,924
	Canadian Entitlement Credit		5	1,000		1,000		1,000	\$	1,000		1,000	- S	5,000
	Canadian Entitiement Credit		Ф	1,000	Ф	1,000	Ф	1,000	Ф	1,000	Ф	1,000	a a	9,000
102	COE & UCBB Businest Bernande		\$	0.100	ır.	8,100	ır.	8,100	or.	0.100	ar.	0.100	\$	40.500
	COE & USBR Project Revenues		\$	8,100			\$			8,100		8,100	\$	40,500
	4(h)(10)(c) Colville Credit		5	88,147 4,600		91,007 4.600		90,731 4.600	\$ \$	92,873 4.600		95,177 4.600	- 5 - 5	457,935 23.000
	FCCF		5	51,406		33,261		22,681		16,079		6,899	- S	130,326
	Sup/Ent Cap; Irr. Pump		5	938		33,261 707		471	\$	471		471	\$ \$	3,059
	Energy Efficiency Revenues		5	13,046	\$	13,345			\$	13,345		13,345	- S	66,426
			5	3,416		3,416		13,345 3,416		3,416			- S	
110	Property Trnfrs & Misc.		Ф	3,416	ф	3,410	Ф	3,410	Þ	3,416	Þ	3,416	a	17,080
	T-4-LB													4 4 4 7 2 4 0
111	Total Revenue Credits												\$	1,147,249
112														
113	Power Revenues Needed												\$	7,924,124
114														
115	Firm System Augmentation (1282 aMWs on avera	ge)	\$	322,218		336,766		289,159		323,744		306,070	\$	1,577,958
116	DSI Augmentation (450 aMWs)		\$	113,888		113,888		113,888	\$	113,888		113,888	\$	569,442
117	Conservation Augmentation (20,40,60,80,100 aMV)	\$	5,415		10,831		16,246		21,662		27,077	\$	81,231
118	Total Cost of Inventory Solution		\$	441,522	\$	461,485	\$	419,294	\$	459,294	\$	447,036	- \$	2,228,632
120														
121	Revenue 1282 aMWs flat, 450 aMWs to DSIs		\$	(327, 235)		(327, 235)		(327, 235)		(327, 235)		(327, 235)	\$	(1,636,175)
122	Net Cost of Inventory Solution		\$	114,287	\$	134,250	\$	92,059	\$	132,060	\$	119,801	\$	592,457
123														
124		(\$000)												
125	Annual Slice Revenue Requirement	\$ 1,703,316												
126	Monthly Slice Revenue Requirement	\$ 141,943							Fiv	e Year Tota	L		\$	8,516,581
127	One Percent of Monthly Requirement	\$ 1,419.43												
128	• •		1											