B O N N E V I L L E P O W E R A D M I N I S T R A T I O N

2008 Final Transmission Proposal

Documentation for Revenue Requirement Study

TR-08-FS-BPA-01A

April 2007

BONNEVILLE POWER ADMINISTRATION
PO BOX 3621 PORTLAND, OREGON 97208-3621

DOE/BP-3802 April 2007

REVENUE REQUIREMENT STUDY DOCUMENTATION

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CHAPTER 1

TRANSMISSION REVENUE REQUIREMENTS

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1. Introduction

This chapter documents how Bonneville Power Administration's (BPA) annual transmission revenue requirements are determined. Two tables are presented showing both years of the rate period (FYs 2008 and 2009). On the first table, revenue requirements for FYs 2008 and 2009 are projected in an income statement format. The second table, a statement of annual cash flows, determines the minimum required net revenues and presents the annual cash flows available for risk mitigation.

2. Income Statement

A more detailed description of the following line items is presented in Chapter 4 of the Revenue Requirement Study (Study), TR-08-E-BPA-01. Operating expenses (lines 1-6) include: BPA's transmission system operation, maintenance and development expenses, environmental remediation, facility leases, non-Federal transmission arrangements, transmission marketing and scheduling, Transmission Services support services and overheads, and corporate overheads (line 2); inter-business lines expenses (primarily the generation inputs for ancillary services) (line 3), interest that accrues on the outstanding Large Generator Interconnection Agreement (LGIA) credit balances (line 4), and annual straight-line depreciation (remaining life technique) for transmission and general plant-in-service and amortization of deferred assets.(line 5).

Interest expense includes both non-Federal and Federal interest expenses. Debt Service Reassignment interest consists of the interest component of the debt service reassigned to TS through the Debt Optimization Program (line 8). Federal interest expense is calculated in transmission repayment studies on appropriations granted by Congress for BPA capital

investments prior to the Transmission Systems Act (line 10) and on bonds that BPA issues to the U.S. Treasury (line 11). Amortization of capitalized bond premiums (line 13) is the annual amortization of call premiums resulting from early retirement of bonds that have been refinanced. The call premiums are capitalized and included in the principal of the replacement bonds. They are then amortized over the term of the respective replacement bonds and constitute a non-cash component of interest expense. Bond interest is reduced by interest income from BPA's projected cash reserves (line 12). The capitalization adjustment and the Allowance for Funds Used During Construction (AFUDC) (lines 14-15) further reduce gross interest expense. The capitalization adjustment, a non-cash expense, is the annual recognition of the write-down in principal that resulted from the BPA Refinancing Act.

Planned net revenues (lines 18-19) are included to ensure coverage of planned amortization payments (minimum required net revenues) and to meet the Administrator's risk mitigation policy (planned net revenues for risk). *See* Chapter 9 of this volume and Section 2.2 of the Revenue Requirement Study, TR-08-FS-BPA-01.

3. Statement of Cash Flows

- **Cash from Current Operations:** Minimum required net revenues (line 2) is the amount necessary to ensure that cash from operations is sufficient for planned amortization payments. It is the amount by which these planned payments to the U.S. Treasury exceed the expenses that do not require cash outlays (depreciation and amortization (line 4), amortization of capitalized bond premiums (line 6), and the capitalization adjustment (line 7)) and the revenues that do not provide cash in that year (accrual revenues from AC

Intertie capacity ownership and fiber optic cable leases and revenue credits given to customers for LGIA payments (line 8)). As part of the settlement agreement, BPA is drawing on cash reserves (line 8).

- **Cash Used for Capital Investments**: Investment in utility plant (line 13) is the increase in capital outlays associated with BPA investments for transmission, environment and general plant assets.

- **Cash from Treasury Borrowing and Appropriations**: Increase in long-term debt (line 16) is the annual increment in bonds that BPA issues to Treasury to fund capital outlays for transmission, environment and general plant assets. Debt Service Reassignment Principal is the principal component of the debt service obligation reassigned to TS through the Debt Optimization Program (line 17). Repayment of long-term debt (line 18) is planned amortization of bonds issued to Treasury, as determined in transmission repayment studies. Repayment of capital appropriations (line 19) is planned amortization associated with pre-Transmission System Act appropriations, as determined in transmission repayment studies.

Table 1-1: Transmission Revenue Requirement Income Statement
($000s)

		A FY 2008	B FY 2009
1	OPERATING EXPENSES		
2	OPERATION AND MAINTENANCE	275,071	285,128
3	TRANSMISSION ACQ & ANCILLARY SERVICES	73,351	76,605
4	NON-FEDERAL PROJECTS DEBT SERVICE	6,064	11,544
5	DEPRECIATION & AMORTIZATION	190,229	198,535
6	TOTAL OPERATING EXPENSES	544,715	571,812
7	INTEREST EXPENSE		
8	DEBT SERVICE REASSIGNMENT INTEREST	42,546	42,347
9	INTEREST ON FEDERAL INVESTMENT -		
10	ON APPROPRIATED FUNDS	37,918	35,714
11	ON LONG-TERM DEBT	112,896	125,472
12	INTEREST INCOME	(10,366)	(9,665)
13	AMORTIZATION OF CAPITALIZED BOND PREMIUMS	1,489	1,051
14	CAPITALIZATION ADJUSTMENT	(18,968)	(18,968)
15	AFUDC	(10,295)	(10,798)
16	NET INTEREST EXPENSE	155,220	165,152
17	TOTAL EXPENSES	699,935	736,964
18	MINIMUM REQUIRED NET REVENUES 1/	29,301	31,335
19	PLANNED NET REVENUES FOR RISK	0	0
20	TOTAL PLANNED NET REVENUES	29,301	31,335
21	**TOTAL REVENUE REQUIREMENT**	**729,236**	**768,300**

1/ SEE NOTE ON CASH FLOW TABLE.

Table 1-2: Transmission Revenue Requirement Statement of Cash Flows
($000s)

		A FY 2008	B FY 2009
1	CASH FROM CURRENT OPERATIONS:		
2	MINIMUM REQUIRED NET REVENUES 1/	29,301	31,335
3	EXPENSES NOT REQUIRING CASH:		
4	DEPRECIATION & AMORTIZATION	190,229	198,535
5	NON-FEDERAL PROJECTS DEBT SERVICE	6,064	11,544
6	AMORTIZATION OF CAPITALIZED BOND PREMIUMS	1,489	1,051
7	CAPITALIZATION ADJUSTMENT	(18,968)	(18,968)
8	DRAWDOWN OF CASH RESERVES FOR CAPITAL FUNDING	15,000	15,000
9	ACCRUAL REVENUES (AC INTERTIE/FIBER)	(35,824)	(43,390)
10	CASH PROVIDED BY CURRENT OPERATIONS	187,291	195,107
11	CASH USED FOR CAPITAL INVESTMENTS:		
12	INVESTMENT IN:		
13	UTILITY PLANT	(305,318)	(279,982)
14	CASH USED FOR CAPITAL INVESTMENTS	(305,318)	(279,982)
15	CASH FROM TREASURY BORROWING AND APPROPRIATIONS:		
16	INCREASE IN LONG-TERM DEBT	290,318	264,982
17	DEBT SERVICE REASSIGNMENT PRINCIPAL	(4,510)	(7,449)
18	REPAYMENT OF LONG-TERM DEBT	(137,119)	(128,480)
19	REPAYMENT OF CAPITAL APPROPRIATIONS	(30,662)	(44,178)
20	CASH FROM TREASURY BORROWING AND APPROPRIATIONS	118,027	84,875
21	ANNUAL INCREASE (DECREASE) IN CASH	-	-
22	PLANNED NET REVENUES FOR RISK	-	-
23	TOTAL ANNUAL INCREASE (DECREASE) IN CASH	-	-

1/ Line 21 must be greater than or equal to zero, otherwise net revenues will be added so that there are no negative cash flows for the year.

CHAPTER 2

TRANSMISSION EXPENSES

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1. Introduction

This chapter compiles the expenses that are the basis for cost recovery in determination of transmission revenue requirements for the rate approval period.

2. Expenses

BPA used O&M expenses reflected in the final spending level process and decisions explained in Chapter 2 of the Study. Inter-business line expenses, as determined in BPA's 2007 wholesale power rate case, are the generation inputs for ancillary services and the COE and BOR annual costs of network transmission and utility delivery facilities of those agencies.

Depreciation and amortization expense, calculated using the straight-line method and remaining life technique is determined for lines, substations, and each of the FERC Accounts in the general plant category. *See* Chapter 3.

Interest expense is calculated in the transmission repayment study, using the capital appropriations and BPA revenue bonds issued to Treasury at individual interest rates. *See* Chapter 4 for calculation of the interest credit on cash reserves.

Table 2-1: TS Expenses from Programs in Review
($000s)

Program & Other Operating Costs	FY2008	FY2009
Transmission's Transmission Acquisition		
Leased Facilities	13,608	16,098
Settlements	931	950
Stability Reserve Payments	3,050	3,050
Sub-Total Transmission Acquisition	**17,589**	**20,098**
Transmission System Operations		
Information Technology	662	681
Power System Dispatching	10,125	10,332
Control Center Support	9,449	9,613
Technical Operations	3,694	3,770
Substation Operations	18,758	19,143
Sub-Total Transmission System Operations	**42,688**	**43,539**
Transmission Scheduling		
Management Supervision & Administration	1,035	1,071
Reservations	459	469
Pre-Scheduling	755	771
Real-Time Scheduling	3,971	4,039
Scheduling Technical Support	2,691	2,738
Scheduling After-The-Fact	666	680
Sub-Total Transmission Scheduling	**9,577**	**9,767**
Transmission Marketing		
Transmission Sales	2,230	2,283
Marketing Internal Operations	861	884
Transmission Finance	815	832
Contract Management	1,456	1,498
Transmission Billing	1,922	1,962
Business Strategy & Assessment	2,446	2,496
Marketing IT Support	0	0
Meter Data	1,354	1,385
Sub-Total Transmission Marketing	**11,084**	**11,340**
Transmission Business Support		
Executive and Admin Services 1/	8,045	8,191
Staff Management	0	0
TBL Internal G&A 1/	7,577	7,733
Aircraft Services	1,327	1,360
Logistics Services	5,080	5,185
Security Enhancements	1,028	1,049
Sub-Total Transmission Business Support	**23,057**	**23,519**
Transmission System Development		
Research & Development	3,396	3,466
TSD Planning & Analysis	3,502	3,534
Capital to Expense Transfer	3,000	3,000
Inventory Management	5,000	4,000
Regulatory & Region Association Fees	2,180	2,250
Sub-Total Transmission System Development	**17,078**	**16,250**

Table 2-1: TS Expenses from Programs in Review
($000s)

Program & Other Operating Costs	FY2008	FY2009
Transmission System Maintenance		
Non-Electric Maintenance	11,053	11,229
Substation Maintenance	17,386	17,827
Transmission Line Maintenance	18,826	19,191
System Protection Control Maintenance	9,730	9,911
Power System Control Maintenance	10,627	10,858
System Maintenance Management	6,822	6,958
Right Of Way Maintenance	12,844	13,088
Heavy Mobile Equipment Maintenance	858	836
Technical Training	3,530	4,092
Sub-Total Transmission System Maintenance	**91,675**	**93,992**
Transmission Environmental Operations		
Environmental Policy & Planning	1,266	1,307
Pollution Prevention & Abatement	3,389	3,491
Sub-Total Transmission Environmental Operations	**4,655**	**4,798**
Transmission Other		
Civil Service Retirement System (CSRS)	9,000	15,277
Undistributed Cost Reduction	(2,000)	-2,000
Non-Federal Debt Service	11,034	13,434
Sub-Total Transmission Other	**18,034**	**26,711**
Sub-Total Transmission System Operations & Maintenance	**235,438**	**250,016**
Between Business Line Expenses		
Ancillary Services	45,521	45,521
Corps/Bureau/Network/Delivery Facilities	6,652	7,397
Station Service	3,589	3,589
Sub-Total Between Business Line Expense	**55,762**	**56,507**
Corporate Expenses		
Legal Support - Expense	2,213	2,287
Shared Services Costs	0	0
Corporate Overhead Distributions	66,044	66,359
Sub-Total Corporate Charges	**68,257**	**68,646**
Total Transmission Expense Program Levels	**359,457**	**375,169**

1/ Executive and Admin Services includes expenses for Executive Management, Asset Management, Continuity of Operations, and non-project travel and training costs. Internal G&A includes expenses for General Administration, Relocations and Pay for Performance.

Table 2-2: Federal Columbia River Transmission System Capital-Related Costs

SUMMARY OF TRANSMISSION REPAYMENT STUDY DATA
($000s)

		A 2008	B 2009
1	INTEREST EXPENSE (GROSS)		
2	DSR INTEREST	42,546	42,347
3	APPROPRIATIONS	37,918	35,714
4	BONDS ISSUED TO TREASURY	112,896	125,472
5	TOTAL INTEREST EXPENSE (GROSS)	193,360	203,532
6	PLANNED AMORTIZATION		
7	BPA APPROPRIATIONS	30,662	44,178
8	LONG-TERM DEBT	137,119	128,480
9	TOTAL AMORTIZATION	167,781	172,658

SUMMARY OF TRANSMISSION DEPRECIATION & AMORTIZATION

10	TRANSMISSION PLANT		
11	LINES	51,618	53,414
12	SUBSTATIONS	67,910	72,609
13	GENERAL PLANT	69,542	70,854
14	AMORTIZATION	1,159	1,658
15	TOTAL DEPRECIATION AND AMORTIZATION	190,229	198,535

Table 2-3: Allowance for Funds Used During Construction
($000s)

		2007	2008	2009
1	capital expenditures	242,293	288,819	261,064
2	plant-in-service	212,936	246,152	294,813
3	SOY CWIP Balance	242,222	280,346	333,308
4	EOY CWIP Balance	271,579	323,013	299,559
5	Average CWIP Balance	256,900	301,679	316,433
6	AFUDC Rate	5.25%	5.25%	5.25%
7	**AFUDC**	**8,767**	**10,295**	**10,798**

Table 2-4 Amortization of Premiums of Bond Refinancings

Date of Refinancing	Premium	No. of Months	Monthly Amortization	Type of Bond	Last Month to Amortize	2008	2009
TBL Construction - Capitalized Bond Premium: (186034)							
8/31/1992	$7,760,000.00	180	$43,111.11	Construction	Aug-2007	-	-
8/31/1997	$7,954,100.00	120	$66,284.17	Construction	Aug-2007	-	-
4/30/1998	$4,998,330.00	120	$41,652.75	Construction	Apr-2008	292	-
5/31/1998	$4,827,690.00	132	$36,573.41	Construction	May-2009	439	293
5/31/1998	$2,556,947.00	156	$16,390.69	Construction	May-2011	197	197
5/31/1998	$6,322,053.00	408	$15,495.23	Construction	May-2032	186	186
8/31/1998	$4,684,950.00	360	$13,013.75	Construction	Aug-2028	156	156
8/31/1998	$6,560,000.00	360	$18,222.22	Construction	Aug-2028	219	219
	$45,664,070.00		**$250,743.32**			1,489	1,051

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CHAPTER 3

FCRTS INVESTMENT BASE

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1. Introduction

This chapter documents the development of the FCRTS investment for the rate approval period. In this proposal the investment data primarily serve as the source of depreciation calculations.

2. Methodology

The historical investment information is prepared from BPA's plant investment records. The general plant investment is identified according to different types of facilities (communications, supervisory control, buildings, etc.) by FERC Account.

Forecasted plant additions have been adjusted to take into account the investment associated with Delivery segment facilities projected to be sold prior to the rate approval period.

Depreciation is calculated using the straight-line method, remaining life technique. For general plant categories, annual depreciation rates are used unadjusted. For lines and substations, the annual rate has been weighted by the groups that compose these facilities, e.g., Substations is made up of land and land rights, structures and improvements, and station equipment. Both historical investment and forecasted additions are depreciated according to their group rate.

Table 3-1: BPA Transmission Plant Depreciation and Accumulated Depreciation
($000s)

	A 2005 PLANT INVEST	B 2005 ACCUM DEPREC	C 2006 PLANT INVEST	D 2006 DEPREC EXPEN	E 2006 ACCUM DEPREC	F 2007 PLANT INVEST	G 2007 DEPREC EXPEN	H 2007 ACCUM DEPREC
TOTAL LINES	2,232,712	1,092,812	2,285,803	48,855	1,141,667	2,354,299	50,169	1,191,836
TOTAL SUBSTATIONS	2,274,893	913,442	2,445,077	58,853	952,303	2,618,863	63,143	1,015,446

	I 2008 PLANT INVEST	J 2008 DEPREC EXPEN	K 2008 ACCUM DEPREC	L 2009 PLANT INVEST	M 2009 DEPREC EXPEN	N 2009 ACCUM DEPREC
TOTAL LINES	2,419,788	51,618	1,243,454	2,520,280	53,414	1,296,868
TOTAL SUBSTATIONS	2,827,441	67,910	1,083,356	2,995,686	72,609	1,155,965

Table 3-2: BPA Projected Transmission Plant Investmen
($000s)

	A	B	C	D	E	F	G	H	I
	TOTAL 2005 INVEST	2006 ADDITIONS	TOTAL 2006 INVEST	2007 ADDITIONS	TOTAL 2007 INVEST	2008 ADDITIONS	TOTAL 2008 INVEST	2009 ADDITIONS	TOTAL 2009 INVEST
TOTAL BPA	5,467,138	261,230	5,728,368	285,051	6,013,419	322,988	6,336,407	313,137	6,649,544

Table 3-3: BPA Transmission Plant Investment Additions
($000s)

	A	B	C	D	E	F	G	H
	LINES	SUBS	GEN PLANT	TOTAL 2006 ADDITIONS	LINES	SUBS	GEN PLANT	TOTAL 2007 ADDITIONS
TOTAL BPA	53,091	170,184	37,955	261,230	68,496	173,786	42,769	285,051

	I	J	K	L	M	N	O	P
	LINES	SUBS	GEN PLANT	TOTAL 2008 ADDITIONS	LINES	SUBS	GEN PLANT	TOTAL 2009 ADDITIONS
TOTAL BPA	65,489	208,578	48,921	322,988	100,492	168,245	44,400	313,137

Table 3-4: Amortization of BPA Transmission Other Deferred Assets
($000s)

Spacer Dampers

FY	Investment	Partial Year Amortization	Full year Amortization	Annual Amortization	Accumulated Amortization	Cumulative Investment
2005				-	-	
2006	2,728	68	91	68	68	2,728
2007	2,800	47	93	138	206	5,528
2008	21,943	731	731	915	1,121	27,471
2009	9,812	327	327	1,242	2,363	37,283

FY 2008 investment = 9,617 plus total deferred investment from 2006 and 2007.

Non-Wires Program

FY	Investment	Partial Year Amortization	Full year Amortization	Annual Amortization	Accumulated Amortization	Cumulative Investment
2006						
2007						
2008	4,000	100	200	100	100	4,000
2009	3,000	75	150	275	375	7,000

Total FAS 71 Amortization

	Annual Amortization
2008	1,015
2009	1,517

Note:
Amortization of investments made in FY 2006 and FY 2007 was deferred until FY 2008.

Table 3-5: BPA General Plant Cumulative Investment
($000s)

		FERC ACCT	2005 TOTAL	2006 TOTAL	2007 TOTAL	2008 TOTAL	2009 TOTAL
1	LAND & LAND RIGHTS	389	8,259	8,259	8,259	8,259	8,259
2	STRUCTURES & IMPROVEMENTS	390	146,982	152,711	157,430	162,263	167,205
3	OFFICE FURNITURE & FIXTURES	391.1	2,370	2,370	2,370	2,370	2,370
4	DATA PROCESSING -EQUIPMENT	391.2	31,113	31,113	31,113	31,113	31,113
5	DATA PROCESSING -SOFTWARE	391.3	68,289	76,935	93,790	117,656	134,032
6	TRANSPORT EQUIPMENT	392.1	26,816	27,709	28,595	29,710	30,829
7	HELICOPTERS	392.2	5,271	8,413	14,246	14,993	15,743
8	AIRPLANES	392.3	5,255	5,854	6,448	14,141	21,977
9	STORES EQUIPMENT	393	1,914	2,807	3,693	4,808	5,927
10	TOOLS, SHOP & GARAGE EQUIPMENT	394	5,351	5,950	6,544	7,291	8,041
11	LAB EQUIPMENT	395	42,701	43,899	45,087	46,581	48,080
12	POWER OPERATED EQUIPMENT	396	25,509	26,707	27,895	29,389	30,888
13	COMMUNICATIONS EQUIPMENT	397	455,239	471,503	491,071	511,077	526,064
14	MISC EQUIPMENT	398	7,047	7,047	7,047	7,047	7,047
15	SUBTOTAL GENERAL PLANT		832,116	871,277	923,588	986,698	1,037,575
16	STATION EQUIPMENT	353	84,545	91,611	98,571	107,882	117,405
17	TOTAL GENERAL PLANT		916,661	962,888	1,022,159	1,094,580	1,154,980

Table 3-6: BPA General Plant Depreciation Expense
($000s)

		FERC ACCT	FY 2005 TOTAL	FY 2006 TOTAL	FY 2007 TOTAL	FY 2008 TOTAL	FY 2009 TOTAL
1	LAND & LAND RIGHTS	389	-				
2	STRUCTURES & IMPROVEMENTS	390	2,549	3,042	3,148	3,245	3,344
3	OFFICE FURNITURE & FIXTURES	391.1	123	237	237	237	237
4	DATA PROCESSING -EQUIPMENT	391.2	4,549	5,622	5,289	3,257	-
5	DATA PROCESSING -SOFTWARE	391.3	8,078	13,121	15,544	13,615	15,861
6	TRANSPORT EQUIPMENT	392.1	2,949	414	428	443	460
7	HELICOPTERS	392.2	176	246	408	526	553
8	AIRPLANES	392.3	169	176	194	325	571
9	STORES EQUIPMENT	393	68	50	69	90	113
10	TOOLS, SHOP & GARAGE EQUIPMENT	394	283	144	159	176	195
11	LAB EQUIPMENT	395	2,419	2,221	2,282	2,351	2,428
12	POWER OPERATED EQUIPMENT	396	1,756	1,512	1,581	1,658	1,745
13	COMMUNICATIONS EQUIPMENT	397	20,930	36,282	32,023	39,234	40,604
14	MISC EQUIPMENT	398	287	473	473	473	473
15	SUBTOTAL GENERAL PLANT		44,336	63,540	61,835	65,630	66,584
16	STATION EQUIPMENT	353	4,006	3,338	3,604	3,912	4,270
17	TOTAL GENERAL PLANT		48,342	66,878	65,439	69,542	70,854

Table 3-7: BPA Transmission General Plant Projected Plant Additions
($000s)

		FERC ACCT	2007 ADDTNS	2008 ADDTNS	2009 ADDTNS
1	LAND & LAND RIGHTS	389	-	-	-
2	STRUCTURES & IMPROVEMENTS	390	4,719	4,833	4,942
3	OFFICE FURNITURE & FIXTURES	391.1	-	-	-
4	DATA PROCESSING -EQUIPMENT	391.2	-	-	-
5	DATA PROCESSING -SOFTWARE	391.3	16,855	23,866	16,376
6	TRANSPORT EQUIPMENT	392.1	886	1,115	1,119
7	HELICOPTERS	392.2	5,833	747	750
8	AIRPLANES	392.3	594	7,693	7,836
9	STORES EQUIPMENT	393	886	1,115	1,119
10	TOOLS, SHOP & GARAGE EQUIPMENT	394	594	747	750
11	LAB EQUIPMENT	395	1,188	1,494	1,499
12	POWER OPERATED EQUIPMENT	396	1,188	1,494	1,499
13	COMMUNICATIONS EQUIPMENT	397	19,568	20,006	14,987
14	MISC EQUIPMENT	398	-	-	-
15	SUBTOTAL GENERAL PLANT		52,311	63,110	50,877
16	STATION EQUIPMENT	353	6,960	9,311	9,523
17	TOTAL GENERAL PLANT		59,271	72,421	60,400

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CHAPTER 4

PROJECTED CASH BALANCES/INTEREST CREDITS

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1. Introduction

This chapter projects BPA-TS cash balances for the rate period and estimates the interest income (credits) to be earned on of BPA's projected cash balances and on annual funds to be returned to Treasury. Included in BPA-TS's projected cash balances are proceeds from the sale of Delivery segment facilities projected to be sold prior to the 2008-2009 rate period.

2. Interest credits on BPA's projected cash balances

The beginning rate period cash balance was derived from BPA's business unit cash analysis for FY 2006 and from current TS forecasts of revenues, expenses and cash flows for FY 2007. The annual incremental cash provided from forecasted net revenues are added to this, for revenue requirements and the current and revised revenue tests. As agreed to in the rate case settlement, reserves during the rate period are reduced by $15 million each year for the funding of capital expenditures in lieu of Treasury borrowing. Using the existing interest earnings rate, annual interest income is calculated from projected average annual cash balances. In addition, based on an analysis of actual TS within-year cash flows, thirty-three percent of the repayment study interest income is included in the total credit. The resulting interest income is applied as a credit against interest expense in the transmission revenue requirements and in the income statements of the current and revised revenue tests.

3. Interest income (repayment program calculation)

Separately, interest income rates listed in this chapter are calculated and used within the repayment program to calculate an interest credit based on the average cash necessary to pay the interest, bond call premiums, and amortization payments calculated by the study for return to

Treasury in that year. The repayment program assumes the cash accumulates at a uniform rate throughout the year, except for interest paid on bonds issued to Treasury at mid-year. At the end of the year, the cash balance, together with the interest credit earned thereon, is used in the program for payment of interest expense, amortization of the Federal investment, and payment of bond premiums. For a further explanation of the calculation of the interest credit computed within repayment studies, *see* 2004 Final Transmission Proposal Revenue Requirement Study, TR-04-FS-BPA-01, Appendix A - The Repayment Program.

Table 4-1: Interest Income from Projected Cash Balanced Revenue Requirement Development ($000s)

		2007	2008	2009
1	Annual Cash Surplus/(Deficit)		0	0
2	Adjustments to Cash			
3	SOY Cash Balance		175,167	160,167
4	EOY Cash Balance	175,167	160,167	145,167
5	Average Cash Balance		167,667	152,667
6	Interest Income Rate	5.08%	5.08%	5.08%
7	Annual Interest Income *		10,366	9,665
	* includes from repayment study **(takes only 1/3 of above)**		6,162	6,365

Table 4-2: Interest Income from Projected Cash Balances
Revenues from Current Rates
($000s)

		2008	2009	Repayment Period
1	Annual Cash Surplus/(Deficit)	8,588	(20,207)	
2	Adjustments to Cash			
3	SOY Cash Balance	175,167	179,340	154,259
4	EOY Cash Balance	168,755	144,133	154,259
5	Average Cash Balance	171,961	161,736	154,259
6	Interest Income Rate	5.08%	5.08%	5.08%
7	Annual Interest Income *	10,585	10,126	7,836
	* includes from repayment study **(takes only 1/3 of above)**	6,162	6,365	

Table 4-3: Interest Income from Projected Cash Balances
Revenues from Revised Rates
($000s)

		2008	2009	Repayment Period
1	Annual Cash Surplus/(Deficit)	5,511	(23,742)	
2	Adjustments to Cash			
3	SOY Cash Balance	175,167	176,184	147,318
4	EOY Cash Balance	165,678	137,442	147,318
5	Average Cash Balance	170,422	156,813	147,318
6	Interest Income Rate	0	0	0
7	Annual Interest Income *	10,506	9,876	7,484
	* includes from repayment study **(takes only 1/3 of above)**	6,162	6,365	

Table 4-4: Transmission Income Statement for 2007
($000s)

		2007
1	OPERATING REVENUES	739,359
2	OPERATING EXPENSES	
3	Transmission Operations	88,749
4	Transmission Maintenance	95,371
5	Transmission Engineering	12,799
6	Transmission Acquisitions and Ancillary Services	95,590
7	Transmission Reimbursables	0
8	BPA Internal Support	74,681
9	Other	0
10	Non-Federal Debt Service	5,873
11	Depreciation & Amortization	179,779
12	TOTAL OPERATING EXPENSES	552,842
13	INTEREST EXPENSE	
14	DSR INTEREST	42,574
15	INTEREST ON FEDERAL INVESTMENT -	
16	ON APPROPRIATED FUNDS	44,614
17	ON LONG-TERM DEBT	88,825
18	INTEREST CREDIT ON CASH RESERVES	(14,500)
19	AMORTIZATION OF CAPITALIZED BOND PREMIUMS	2,900
20	CAPITALIZATION ADJUSTMENT	(18,968)
21	AFUDC	(8,767)
22	NET INTEREST EXPENSE	136,678
23	TOTAL EXPENSES	689,520
24	NET REVENUES	49,839

Table 4-5: Statement of Transmission Cash Flows for 2007
($000s)

		2007
	Cash Provided by Current Operations	
1.	Net Revenues	49,839
2.	Expenses not Requiring Cash	
3.	Depreciation/Amortization	179,779
4.	Amort of Capitalized Bond Premiums	2,900
5.	Capitalization Adjustment	(18,968)
6.	Accrual Revenues (AC Intertie & Fiber)	(7,239)
7.	Proceeds from Sale of Facilities	
8.	Corporate Advance for Debt Optimization	
9.	Non-Federal Debt Service (LGIA Interest/AFUDC) Accrual	5,873
10.	LGIA Revenues	(16,193)
11.	Funds in 2006 held for others	(89,000)
12.	Cash Provided by Current Operations	106,991
	Cash Used for Capital Investments	
13.	Investment in	
14.	Gross Utility Plant and CWIP	(254,010)
15.	Cash Used for Capital Investments	(254,010)
	Cash From Borrowing and Appropriations	
16.	Increase in Long-term debt	239,010
17.	DSR Principal repayment	(716)
18.	Repayment of Long-term debt	(76,643)
19.	Repayment of Capital Appropriations	(93,657)
20.	Subtotal Cash from Borrowing & Approp	67,994
21.	**Annual Change in Cash Balance**	(79,025)
22.	Beginning Cash Balance	254,192
23.	**Ending Cash Balance**	**175,167**
24.	Deferred Borrowing	23,700
25.	**Total Reserves**	**198,867**

CHAPTER 5

INTEREST RATES FOR TREASURY SOURCES OF CAPITAL

AND PRICE DEFLATORS

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1. Introduction

Interest rates on bonds issued by BPA to Treasury are used in development of repayment studies and projections of Federal interest expense in revenue requirements. Price deflators are used for developing spending levels in revenue requirements.

2. Source of Forecasts

To project interest rates on bonds issued to Treasury, BPA uses Treasury yield curve forecasts provided by the Global Insights Group (GI). GI is also the source of price deflators that BPA treats as escalators for purposes of developing spending levels. GI develops the price deflators taking into account projections of Gross Domestic Product (GDP). The GDP consists of the sum of consumption, investment, government purchases and net exports, excluding transfers to foreigners.

3. Interest Rate Projections

Projected interest rates for BPA bonds issued to Treasury are based on GI's yield curve projections of Treasury market rates, plus a markup of 32 to 90 basis points depending on the length of time to maturity. The markup estimate reflects an interagency agreement that Treasury price BPA bonds at a level comparable to securities (bonds) issued by U.S. government corporations. The markup estimate reflects the average basis point markup on recent intermediate and long-term bonds issued by BPA. As noted in the attached transmittal memo documenting the interest rates in this revenue requirement study, for the FY 2008-2009 period the 30-year rate reflects a markup of 90 basis points.

4. Deflators

The current and cumulative price deflator used to escalate midyear dollars are derived from the fiscal and calendar year price deflators provided by GI. They are calculated as follows:

$$[(FY1/100) \times 0\ 5] + 1 = \text{Cumulative Price Deflator1}$$

The fiscal year GDP price deflator for the current year is divided by one hundred and multiplied by one half. The result, when added to one, yields the cumulative price deflator for the first year.

$$[1 + (FY_t/100)] \times \text{Cumulative Price Deflator}_{t-1} = \text{Cumulative Price Deflator}_t, \text{ when } t > 1$$

The fiscal year GDP price deflator for a future year is divided by one hundred and added to one. The result, when multiplied by the cumulative price deflator from the previous year, yields the cumulative price deflator for the each successive year.

To the extent deflators are used in developing the FY 2008-2009 spending levels, they are based on the price deflators from the First Quarter 2006 GI forecast.

United States Government Department of Energy

Bonneville Power Administration

memorandum

DATE: April 28, 2006

REPLY TO ATTN OF: KFW

SUBJECT: FY 2006 Agency Borrowing Rate and Inflation Forecasts

TO: See Attached

BPA borrowing rate and inflation forecasts for the period FY 2006 through 2035 are attached. The FY 2006 forecast is summarized in the following tables:

- Table 1: 30-year term (2006 Forecast)
- Table 2: 30-year term (Comparison of 2006 and 2005 Forecasts)
- Table 3: 20-year term (2006 Forecast)
- Table 4: 15-year term (2006 Forecast).
- Table 5: Appropriations
- Table 6: BPA Treasury borrowing
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- Table 9: Projected change in the GDP price deflator
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These forecasts provide an internally consistent basis for BPA decisions regarding: debt management, budget formulation, and other financial analyses, as well as capital budgeting, and strategic planning efforts. The projected near-term increase in the cost of BPA borrowing compared to our last forecast reflects a consensus expectation that interest rates will rise significantly over the next four years. However, beyond 2010, the FY 2006 projections are generally lower than the FY 2005 forecast.

FY 2006 Borrowing Rate and Inflation Forecasts

The FY 2006 forecast of BPA cost of funds and inflation expectations is based on the Global Insight (GI) February 2006 First Quarter Long-Term Economic Outlook.

Table 1 illustrates the basis of BPA's Treasury borrowing rate. GI calendar year (CY) projections of 30-year Treasury bond yields are shown in Column A. BPA fiscal year projections are shown in Column B. Column C reflects BPA's Treasury borrowing rate. This rate includes a mark-up over the Treasury yield curve that the Treasury Department assigns to BPA Treasury borrowing. The markup reflects the Government Agency spread over the Treasury yield curve, and, when appropriate, an adder for call options in BPA Treasury borrowings. The mark-up ranges from 23 basis points (bp) over the 1-year Treasury note to 90 bp over the 30-year Treasury bond. The estimated Treasury markup is a value derived from: (1) the historical Government Agency/Treasury yield curve spreads, (2) past BPA Treasury borrowings, and (3) the knowledge and experience gained from previous Treasury borrowings.

BPA inflation assumptions reflect projected changes in the U.S. Gross Domestic Product (GDP) Price Deflator. This index assumes a base year of 2000. The projected change in the GDP price deflator is summarized in Table 9. Column A shows the projected trend in the GDP inflation rate between 2006-2035 on a calendar year basis and in column B by BPA fiscal year. Column C provides the cumulative price index projections. The forecast expresses fiscal year dollar values as mid-year dollar values.

BPA Borrowing Forecasts

The FY 2006 forecast begins in an environment of transition from historically low interest rates to a significantly higher long-term equilibrium. The Federal Reserve Board (Fed) increased interest rates in 2005 at every meeting of the Federal Open Market Committee (FOMC). Although the Fed increased short term interest rates from 1.00 percent in 2004 to 4.75 percent by December 2005, the U.S. economy has continued to perform well with solid growth in most sectors. In addition to rapidly rising interest rates the U.S. economy withstood the economic buffeting of hurricane Katrina and an explosive spike in energy prices.

Notwithstanding future random events, monetary policy will remain an important determinant for interest rates in 2006 and the near-term. The Fed's major concern is that the pace of economic expansion will ignite inflationary pressures. However, the Fed will at the same time, be forward looking on policy as rate increases already sanctioned will not have their main impact until later in 2006. As a consequence, the Fed will likely be more responsive to ongoing economic trends in 2006, and will not tighten in the same mechanical fashion of 2005.

Although most forecasters believe the steady increase in Fed rate hikes is coming to an end, just when this occurs is problematic. In February 2006, GI believed the last rate hike would occur at the Fed's March meeting. It now appears that inflationary risks associated with the economy's continued robust strength will require additional Fed tightening of monetary policy. However, given the net risks to the economy, GI believes it is unlikely the Fed will tighten beyond the CY second quarter (June 2006).

The 2-year Treasury note rate is projected to increase 76 bp, from 4.51 percent in FY 2006 to 5.27 percent in 2009. The 10-year Treasury bond rate is projected to increase 80 bp from 4.68 percent to 5.48 percent while the 30-year Treasury bond rate is projected to increase 87 bp from 4.86 percent to 5.73 percent.

This outlook suggests BPA borrowing rates will increase significantly over all funding sources. BPA borrowing rate forecasts are a direct reflection of the Treasury yield curve. Most of the increase is expected to occur over the next four years. By 2010, BPA's 10-year borrowing rate from the U.S. Treasury is expected to increase 103 bp from 5.23 percent in FY 2006 to 6.26 percent while the municipal taxable 10-year rate rises 128 bp from 5.61 percent to 6.89 percent. The municipal tax-exempt 10-year rate is expected to increase 86 bp from 4.17 percent to 5.03 percent. Beyond 2010, BPA borrowing rates are expected to remain flat.

The assumptions underlying the FY 2006 forecast of BPA borrowing costs, as well as how the current forecast differs from the FY 2005 forecast are described in the attached appendix.

Inflation Forecast

The GDP Price Deflator is the broadest measure of inflation in the U.S. economy. GDP reflects the value of all goods and services produced by domestic and foreign capital and labor within

the United States. Major components of GDP include: total consumption, investment, government purchases, and net exports. The real GDP calculations reflect both the changing mix of the components in GDP, and the relative price changes in these components.

The GI February 2006 Trend forecast assumes inflation will remain subdued over the next 30 years. The U.S economy grows more slowly than the FY 2005 forecast. Greater slack in the economy reduces inflationary pressures.

GI expects the rate of GDP inflation in 2006 will remain close to 2005 levels. Inflation slips to 2.68 percent in 2006 from a 2.75 percent rate in 2005. Beyond 2006 the forecast assumes a significantly lower rate of inflation. In 2007, inflationary pressures drop to a 1.82 percent annual rate. This rate rises slightly to a long-term average equilibrium rate of approximately 2.00 percent by 2008 and does not change significantly thereafter. Overall, the annual rate of inflation in the February 2006 forecast is approximately half a percent lower than the 2005 projection beyond 2011 (See Table 9).

Note: As a broad measure of inflation, the GDP price deflator is a reasonable approximation of BPA Agency-wide inflation. However, it will likely be less representative of inflation associated with specific components of BPA's budget. For example, GDP inflation may not be the best measure for estimating the annual increase in labor costs. We are currently investigating the development of a more representative measure.

The attached appendix: (1) provides a general description of the specific assumptions underlying FY 2006 expectations regarding future trends in BPA cost of capital and inflation, (2) documents differences from the FY 2005 forecast, as well as limiting assumptions and risks, (3) provides a basis for evaluating the adequacy and required frequency of forecasts of commonly shared financial assumptions, and (4) provides an understanding that supports on-going efforts to develop financial forecasts that are of interest to BPA decision-makers.

We are interested in feedback that would: (1) enhance the effectiveness of forecasts supporting common financial assumptions used throughout the Agency, and (2) help identify gaps between available forecasts and the decision-support information needs of the Agency.

If you have any questions, feedback, or suggestions concerning the FY 2006 borrowing rate and inflation forecasts, please contact Robert Mealey at (503) 230-5389. Also, please forward this to the appropriate people in your group. Your assistance in identifying addressees for future forecasts is appreciated.

Robert Mealey
Economist

2 Attachments
Appendix
Tables

cc:
See Front List
Official File – KFW (FI-21-12)

Appendix – Forecast Assumptions/Source of Change

This appendix provides a general description of the assumptions underlying BPA FY 2006 expectations regarding future trends in BPA cost of capital and inflation. The FY 2006 forecast includes borrowing costs associated with four sources of capital. Agency assumptions regarding the expected cost of BPA and third-party debt financing are projected for: (1) BPA borrowing from the U.S. Treasury, (2) Congressional Appropriations, (3) third-party municipal taxable BPA-backed borrowings, and (4) third-party municipal tax-exempt BPA-backed borrowings. Agency inflation assumptions are represented by a single broad-based price index.

The Global Insight (GI) February 2006 Long-term Economic Outlook Base Case is a trend forecast. It is the integration of the GI short-term (10-Year) economic outlook and the GI long-term outlook (30-year focus). The short end of the forecast accounts for more of the variability associated with future interest and inflation rates, while the long end describes their general direction. These expectations have changed significantly since the BPA FY 2005 forecast.

Core Forecast Assumptions

The FY 2006 forecast is based on several core assumptions that are shared with the FY 2005 forecast. Both forecasts assume:

- There are no internal imbalances associated with the current growth path of the U.S. economy.
- The retirement of a generation of Baby Boomers will not create relative labor force scarcities that increase long-term inflationary pressures in the economy.
- Federal budget deficits will decline from current record-setting levels. GI believes the reduction of Federal budget deficits will be sufficient to reduce the public/private competition for available capital and mitigate upward pressure on interest rates.
- Capital formation from domestic savings along with necessary large and rapidly expanding inflows of foreign capital are sufficient to support the development of new technologies required to raise labor productivity and support projected rates of economic growth. Domestic U.S. savings rates will increase from very low levels. American households will reform their spendthrift habits and become savers.
- The U.S. economy avoids significant external shocks and recessionary cycles over the next 30 years.

FY 2006 Forecast Differences

The GI long-term forecast normally changes little from one year to the next. However in 2006 there were some significant differences from the 2005 long-term forecast.

- Restrictive monetary policy, over the past year, has continued longer than anticipated by the FY 2005 forecast. The FY 2005 GI forecast assumed that the short-term Federal Funds rate would peak at 4.07 percent in 2007. The February FY 2006 GI forecast estimates that the Fed will now push the Federal Funds rate up to 4.75 percent.

- Interest rates, over the next four years are expected to move higher, beyond FY 2005 expectations.

  Near-term inflationary worries have risen in the FY 2006 forecast. The inflationary expectations ignited in 2005 by high world oil prices have persisted. Over the past year, crude oil prices have more than doubled. Although the U.S. economy has been more tolerant of both higher energy prices and rising short-term interest rates, stronger growth in CY 2006 has aggravated inflation worries.

- GI is less concerned about the long run. The GI 2006 forecast reflects a general belief that inflation is more contained than was reflected in the FY 2005 forecast. The U.S. economy is projected to grow more slowly over the long run. Slower growth will help to mitigate inflationary pressures on interest rates.

- Beyond 2010 interest rates are scaled back from levels projected in the FY 2005 forecast.

- Lower inflationary expectations and interest rate projections in the FY 2006 forecast also assumes the Fed will do a better job managing the U.S. economy and inflation. The new Fed Chairman is expected to dispel some of the uncertainty surrounding monetary policy with greater transparency and explicit inflation targets. Explicit targets will focus monetary policy on inflation risks. If the Fed is successful in enhancing the effectiveness of monetary policy, the need to step on the interest rate brake will diminish with slack in the economy.

FY 2006 Forecast Risks

Risks associated with the FY 2006 GI forecast include the following.

- Escalating energy price shocks that persist over an extended period could raise the rate of inflation. Natural disasters, geopolitical events, and regional conflicts that would disrupt the supply of fossil fuels could generate significant price shocks.

  GI believes that, while energy price shocks might raise the level of inflation, these shocks would not be sustained. Once the economy adjusted to higher energy costs, the rate of inflation would settle back to a long-term equilibrium rate.

- A more serious threat to the forecast might emerge from the accelerating energy demands of emerging economies such as China and India. These rapidly expanding economies could cause global demand to outpace the rate of new oil discoveries and the world supply of fossil fuels over an extended period. GI believes that over the long run, new fuel efficiency (new vehicle CAFÉ standards) should help contain the growth of energy demands.

- The likelihood of ballooning Federal budget deficits could increase significantly. In the near-term the Iraq war and hurricane Katrina have been budget busters. While GI believes the Federal budget deficit will begin to decline over the next five years, the likelihood of

international conflagrations, as well as the growing health care and retirement needs of senior citizens may raise the level of deficit spending above current expectations.

- Over a 30 year forecast, the impacts of global warming cannot be ignored. Climate change could dramatically affect agricultural production, commodity markets, the location of industrial production, and acerbate inflationary pressures. This is a qualitative risk that while beyond our ability to fully understand, measure and predict with any confidence, illustrates the expanding range of possible future scenarios.

- Productivity is an important assumption in the forecast and is a significant risk to the forecast. A key determinant of total productivity is technological productivity. It's a measure of how much productivity contributes to the real GDP growth. Between 1990 and 2000, the economy grew 3.5 percent annually. Of this rate 1.1 percent was due to technology. Between 2005 and 2020 GI projects the economy will grow 3.2 percent per year. Of this, 1.3 percent is attributed to technological productivity. The rate at which productivity increases is dependent on the growth of capital formation and investment. Given a low domestic savings rate, the rate at which productivity and the U.S. economy grows is heavily dependent on the continued availability of foreign sources of capital. If the attractiveness of the U.S. dollar as an international reserve currency and the relative attractiveness of U.S. investments were to diminish, interest rates and the cost of capital in the U.S. economy would rise significantly, productivity would fall, and the rate of inflation would accelerate. The most common risk associated with economic forecasts is lower than expected productivity.

GI has given the likelihood of their FY 2006 Trend Forecast an 80 percent probability. However, the range of possible scenarios is bounded by an expanding set of possible futures. A subset of these futures is captured in the GI optimistic and pessimistic forecast scenarios. GI has assigned a 20 percent probability to alternative scenarios that would fall outside this range.

Table 5-1: 30 Year Treasury Yields, FY 2006, Q1 Forecast of BPA Treasury Borrowing Rates

Table 1

30 YEAR TREASURY YIELDS

FY 2006 FORECAST OF BPA TREASURY BORROWING RATES

Calendar/Fiscal Years 2006 - 2035

YEAR	(A) BOND RATE 1/ Calendar Year	(B) BOND RATE Fiscal Year	(C) BPA RATE 2/ Fiscal Year
2006	4.95	4.86	5.76
2007	5.15	5.10	6.00
2008	5.52	5.42	6.32
2009	5.80	5.73	6.63
2010	6.00	5.95	6.85
2011	6.00	6.00	6.90
2012	6.00	6.00	6.90
2013	6.00	6.00	6.90
2014	6.00	6.00	6.90
2015	6.00	6.00	6.90
2016	6.00	6.00	6.90
2017	6.00	6.00	6.90
2018	6.01	6.00	6.90
2019	6.01	6.01	6.91
2020	6.01	6.01	6.91
2021	6.01	6.01	6.91
2022	6.01	6.01	6.91
2023	6.01	6.01	6.91
2024	6.01	6.01	6.91
2025	6.01	6.01	6.91
2026	6.01	6.01	6.91
2027	6.01	6.01	6.91
2028	6.01	6.01	6.91
2029	6.01	6.01	6.91
2030	6.01	6.01	6.91
2031	6.01	6.01	6.91
2032	6.01	6.01	6.91
2033	6.01	6.01	6.91
2034	6.01	6.01	6.91
2035	6.01	6.01	6.91

1/ BPA Forecast April 2006, Global Insight CY 2006.Q1 long-term outlook.
The U.S. Economy: 30-Year Focus, February 2006 Forecast, Base Case

2/ Column C = Column B + U.S. Treasury markup of 90 bp.

Table 5-2: 30 Year Treasury Yields, FY 2006, Q1 Comparison of BPA Borrowing Rate Forecasts

Table 2

30 YEAR TREASURY YIELDS

FY 2006 COMPARISON OF BPA BORROWING RATE FORECASTS

Fiscal Years 2006 - 2035

YEAR	(A) FY 2006 FORECAST 1/ BPA RATE	(B) FY 2005 FORECAST 2/ BPA RATE	(C) DIFFERENCE (A-B)
2006	5.76	6.36	-0.60
2007	6.00	6.67	-0.67
2008	6.32	6.98	-0.66
2009	6.63	7.22	-0.59
2010	6.85	7.52	-0.67
2011	6.90	7.59	-0.69
2012	6.90	7.57	-0.67
2013	6.90	7.55	-0.65
2014	6.90	7.54	-0.64
2015	6.90	7.54	-0.64
2016	6.90	7.55	-0.65
2017	6.90	7.60	-0.70
2018	6.90	7.66	-0.76
2019	6.91	7.73	-0.82
2020	6.91	7.77	-0.86
2021	6.91	7.79	-0.88
2022	6.91	7.79	-0.88
2023	6.91	7.77	-0.86
2024	6.91	7.78	-0.87
2025	6.91	7.77	-0.86
2026	6.91	7.75	-0.84
2027	6.91	7.75	-0.84
2028	6.91	7.74	-0.83
2029	6.91	7.74	-0.83
2030	6.91	7.76	-0.85
2031	6.91	7.76	-0.85
2032	6.91	7.76	-0.85
2033	6.91	7.76	-0.85
2034	6.91	7.76	-0.85
2035	6.91	7.76	-0.85

1/ BPA Forecast April 2006, Global Insight CY 2006.Q1 long-term outlook.
The U.S. Economy: 30-Year Focus, February 2006 Forecast, Base Case

2/ BPA Forecast May 2005, Global Insight CY 2005.Q3 long-term outlook.
The U.S. Economy: 25-Year Focus, February 2005 Core Forecast

Table 5-3: 20 Year Treasury Yields, FY 2006, Q1 Forecast of BPA Treasury Borrowing Rates

Table 3

20 YEAR TREASURY YIELDS

FY 2006 FORECAST OF BPA TREASURY BORROWING RATES

Calendar/Fiscal Years 2006 - 2035

YEAR	(A) BOND RATE 1/ Calendar Year	(B) BOND RATE Fiscal Year	(C) BPA RATE Fiscal Year
2006	4.88	4.77	5.59
2007	5.06	5.02	5.84
2008	5.40	5.31	6.13
2009	5.67	5.61	6.43
2010	5.88	5.82	6.64
2011	5.87	5.87	6.69
2012	5.87	5.87	6.69
2013	5.88	5.88	6.70
2014	5.88	5.88	6.70
2015	5.88	5.88	6.70
2016	5.88	5.88	6.70
2017	5.88	5.88	6.70
2018	5.88	5.88	6.70
2019	5.88	5.88	6.70
2020	5.88	5.88	6.70
2021	5.88	5.88	6.70
2022	5.88	5.88	6.70
2023	5.88	5.88	6.70
2024	5.88	5.88	6.70
2025	5.88	5.88	6.70
2026	5.88	5.88	6.70
2027	5.88	5.88	6.70
2028	5.88	5.88	6.70
2029	5.88	5.88	6.70
2030	5.88	5.88	6.70
2031	5.88	5.88	6.70
2032	5.88	5.88	6.70
2033	5.88	5.88	6.70
2034	5.88	5.88	6.70
2035	5.88	5.88	6.70

1/ BPA Forecast April 2006, Global Insight CY 2006.Q1 long-term outlook.
The U.S. Economy: 30-Year Focus, February 2006 Forecast, Base Case

2/ Column C = Column B + U.S. Treasury markup of 82 bp.

Table 5-4: 15 Year Treasury Yields, FY 2006, Q1 Forecast of BPA Treasury Borrowing Rates

Table 4

15 YEAR TREASURY YIELDS

FY 2006 FORECAST OF BPA TREASURY BORROWING RATES

Calendar/Fiscal Years 2006 - 2035

YEAR	(A) BOND RATE 1/ Calendar Year	(B) BOND RATE Fiscal Year	(C) BPA RATE Fiscal Year
2006	4.84	4.72	5.41
2007	5.02	4.98	5.67
2008	5.34	5.26	5.95
2009	5.61	5.55	6.24
2010	5.81	5.76	6.45
2011	5.81	5.81	6.50
2012	5.81	5.81	6.50
2013	5.81	5.81	6.50
2014	5.81	5.81	6.50
2015	5.81	5.81	6.50
2016	5.81	5.81	6.50
2017	5.81	5.81	6.50
2018	5.81	5.81	6.50
2019	5.81	5.81	6.50
2020	5.81	5.81	6.50
2021	5.81	5.81	6.50
2022	5.81	5.81	6.50
2023	5.81	5.81	6.50
2024	5.81	5.81	6.50
2025	5.81	5.81	6.50
2026	5.81	5.81	6.50
2027	5.81	5.81	6.50
2028	5.81	5.81	6.50
2029	5.81	5.81	6.50
2030	5.81	5.81	6.50
2031	5.81	5.81	6.50
2032	5.81	5.81	6.50
2033	5.81	5.81	6.50
2034	5.81	5.81	6.50
2035	5.81	5.81	6.50

1/ BPA Forecast April 2006, Global Insight CY 2006.Q1 long-term outlook.
The U.S. Economy: 30-Year Focus, February 2006 Forecast, Base Case

2/ Column C = Column B + U.S. Treasury markup of 69 bp.

Table 5

FY 2006.Q3 BPA APPROPRIATIONS BORROWING RATE FORECAST 1/

FORECAST PREPARED APRIL 28, 2006

BPA Fiscal Years 2006 - 2035

MATURITY

Year	1 Year	2 Year	3 Year	4 Year	5 Year	6 Year	7 Year	8 Year	9 Year	10 Year	11 Year	12 Year	13 Year	14 Year	15 Year	16 Year	17 Year	18 Year
2006 2/	3.88	4.00	4.00	4.00	4.00	4.00	4.13	4.13	4.13	4.25	4.25	4.25	4.25	4.38	4.38	4.38	4.38	4.50
2007	4.79	4.80	4.82	4.84	4.85	4.87	4.88	4.90	4.92	4.93	4.94	4.95	4.96	4.97	4.98	4.98	4.99	5.00
2008	4.96	5.01	5.04	5.07	5.10	5.12	5.14	5.16	5.18	5.20	5.21	5.22	5.23	5.25	5.26	5.27	5.28	5.29
2009	5.18	5.27	5.30	5.33	5.37	5.39	5.41	5.44	5.46	5.48	5.50	5.51	5.52	5.53	5.55	5.56	5.57	5.58
2010	5.36	5.47	5.50	5.53	5.56	5.59	5.62	5.65	5.67	5.70	5.71	5.73	5.74	5.75	5.76	5.78	5.79	5.80
2011	5.40	5.51	5.54	5.57	5.61	5.64	5.66	5.69	5.72	5.75	5.76	5.77	5.79	5.80	5.81	5.82	5.84	5.85
2012	5.40	5.51	5.54	5.57	5.61	5.64	5.66	5.69	5.72	5.75	5.76	5.77	5.79	5.80	5.81	5.82	5.84	5.85
2013	5.40	5.51	5.54	5.57	5.61	5.64	5.66	5.69	5.72	5.75	5.76	5.78	5.79	5.80	5.81	5.83	5.84	5.85
2014	5.40	5.51	5.54	5.57	5.61	5.64	5.66	5.69	5.72	5.75	5.76	5.77	5.79	5.80	5.81	5.82	5.84	5.85
2015	5.40	5.51	5.54	5.57	5.61	5.64	5.66	5.69	5.72	5.75	5.76	5.77	5.79	5.80	5.81	5.82	5.84	5.85
2016	5.40	5.51	5.54	5.57	5.61	5.64	5.66	5.69	5.72	5.75	5.76	5.77	5.79	5.80	5.81	5.82	5.84	5.85
2017	5.40	5.51	5.54	5.57	5.61	5.64	5.66	5.69	5.72	5.75	5.76	5.78	5.79	5.80	5.81	5.83	5.84	5.85
2018	5.40	5.51	5.54	5.57	5.61	5.64	5.66	5.69	5.72	5.75	5.76	5.78	5.79	5.80	5.81	5.83	5.84	5.85
2019	5.40	5.51	5.54	5.57	5.61	5.64	5.66	5.69	5.72	5.75	5.76	5.78	5.79	5.80	5.81	5.83	5.84	5.85
2020	5.40	5.51	5.54	5.57	5.61	5.64	5.66	5.69	5.72	5.75	5.76	5.78	5.79	5.80	5.82	5.83	5.84	5.85
2021	5.40	5.51	5.54	5.57	5.61	5.64	5.66	5.69	5.72	5.75	5.76	5.78	5.79	5.80	5.82	5.83	5.84	5.86
2022	5.40	5.51	5.54	5.57	5.61	5.64	5.66	5.69	5.72	5.75	5.76	5.78	5.79	5.80	5.82	5.83	5.84	5.85
2023	5.40	5.51	5.54	5.57	5.61	5.64	5.66	5.69	5.72	5.75	5.76	5.78	5.79	5.80	5.82	5.83	5.84	5.86
2024	5.40	5.51	5.54	5.57	5.61	5.64	5.66	5.69	5.72	5.75	5.76	5.78	5.79	5.80	5.82	5.83	5.84	5.86
2025	5.40	5.51	5.54	5.57	5.61	5.64	5.66	5.69	5.72	5.75	5.76	5.78	5.79	5.80	5.82	5.83	5.84	5.86
2026	5.41	5.51	5.54	5.58	5.61	5.64	5.66	5.69	5.72	5.75	5.76	5.78	5.79	5.80	5.82	5.83	5.84	5.86
2027	5.41	5.51	5.54	5.58	5.61	5.64	5.66	5.69	5.72	5.75	5.76	5.78	5.79	5.80	5.82	5.83	5.84	5.86
2028	5.41	5.51	5.55	5.58	5.61	5.64	5.67	5.69	5.72	5.75	5.76	5.78	5.79	5.80	5.82	5.83	5.84	5.86
2029	5.41	5.52	5.55	5.58	5.61	5.64	5.67	5.69	5.72	5.75	5.76	5.78	5.79	5.80	5.82	5.83	5.84	5.86
2030	5.42	5.52	5.55	5.58	5.61	5.64	5.67	5.69	5.72	5.75	5.76	5.78	5.79	5.80	5.82	5.83	5.84	5.86
2031	5.42	5.52	5.55	5.58	5.61	5.64	5.67	5.69	5.72	5.75	5.76	5.78	5.79	5.80	5.82	5.83	5.84	5.86
2032	5.42	5.52	5.55	5.58	5.61	5.64	5.67	5.69	5.72	5.75	5.76	5.78	5.79	5.80	5.82	5.83	5.84	5.86
2033	5.43	5.53	5.56	5.58	5.61	5.64	5.67	5.70	5.72	5.75	5.76	5.78	5.79	5.80	5.82	5.83	5.84	5.86
2034	5.43	5.53	5.56	5.59	5.61	5.64	5.67	5.70	5.72	5.75	5.76	5.78	5.79	5.80	5.82	5.83	5.84	5.86
2035	5.43	5.53	5.56	5.59	5.61	5.64	5.67	5.70	5.72	5.75	5.76	5.78	5.79	5.80	5.82	5.83	5.84	5.85

1/ Global Insight CY 2006.Q1 long-term outlook. The U.S. Economy: 30-Year Focus, February 2006 Forecast, Base Case

2/ FY 2006 Appropriation rates are determined in accordance with BPA Appropriations Refinancing Act, 16 U.S.C. 838l enacted on April 26, 1996, and are independent of the Global Insight Treasury Yield forecasts.

19 Year	20 Year	21 Year	22 Year	23 Year	24 Year	25 Year	26 Year	27 Year	28 Year	29 Year	30 Year	50 Year	Year
4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	**2006 2/**
5.01	5.02	5.03	5.03	5.04	5.05	5.06	5.07	5.08	5.08	5.09	5.10	5.10	**2007**
5.30	5.31	5.32	5.34	5.35	5.36	5.37	5.38	5.39	5.40	5.41	5.42	5.42	**2008**
5.59	5.61	5.62	5.63	5.64	5.65	5.67	5.68	5.69	5.70	5.71	5.73	5.73	**2009**
5.81	5.82	5.84	5.85	5.86	5.87	5.89	5.90	5.91	5.92	5.94	5.95	5.95	**2010**
5.86	5.87	5.89	5.90	5.91	5.92	5.94	5.95	5.96	5.97	5.99	6.00	6.00	**2011**
5.86	5.87	5.89	5.90	5.91	5.92	5.94	5.95	5.96	5.97	5.99	6.00	6.00	**2012**
5.86	5.88	5.89	5.90	5.91	5.93	5.94	5.95	5.96	5.98	5.99	6.00	6.00	**2013**
5.86	5.87	5.89	5.90	5.91	5.92	5.94	5.95	5.96	5.97	5.99	6.00	6.00	**2014**
5.86	5.87	5.89	5.90	5.91	5.92	5.94	5.95	5.96	5.97	5.99	6.00	6.00	**2015**
5.86	5.87	5.89	5.90	5.91	5.92	5.94	5.95	5.96	5.97	5.99	6.00	6.00	**2016**
5.86	5.88	5.89	5.90	5.91	5.93	5.94	5.95	5.96	5.98	5.99	6.00	6.00	**2017**
5.86	5.88	5.89	5.90	5.92	5.93	5.94	5.95	5.97	5.98	5.99	6.00	6.00	**2018**
5.87	5.88	5.89	5.90	5.92	5.93	5.94	5.96	5.97	5.98	6.00	6.01	6.01	**2019**
5.87	5.88	5.89	5.91	5.92	5.93	5.95	5.96	5.97	5.99	6.00	6.01	6.01	**2020**
5.87	5.88	5.89	5.91	5.92	5.93	5.95	5.96	5.97	5.99	6.00	6.01	6.01	**2021**
5.87	5.88	5.89	5.91	5.92	5.93	5.95	5.96	5.97	5.99	6.00	6.01	6.01	**2022**
5.87	5.88	5.89	5.91	5.92	5.93	5.95	5.96	5.97	5.99	6.00	6.01	6.01	**2023**
5.87	5.88	5.90	5.91	5.92	5.93	5.95	5.96	5.97	5.99	6.00	6.01	6.01	**2024**
5.87	5.88	5.90	5.91	5.92	5.94	5.95	5.96	5.97	5.99	6.00	6.01	6.01	**2025**
5.87	5.88	5.90	5.91	5.92	5.94	5.95	5.96	5.97	5.99	6.00	6.01	6.01	**2026**
5.87	5.88	5.90	5.91	5.92	5.94	5.95	5.96	5.97	5.99	6.00	6.01	6.01	**2027**
5.87	5.88	5.90	5.91	5.92	5.94	5.95	5.96	5.98	5.99	6.00	6.01	6.01	**2028**
5.87	5.88	5.90	5.91	5.92	5.94	5.95	5.96	5.98	5.99	6.00	6.01	6.01	**2029**
5.87	5.88	5.90	5.91	5.92	5.94	5.95	5.96	5.98	5.99	6.00	6.01	6.01	**2030**
5.87	5.88	5.90	5.91	5.92	5.94	5.95	5.96	5.98	5.99	6.00	6.01	6.01	**2031**
5.87	5.88	5.90	5.91	5.92	5.94	5.95	5.96	5.98	5.99	6.00	6.01	6.01	**2032**
5.87	5.88	5.90	5.91	5.92	5.94	5.95	5.96	5.98	5.99	6.00	6.01	6.01	**2033**
5.87	5.88	5.90	5.91	5.92	5.94	5.95	5.96	5.98	5.99	6.00	6.01	6.01	**2034**
5.87	5.88	5.90	5.91	5.92	5.94	5.95	5.96	5.98	5.99	6.00	6.01	6.01	**2035**

Table 6

BPA FY 2006 BPA TREASURY BORROWING YIELD CURVE FORECAST 1/

FORECAST PREPARED APRIL 28, 2006

BPA Fiscal Years 2006 - 2035

MATURITY

Year	1 Year	2 Year	3 Year	4 Year	5 Year	6 Year	7 Year	8 Year	9 Year	10 Year	11 Year	12 Year	13 Year	14 Year	15 Year	16 Year	17 Year	18 Year
2006	4.69	4.88	4.92	4.96	5.00	5.04	5.09	5.14	5.19	5.23	5.27	5.30	5.34	5.37	5.41	5.44	5.47	5.51
2007	5.02	5.17	5.21	5.25	5.28	5.32	5.36	5.41	5.45	5.49	5.52	5.56	5.59	5.63	5.66	5.69	5.73	5.76
2008	5.19	5.38	5.43	5.49	5.53	5.58	5.62	5.67	5.71	5.76	5.80	5.83	5.87	5.91	5.94	5.98	6.02	6.05
2009	5.41	5.64	5.69	5.75	5.80	5.85	5.90	5.94	5.99	6.04	6.08	6.12	6.16	6.19	6.23	6.27	6.31	6.34
2010	5.59	5.83	5.89	5.94	5.99	6.05	6.10	6.15	6.21	6.26	6.30	6.33	6.37	6.41	6.45	6.49	6.52	6.56
2011	5.63	5.88	5.93	5.99	6.04	6.09	6.14	6.20	6.25	6.31	6.35	6.38	6.42	6.46	6.50	6.54	6.57	6.61
2012	5.63	5.88	5.93	5.99	6.04	6.09	6.14	6.20	6.25	6.31	6.35	6.38	6.42	6.46	6.50	6.54	6.57	6.61
2013	5.63	5.88	5.93	5.99	6.04	6.09	6.14	6.20	6.25	6.31	6.35	6.38	6.42	6.46	6.50	6.54	6.57	6.61
2014	5.63	5.88	5.93	5.99	6.04	6.09	6.14	6.20	6.25	6.31	6.35	6.38	6.42	6.46	6.50	6.54	6.57	6.61
2015	5.63	5.88	5.93	5.99	6.04	6.09	6.14	6.20	6.25	6.31	6.35	6.38	6.42	6.46	6.50	6.54	6.57	6.61
2016	5.63	5.88	5.93	5.99	6.04	6.09	6.14	6.20	6.25	6.31	6.35	6.38	6.42	6.46	6.50	6.54	6.57	6.61
2017	5.63	5.88	5.93	5.98	6.04	6.09	6.14	6.20	6.25	6.31	6.35	6.38	6.42	6.46	6.50	6.54	6.57	6.61
2018	5.63	5.88	5.93	5.98	6.04	6.09	6.14	6.20	6.25	6.31	6.35	6.38	6.42	6.46	6.50	6.54	6.57	6.61
2019	5.63	5.88	5.93	5.99	6.04	6.09	6.15	6.20	6.25	6.31	6.35	6.38	6.42	6.46	6.50	6.54	6.58	6.61
2020	5.63	5.88	5.93	5.99	6.04	6.09	6.15	6.20	6.25	6.31	6.35	6.38	6.42	6.46	6.50	6.54	6.58	6.62
2021	5.63	5.88	5.93	5.98	6.04	6.09	6.15	6.20	6.25	6.31	6.35	6.38	6.42	6.46	6.50	6.54	6.58	6.62
2022	5.63	5.88	5.93	5.99	6.04	6.09	6.15	6.20	6.25	6.31	6.35	6.38	6.42	6.46	6.50	6.54	6.58	6.62
2023	5.63	5.88	5.93	5.99	6.04	6.09	6.15	6.20	6.25	6.31	6.35	6.38	6.42	6.46	6.50	6.54	6.58	6.62
2024	5.63	5.88	5.93	5.99	6.04	6.09	6.15	6.20	6.25	6.31	6.35	6.38	6.42	6.46	6.50	6.54	6.58	6.62
2025	5.63	5.88	5.93	5.99	6.04	6.09	6.15	6.20	6.25	6.31	6.35	6.38	6.42	6.46	6.50	6.54	6.58	6.62
2026	5.64	5.88	5.93	5.99	6.04	6.09	6.15	6.20	6.25	6.31	6.35	6.38	6.42	6.46	6.50	6.54	6.58	6.62
2027	5.64	5.88	5.93	5.99	6.04	6.09	6.15	6.20	6.25	6.31	6.35	6.38	6.42	6.46	6.50	6.54	6.58	6.62
2028	5.64	5.88	5.94	5.99	6.04	6.09	6.15	6.20	6.25	6.31	6.35	6.39	6.42	6.46	6.50	6.54	6.58	6.62
2029	5.64	5.88	5.94	5.99	6.04	6.09	6.15	6.20	6.25	6.31	6.35	6.39	6.42	6.46	6.50	6.54	6.58	6.62
2030	5.65	5.89	5.94	5.99	6.04	6.09	6.15	6.20	6.25	6.31	6.35	6.39	6.42	6.46	6.50	6.54	6.58	6.62
2031	5.65	5.89	5.94	5.99	6.04	6.09	6.15	6.20	6.25	6.31	6.35	6.39	6.42	6.46	6.50	6.54	6.58	6.62
2032	5.65	5.89	5.94	5.99	6.04	6.09	6.15	6.20	6.25	6.31	6.35	6.39	6.42	6.46	6.50	6.54	6.58	6.62
2033	5.66	5.90	5.95	6.00	6.04	6.10	6.15	6.20	6.25	6.31	6.35	6.38	6.42	6.46	6.50	6.54	6.58	6.62
2034	5.66	5.90	5.95	6.00	6.04	6.10	6.15	6.20	6.25	6.31	6.35	6.38	6.42	6.46	6.50	6.54	6.58	6.62
2035	5.66	5.90	5.95	6.00	6.04	6.10	6.15	6.20	6.25	6.31	6.35	6.38	6.42	6.46	6.50	6.54	6.58	6.62

1/ Global Insight CY 2006.Q1 long-term outlook. The U.S. Economy: 30-Year Focus, February 2006 Forecast, Base Case

19 Year	20 Year	21 Year	22 Year	23 Year	24 Year	25 Year	26 Year	27 Year	28 Year	29 Year	30 Year	50 Year	Year
5.54	5.59	5.60	5.62	5.64	5.65	5.67	5.69	5.70	5.72	5.74	5.76	5.76	**2006**
5.80	5.84	5.85	5.87	5.89	5.90	5.92	5.94	5.95	5.97	5.98	6.00	6.00	**2007**
6.09	6.13	6.15	6.17	6.19	6.21	6.23	6.25	6.27	6.29	6.31	6.32	6.32	**2008**
6.38	6.43	6.45	6.47	6.49	6.51	6.53	6.55	6.57	6.59	6.61	6.63	6.63	**2009**
6.60	6.64	6.67	6.69	6.71	6.73	6.75	6.77	6.79	6.81	6.83	6.85	6.85	**2010**
6.65	6.69	6.72	6.74	6.76	6.78	6.80	6.82	6.84	6.86	6.88	6.90	6.90	**2011**
6.65	6.69	6.72	6.74	6.76	6.78	6.80	6.82	6.84	6.86	6.88	6.90	6.90	**2012**
6.65	6.69	6.72	6.74	6.76	6.78	6.80	6.82	6.84	6.86	6.88	6.90	6.90	**2013**
6.65	6.69	6.72	6.74	6.76	6.78	6.80	6.82	6.84	6.86	6.88	6.90	6.90	**2014**
6.65	6.69	6.72	6.74	6.76	6.78	6.80	6.82	6.84	6.86	6.88	6.90	6.90	**2015**
6.65	6.69	6.72	6.74	6.76	6.78	6.80	6.82	6.84	6.86	6.88	6.90	6.90	**2016**
6.65	6.70	6.72	6.74	6.76	6.78	6.80	6.82	6.84	6.86	6.88	6.90	6.90	**2017**
6.65	6.70	6.72	6.74	6.76	6.78	6.80	6.82	6.84	6.86	6.88	6.90	6.90	**2018**
6.65	6.70	6.72	6.74	6.76	6.78	6.80	6.82	6.85	6.87	6.89	6.91	6.91	**2019**
6.65	6.70	6.72	6.74	6.76	6.79	6.81	6.83	6.85	6.87	6.89	6.91	6.91	**2020**
6.66	6.70	6.72	6.74	6.76	6.79	6.81	6.83	6.85	6.87	6.89	6.91	6.91	**2021**
6.66	6.70	6.72	6.74	6.76	6.79	6.81	6.83	6.85	6.87	6.89	6.91	6.91	**2022**
6.66	6.70	6.72	6.74	6.76	6.79	6.81	6.83	6.85	6.87	6.89	6.91	6.91	**2023**
6.66	6.70	6.72	6.74	6.77	6.79	6.81	6.83	6.85	6.87	6.89	6.91	6.91	**2024**
6.66	6.70	6.72	6.74	6.77	6.79	6.81	6.83	6.85	6.87	6.89	6.91	6.91	**2025**
6.66	6.70	6.72	6.74	6.77	6.79	6.81	6.83	6.85	6.87	6.89	6.91	6.91	**2026**
6.66	6.70	6.72	6.74	6.77	6.79	6.81	6.83	6.85	6.87	6.89	6.91	6.91	**2027**
6.66	6.70	6.72	6.74	6.77	6.79	6.81	6.83	6.85	6.87	6.89	6.91	6.91	**2028**
6.66	6.70	6.72	6.75	6.77	6.79	6.81	6.83	6.85	6.87	6.89	6.92	6.92	**2029**
6.66	6.70	6.72	6.75	6.77	6.79	6.81	6.83	6.85	6.87	6.89	6.92	6.92	**2030**
6.66	6.70	6.72	6.75	6.77	6.79	6.81	6.83	6.85	6.87	6.89	6.92	6.92	**2031**
6.66	6.70	6.72	6.75	6.77	6.79	6.81	6.83	6.85	6.87	6.89	6.92	6.92	**2032**
6.66	6.70	6.72	6.75	6.77	6.79	6.81	6.83	6.85	6.87	6.89	6.92	6.92	**2033**
6.66	6.70	6.72	6.75	6.77	6.79	6.81	6.83	6.85	6.87	6.89	6.92	6.92	**2034**
6.66	6.70	6.72	6.75	6.77	6.79	6.81	6.83	6.85	6.87	6.89	6.92	6.92	**2035**

Table 7

BPA FY 2006 MUNI TAXABLE BORROWING RATE FORECAST 1/

FORECAST PREPARED APRIL 28, 2006

BPA Fiscal Years 2006 - 2035

MATURITY

Year	1 Year	2 Year	3 Year	4 Year	5 Year	6 Year	7 Year	8 Year	9 Year	10 Year	11 Year	12 Year	13 Year	14 Year	15 Year	16 Year	17 Year	18 Year
2006	5.03	5.15	5.23	5.30	5.37	5.42	5.47	5.52	5.57	5.61	5.63	5.64	5.66	5.67	5.69	5.70	5.72	5.73
2007	5.40	5.54	5.61	5.69	5.76	5.81	5.85	5.90	5.94	5.99	6.00	6.02	6.03	6.05	6.06	6.07	6.09	6.10
2008	5.58	5.77	5.86	5.96	6.05	6.10	6.15	6.20	6.25	6.30	6.32	6.34	6.36	6.37	6.39	6.41	6.43	6.45
2009	5.82	6.05	6.15	6.25	6.36	6.41	6.47	6.52	6.58	6.64	6.66	6.67	6.69	6.71	6.73	6.75	6.77	6.79
2010	6.02	6.27	6.37	6.48	6.58	6.64	6.70	6.77	6.83	6.89	6.91	6.93	6.95	6.97	6.99	7.01	7.03	7.05
2011	6.06	6.32	6.42	6.53	6.63	6.69	6.76	6.82	6.88	6.95	6.97	6.99	7.01	7.03	7.05	7.07	7.09	7.11
2012	6.06	6.32	6.42	6.53	6.63	6.69	6.76	6.82	6.88	6.95	6.97	6.99	7.01	7.03	7.05	7.07	7.09	7.11
2013	6.06	6.32	6.42	6.53	6.63	6.69	6.76	6.82	6.88	6.95	6.97	6.99	7.01	7.03	7.05	7.07	7.09	7.11
2014	6.06	6.32	6.42	6.53	6.63	6.69	6.76	6.82	6.88	6.95	6.97	6.99	7.01	7.03	7.05	7.07	7.09	7.11
2015	6.06	6.32	6.42	6.53	6.63	6.69	6.76	6.82	6.88	6.95	6.97	6.99	7.01	7.03	7.05	7.07	7.09	7.11
2016	6.06	6.32	6.42	6.53	6.63	6.69	6.76	6.82	6.88	6.95	6.97	6.99	7.01	7.03	7.05	7.07	7.09	7.11
2017	6.06	6.32	6.42	6.53	6.63	6.69	6.76	6.82	6.88	6.95	6.97	6.99	7.01	7.03	7.05	7.07	7.09	7.11
2018	6.06	6.32	6.42	6.53	6.63	6.69	6.76	6.82	6.88	6.95	6.97	6.99	7.01	7.03	7.05	7.07	7.09	7.11
2019	6.06	6.32	6.42	6.53	6.63	6.69	6.76	6.82	6.88	6.95	6.97	6.99	7.01	7.03	7.05	7.07	7.09	7.11
2020	6.06	6.32	6.42	6.53	6.63	6.69	6.76	6.82	6.88	6.95	6.97	6.99	7.01	7.03	7.05	7.07	7.09	7.11
2021	6.06	6.32	6.42	6.53	6.63	6.69	6.76	6.82	6.88	6.95	6.97	6.99	7.01	7.03	7.05	7.07	7.09	7.11
2022	6.06	6.32	6.42	6.53	6.63	6.69	6.76	6.82	6.88	6.95	6.97	6.99	7.01	7.03	7.05	7.07	7.09	7.11
2023	6.06	6.32	6.42	6.53	6.63	6.69	6.76	6.82	6.88	6.95	6.97	6.99	7.01	7.03	7.05	7.07	7.09	7.11
2024	6.06	6.32	6.42	6.53	6.63	6.69	6.76	6.82	6.88	6.95	6.97	6.99	7.01	7.03	7.05	7.07	7.09	7.11
2025	6.06	6.32	6.42	6.53	6.63	6.69	6.76	6.82	6.88	6.95	6.97	6.99	7.01	7.03	7.05	7.07	7.09	7.11
2026	6.06	6.32	6.42	6.53	6.63	6.69	6.76	6.82	6.88	6.95	6.97	6.99	7.01	7.03	7.05	7.07	7.09	7.11
2027	6.07	6.32	6.43	6.53	6.63	6.70	6.76	6.82	6.88	6.95	6.97	6.99	7.01	7.03	7.05	7.07	7.09	7.11
2028	6.07	6.32	6.43	6.53	6.63	6.70	6.76	6.82	6.88	6.95	6.97	6.99	7.01	7.03	7.05	7.07	7.09	7.11
2029	6.07	6.33	6.43	6.53	6.63	6.70	6.76	6.82	6.88	6.95	6.97	6.99	7.01	7.03	7.05	7.07	7.09	7.11
2030	6.08	6.33	6.43	6.53	6.63	6.70	6.76	6.82	6.89	6.95	6.97	6.99	7.01	7.03	7.05	7.07	7.09	7.11
2031	6.08	6.33	6.43	6.53	6.63	6.70	6.76	6.82	6.89	6.95	6.97	6.99	7.01	7.03	7.05	7.07	7.09	7.11
2032	6.08	6.33	6.44	6.54	6.64	6.70	6.76	6.82	6.89	6.95	6.97	6.99	7.01	7.03	7.05	7.07	7.09	7.11
2033	6.09	6.34	6.44	6.54	6.64	6.70	6.76	6.82	6.89	6.95	6.97	6.99	7.01	7.03	7.05	7.07	7.09	7.11
2034	6.09	6.34	6.44	6.54	6.64	6.70	6.76	6.82	6.89	6.95	6.97	6.99	7.01	7.03	7.05	7.07	7.09	7.11
2035	6.10	6.34	6.44	6.54	6.64	6.70	6.76	6.82	6.89	6.95	6.97	6.99	7.01	7.03	7.05	7.07	7.09	7.11

1/ Global Insight CY 2006.Q1 long-term outlook. The U.S. Economy: 30-Year Focus, February 2006 Forecast, Base Case

Table 5-7: FY 2006, Q1 Municipal Taxable All-In Rate Curve Forecast

19 Year	20 Year	21 Year	22 Year	23 Year	24 Year	25 Year	26 Year	27 Year	28 Year	29 Year	30 Year	50 Year	Year
5.75	5.76	5.77	5.79	5.80	5.82	5.83	5.85	5.86	5.88	5.89	5.91	5.91	**2006**
6.12	6.13	6.15	6.16	6.17	6.19	6.20	6.22	6.23	6.24	6.26	6.27	6.27	**2007**
6.46	6.48	6.50	6.52	6.53	6.55	6.57	6.59	6.60	6.62	6.64	6.66	6.66	**2008**
6.81	6.83	6.85	6.86	6.88	6.90	6.92	6.94	6.96	6.98	7.00	7.02	7.02	**2009**
7.07	7.09	7.11	7.13	7.14	7.16	7.18	7.20	7.22	7.24	7.26	7.28	7.28	**2010**
7.13	7.15	7.16	7.18	7.20	7.22	7.24	7.26	7.28	7.30	7.32	7.34	7.34	**2011**
7.13	7.15	7.16	7.18	7.20	7.22	7.24	7.26	7.28	7.30	7.32	7.34	7.34	**2012**
7.13	7.15	7.16	7.18	7.20	7.22	7.24	7.26	7.28	7.30	7.32	7.34	7.34	**2013**
7.13	7.15	7.16	7.18	7.20	7.22	7.24	7.26	7.28	7.30	7.32	7.34	7.34	**2014**
7.13	7.15	7.16	7.18	7.20	7.22	7.24	7.26	7.28	7.30	7.32	7.34	7.34	**2015**
7.13	7.15	7.16	7.18	7.20	7.22	7.24	7.26	7.28	7.30	7.32	7.34	7.34	**2016**
7.13	7.15	7.17	7.19	7.21	7.22	7.24	7.26	7.28	7.30	7.32	7.34	7.34	**2017**
7.13	7.15	7.17	7.19	7.21	7.23	7.25	7.27	7.29	7.31	7.33	7.35	7.35	**2018**
7.13	7.15	7.17	7.19	7.21	7.23	7.25	7.27	7.29	7.31	7.33	7.35	7.35	**2019**
7.13	7.15	7.17	7.19	7.21	7.23	7.25	7.27	7.30	7.32	7.34	7.36	7.36	**2020**
7.13	7.15	7.17	7.19	7.21	7.23	7.26	7.28	7.30	7.32	7.34	7.36	7.36	**2021**
7.13	7.15	7.17	7.19	7.21	7.23	7.25	7.28	7.30	7.32	7.34	7.36	7.36	**2022**
7.13	7.15	7.17	7.19	7.21	7.23	7.26	7.28	7.30	7.32	7.34	7.36	7.36	**2023**
7.13	7.15	7.17	7.19	7.22	7.24	7.26	7.28	7.30	7.32	7.34	7.36	7.36	**2024**
7.13	7.15	7.17	7.19	7.22	7.24	7.26	7.28	7.30	7.32	7.34	7.36	7.36	**2025**
7.13	7.15	7.17	7.19	7.22	7.24	7.26	7.28	7.30	7.32	7.34	7.36	7.36	**2026**
7.13	7.15	7.17	7.19	7.22	7.24	7.26	7.28	7.30	7.32	7.34	7.36	7.36	**2027**
7.13	7.15	7.17	7.20	7.22	7.24	7.26	7.28	7.30	7.32	7.34	7.36	7.36	**2028**
7.13	7.15	7.18	7.20	7.22	7.24	7.26	7.28	7.30	7.32	7.34	7.36	7.36	**2029**
7.13	7.15	7.18	7.20	7.22	7.24	7.26	7.28	7.30	7.32	7.34	7.36	7.36	**2030**
7.13	7.15	7.18	7.20	7.22	7.24	7.26	7.28	7.30	7.32	7.34	7.36	7.36	**2031**
7.13	7.15	7.18	7.20	7.22	7.24	7.26	7.28	7.30	7.32	7.34	7.36	7.36	**2032**
7.13	7.15	7.18	7.20	7.22	7.24	7.26	7.28	7.30	7.32	7.34	7.36	7.36	**2033**
7.13	7.15	7.18	7.20	7.22	7.24	7.26	7.28	7.30	7.32	7.34	7.36	7.36	**2034**
7.13	7.15	7.18	7.20	7.22	7.24	7.26	7.28	7.30	7.32	7.34	7.36	7.36	**2035**

Table 8

BPA FY 2006 MUNI TAX-EXEMPT BORROWING RATE FORECAST 1/

FORECAST PREPARED APRIL 28, 2006

BPA Fiscal Years 2006 - 2035

MATURITY

Year	1 Year	2 Year	3 Year	4 Year	5 Year	6 Year	7 Year	8 Year	9 Year	10 Year	11 Year	12 Year	13 Year	14 Year	15 Year	16 Year	17 Year	18 Year
2006	3.35	3.49	3.57	3.66	3.75	3.84	3.92	4.00	4.08	4.17	4.19	4.22	4.25	4.27	4.30	4.33	4.36	4.38
2007	3.58	3.74	3.82	3.91	3.99	4.07	4.15	4.22	4.30	4.38	4.40	4.43	4.45	4.48	4.51	4.53	4.56	4.58
2008	3.70	3.89	3.99	4.09	4.19	4.27	4.36	4.44	4.52	4.60	4.63	4.66	4.69	4.72	4.75	4.78	4.81	4.84
2009	3.85	4.08	4.19	4.29	4.40	4.49	4.58	4.66	4.75	4.84	4.87	4.91	4.94	4.97	5.00	5.03	5.06	5.09
2010	3.98	4.22	4.33	4.44	4.55	4.65	4.74	4.84	4.93	5.03	5.06	5.09	5.12	5.16	5.19	5.22	5.25	5.28
2011	4.01	4.26	4.37	4.48	4.59	4.68	4.78	4.87	4.97	5.07	5.10	5.13	5.17	5.20	5.23	5.26	5.30	5.33
2012	4.01	4.26	4.37	4.48	4.59	4.68	4.78	4.87	4.97	5.07	5.10	5.13	5.17	5.20	5.23	5.26	5.30	5.33
2013	4.01	4.26	4.37	4.48	4.59	4.68	4.78	4.87	4.97	5.07	5.10	5.13	5.17	5.20	5.23	5.26	5.30	5.33
2014	4.01	4.26	4.37	4.48	4.59	4.68	4.78	4.87	4.97	5.07	5.10	5.13	5.17	5.20	5.23	5.26	5.30	5.33
2015	4.01	4.26	4.37	4.48	4.59	4.68	4.78	4.87	4.97	5.07	5.10	5.13	5.17	5.20	5.23	5.26	5.30	5.33
2016	4.01	4.26	4.37	4.48	4.59	4.68	4.78	4.87	4.97	5.07	5.10	5.13	5.17	5.20	5.23	5.26	5.30	5.33
2017	4.01	**4.26**	**4.37**	**4.48**	4.58	4.68	4.78	4.87	4.97	5.07	5.10	5.13	5.17	5.20	5.23	5.26	5.30	5.33
2018	4.01	**4.26**	**4.37**	**4.48**	4.58	4.68	4.78	4.87	4.97	5.07	5.10	5.13	5.17	5.20	5.23	5.26	5.30	5.33
2019	4.01	4.26	4.37	4.48	4.59	4.68	4.78	4.87	4.97	5.07	5.10	5.13	5.17	5.20	5.23	5.27	5.30	5.33
2020	4.01	**4.26**	4.37	4.48	4.59	4.68	4.78	4.87	4.97	5.07	5.10	5.13	5.17	5.20	5.23	5.27	5.30	5.33
2021	4.01	**4.26**	**4.37**	**4.48**	4.59	4.68	4.78	4.87	4.97	5.07	5.10	5.13	5.17	5.20	5.23	5.27	5.30	5.33
2022	4.01	**4.26**	**4.37**	4.48	4.59	4.68	4.78	4.87	4.97	5.07	5.10	5.13	5.17	5.20	5.23	5.27	5.30	5.33
2023	4.01	**4.26**	**4.37**	4.48	4.59	4.68	4.78	4.87	4.97	5.07	5.10	5.13	5.17	5.20	5.23	5.27	5.30	5.33
2024	4.01	4.26	4.37	4.48	4.59	4.68	4.78	4.87	4.97	5.07	5.10	5.13	5.17	5.20	5.23	5.27	5.30	5.33
2025	4.01	4.26	4.37	4.48	4.59	4.68	4.78	4.87	4.97	5.07	5.10	5.13	5.17	5.20	5.23	5.27	5.30	5.33
2026	4.01	4.26	4.37	4.48	4.59	4.68	4.78	4.87	4.97	5.07	5.10	5.13	5.17	5.20	5.23	5.27	5.30	5.33
2027	4.02	4.26	4.37	4.48	4.59	4.68	4.78	4.87	4.97	5.07	5.10	5.13	5.17	5.20	5.23	5.27	5.30	5.33
2028	4.02	4.26	4.37	4.48	4.59	4.68	4.78	4.88	4.97	5.07	5.10	5.13	5.17	5.20	5.23	5.27	5.30	5.33
2029	4.02	4.26	4.37	4.48	4.59	4.68	4.78	4.88	4.97	5.07	5.10	5.13	5.17	5.20	5.23	5.27	5.30	5.33
2030	4.02	4.26	4.37	4.48	4.59	4.68	4.78	4.88	4.97	5.07	5.10	5.13	5.17	5.20	5.23	5.27	5.30	5.33
2031	4.02	4.27	4.37	4.48	4.59	4.68	4.78	4.88	4.97	5.07	5.10	5.13	5.17	5.20	5.23	5.27	5.30	5.33
2032	4.03	4.27	4.38	4.48	4.59	4.68	4.78	4.88	4.97	5.07	5.10	5.13	5.17	5.20	5.23	5.27	5.30	5.33
2033	4.03	4.27	4.38	4.48	4.59	4.69	4.78	4.88	4.97	5.07	5.10	5.13	5.17	5.20	5.23	5.27	5.30	5.33
2034	4.03	4.27	4.38	4.48	4.59	4.69	4.78	4.88	4.97	5.07	5.10	5.13	5.17	5.20	5.23	5.27	5.30	5.33
2035	4.03	4.27	4.38	4.48	4.59	4.69	4.78	4.88	4.97	5.07	5.10	5.13	5.17	5.20	5.23	5.27	5.30	5.33

1/ Global Insight CY 2006.Q1 long-term outlook. The U.S. Economy: 30-Year Focus, February 2006 Forecast, Base Case

19 Year	20 Year	21 Year	22 Year	23 Year	24 Year	25 Year	26 Year	27 Year	28 Year	29 Year	30 Year	50 Year	Year
4.41	4.44	4.46	4.49	4.52	4.54	4.57	4.60	4.62	4.65	4.68	4.71	4.71	**2006**
4.61	4.63	4.66	4.69	4.71	4.74	4.76	4.79	4.82	4.84	4.87	4.89	4.89	**2007**
4.87	4.90	4.93	4.96	4.98	5.01	5.04	5.07	5.10	5.13	5.16	5.19	5.19	**2008**
5.12	5.16	5.19	5.22	5.25	5.28	5.31	5.34	5.37	5.41	5.44	5.47	5.47	**2009**
5.32	5.35	5.38	5.41	5.45	5.48	5.51	5.54	5.58	5.61	5.64	5.67	5.67	**2010**
5.36	5.39	5.43	5.46	5.49	5.52	5.56	5.59	5.62	5.66	5.69	5.72	5.72	**2011**
5.36	5.39	5.43	5.46	5.49	5.52	5.56	5.59	5.62	5.66	5.69	5.72	5.72	**2012**
5.36	5.39	5.43	5.46	5.49	5.52	5.56	5.59	5.62	5.66	5.69	5.72	5.72	**2013**
5.36	5.39	5.43	5.46	5.49	5.52	5.56	5.59	5.62	5.66	5.69	5.72	5.72	**2014**
5.36	5.39	5.43	5.46	5.49	5.52	5.56	5.59	5.62	5.66	5.69	5.72	5.72	**2015**
5.36	5.39	5.43	5.46	5.49	5.52	5.56	5.59	5.62	5.66	5.69	5.72	5.72	**2016**
5.36	5.39	5.43	5.46	5.49	5.53	5.56	5.59	5.62	5.66	5.69	5.72	5.72	**2017**
5.36	5.40	5.43	5.46	5.49	5.53	5.56	5.59	5.63	5.66	5.69	5.72	5.72	**2018**
5.36	5.40	5.43	5.46	5.50	5.53	5.56	5.60	5.63	5.66	5.69	5.73	5.73	**2019**
5.37	5.40	5.43	5.47	5.50	5.53	5.57	5.60	5.63	5.66	5.70	5.73	5.73	**2020**
5.37	5.40	5.43	5.47	5.50	5.53	5.57	5.60	5.63	5.67	5.70	5.73	5.73	**2021**
5.37	5.40	5.43	5.47	5.50	5.53	5.57	5.60	5.63	5.67	5.70	5.73	5.73	**2022**
5.37	5.40	5.43	5.47	5.50	5.53	5.57	5.60	5.63	5.67	5.70	5.73	5.73	**2023**
5.37	5.40	5.43	5.47	5.50	5.53	5.57	5.60	5.63	5.67	5.70	5.73	5.73	**2024**
5.37	5.40	5.43	5.47	5.50	5.53	5.57	5.60	5.63	5.67	5.70	5.73	5.73	**2025**
5.37	5.40	5.43	5.47	5.50	5.53	5.57	5.60	5.63	5.67	5.70	5.73	5.73	**2026**
5.37	5.40	5.43	5.47	5.50	5.53	5.57	5.60	5.63	5.67	5.70	5.73	5.73	**2027**
5.37	5.40	5.43	5.47	5.50	5.53	5.57	5.60	5.63	5.67	5.70	5.73	5.73	**2028**
5.37	5.40	5.43	5.47	5.50	5.53	5.57	5.60	5.63	5.67	5.70	5.73	5.73	**2029**
5.37	5.40	5.43	5.47	5.50	5.53	5.57	5.60	5.63	5.67	5.70	5.73	5.73	**2030**
5.37	5.40	5.43	5.47	5.50	5.53	5.57	5.60	5.63	5.67	5.70	5.73	5.73	**2031**
5.37	5.40	5.43	5.47	5.50	5.53	5.57	5.60	5.63	5.67	5.70	5.73	5.73	**2032**
5.37	5.40	5.43	5.47	5.50	5.53	5.57	5.60	5.63	5.67	5.70	5.73	5.73	**2033**
5.37	5.40	5.43	5.47	5.50	5.53	5.57	5.60	5.63	5.67	5.70	5.73	5.73	**2034**
5.37	5.40	5.43	5.47	5.50	5.53	5.56	5.60	5.63	6.67	5.70	5.73	5.73	**2035**

TABLE 9

FY 2006.Q2 FORECAST OF INFLATION TRENDS
CHANGE IN GROSS DOMESTIC PRODUCT PRICE DEFLATOR

Calendar/Fiscal Years 2006.Q2 vs. 2005.Q3

	(A)	(B)	(C)	(D)	(E)	(F)	(G)
	FY 2006.Q2 1/ CALENDAR YEAR GDP DEFLATOR (% Change)	FY 2006.Q2 1/ FISCAL YEAR GDP DEFLATOR (% Change)	FY 2006.Q2 2/ CUMULATIVE GDP DEFLATOR (Base Year 2005)	FY 2005.Q3 3/ FISCAL YEAR GDP DEFLATOR (% Change)	FY 2005.Q3 3/ CUMULATIVE GDP DEFLATOR (Base Year 2005)	CHANGE IN GDP DEFLATOR (% Change)	CHANGE IN GDP DEFLATOR
2006	2.68%	2.69%	1.013	1.74%	1.027	0.96%	-0.014
2007	1.82%	2.03%	1.034	1.85%	1.046	0.19%	-0.012
2008	2.05%	1.99%	1.055	2.04%	1.068	-0.04%	-0.013
2009	2.01%	2.02%	1.076	2.07%	1.090	-0.06%	-0.014
2010	2.05%	2.04%	1.098	2.18%	1.113	-0.14%	-0.016
2011	1.93%	1.96%	1.119	2.35%	1.140	-0.39%	-0.020
2012	2.05%	2.02%	1.142	2.45%	1.168	-0.43%	-0.026
2013	2.01%	2.02%	1.165	2.41%	1.196	-0.40%	-0.031
2014	1.82%	1.86%	1.187	2.36%	1.224	-0.50%	-0.037
2015	1.86%	1.85%	1.209	2.36%	1.253	-0.52%	-0.044
2016	1.90%	1.89%	1.231	2.40%	1.283	-0.51%	-0.052
2017	1.86%	1.87%	1.255	2.44%	1.314	-0.56%	-0.060
2018	1.90%	1.89%	1.278	2.48%	1.347	-0.59%	-0.069
2019	1.93%	1.92%	1.303	2.49%	1.380	-0.57%	-0.078
2020	1.96%	1.96%	1.328	2.47%	1.414	-0.51%	-0.086
2021	1.93%	1.93%	1.354	2.47%	1.449	-0.53%	-0.095
2022	1.95%	1.95%	1.380	2.47%	1.485	-0.52%	-0.105
2023	1.98%	1.97%	1.408	2.48%	1.522	-0.50%	-0.114
2024	2.01%	2.00%	1.436	2.49%	1.560	-0.49%	-0.124
2025	2.03%	2.02%	1.465	2.48%	1.598	-0.46%	-0.134
2026	1.99%	2.00%	1.494	2.48%	1.638	-0.48%	-0.144
2027	2.07%	2.05%	1.525	2.49%	1.679	-0.44%	-0.154
2028	2.02%	2.03%	1.556	2.49%	1.721	-0.45%	-0.165
2029	2.10%	2.08%	1.588	2.49%	1.763	-0.41%	-0.175
2030	2.11%	2.11%	1.621	2.50%	1.808	-0.39%	-0.186

1/ Source: Global Insight, First Quarter 2006 Long Term Economic Outlook, Trend Forecast

2/ Fiscal Year Cumulative Price Deflator escalates to midyear dollars. The first year, 2006, is determined as follows: 1.0013 = [(2.694/100)*.5] + 1. An example of subsequent year cumulative growth such as in 2006 is found as: 1.0341 = [1+ (2.033/100)]*1.0135

3/ Source: Global Insight, Second Quarter 2005 Long Term Economic Outlook, Trend Forecast

TABLE 10

FY 2006.Q2 INFLATION FORECAST COMPARISONS
GROSS DOMESTIC PRODUCT PRICE DEFLATOR INDEXES 1/

BPA Fiscal Year

YEAR	(A) FY 2006.Q2 2/ CUMULATIVE PRICE DEFLATOR INDEX (Base Year 2005)	(B) FY 2005.Q3 3/ CUMULATIVE PRICE DEFLATOR INDEX (Base Year 2005)	(C) (A - B) DIFFERENCE
2006	1.013	1.027	-0.014
2007	1.034	1.046	-0.012
2008	1.055	1.068	-0.013
2009	1.076	1.090	-0.014
2010	1.098	1.113	-0.016
2011	1.119	1.140	-0.020
2012	1.142	1.168	-0.026
2013	1.165	1.196	-0.031
2014	1.187	1.224	-0.037
2015	1.209	1.253	-0.044
2016	1.231	1.283	-0.052
2017	1.255	1.314	-0.060
2018	1.278	1.347	-0.069
2019	1.303	1.380	-0.078
2020	1.328	1.414	-0.086
2021	1.354	1.449	-0.095
2022	1.380	1.485	-0.105
2023	1.408	1.522	-0.114
2024	1.436	1.560	-0.124
2025	1.465	1.598	-0.134
2026	1.494	1.638	-0.144
2027	1.525	1.679	-0.154
2028	1.556	1.721	-0.165
2029	1.588	1.763	-0.175
2030	1.621	1.808	-0.186

1/ Source: Global Insight, First Quarter 2006 Long Term Economic Outlook, Trend Forecast

2/ Fiscal Year Cumulative Price Deflator escalates to midyear dollars. The first year, 2006, is determined as follows: 1.0013 = [(2.694/100)*.5] + 1. An example of subsequent year cumulative growth such as in 2006 is foun 1.0341 = [1+ (2.033/100)]*1.0135

3/ Source: Global Insight, Second Quarter 2005 Long Term Economic Outlook, Trend Forecast

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CHAPTER 6

PROJECTED NEW BONDS ISSUED TO TREASURY

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1. Purpose

This section projects bonds that BPA plans to issue to the U.S. Treasury to finance BPA capital investments.

2. Method

New long-term debt consists of bonds issued by BPA to Treasury reflecting projected outlays for BPA Transmission construction and Environmental programs during the cost evaluation period (FY 2007-2009). All bonds projected for issuance are entered into the projected portions of the repayment study.

3. Application of Methodology

New bonds projected to be issued for the cost evaluation period are based on Programs in Review capital program outlays.

Table 6.1: Projected Treasury Bonds for FY 2008 - 2009

($000s)

Fiscal Year	Description	Interest Rate	Term	Total Borrowing	
2008	Construction	6.000%	35	285,189	1/
	Environment	5.660%	15	5,129	
2009	Construction	6.320%	35	259,531	2/
	Environment	5.940%	15	5,451	

1/ Capital projection assumes $15,000 of reserve financing
2/ Capital projection assumes $15,000 of reserve financing

Table 6.2: Association of Transmission Construction Investment [1/] Funded by Bonds 1977 - 2006

($000s)

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
	Plant	Amount	Amount					Refinancing	
Fiscal	in	Funded by	of Bond	Amount	Interest		Year		
Year	Service [2/]	Bonds	Sales	Outstanding	Rate	Term	Due	Date	Amount
1977	171,038	100,800 [3/]							
		50,000							
		20,238							
		171,038							
1978	90,494	54,762	50,000	0	8.95	35	2013		
		35,732							
		90,494							
1979	67,649	14,268	75,000	0	9.45	35	2014		
		53,381	50,000	0	9.90	35	2014		
		67,649							
1980	48,043	48,043	115,000	0	13.00	35	2015		
1981	253,151	13,576	175,000	0	16.60	35	2016		
		175,000	50,000	0	14.40	35	2017		
		50,000							
		14,575							
		253,151							
1982	92,111	85,425	100,000	0	14.40	35	2017		
		6,686	85,000	0	14.15	35	2017	7/31/1987	95,000 [4/]
		92,111							
1983	149,133	78,314	40,000	0	10.85	35	2018	2/29/1988	43,700 [5/]
		40,000	30,000	0	11.70	35	2018		
		30,000	45,000	0	12.25	35	2018		
		819							
		149,133							
1984	235,214	44,181	30,000	0	12.30	35	2019		
		30,000	60,000	0	13.05	35	2019		
		60,000							
		100,000							
		1,033							
		235,214							
1985	115,901	98,967	100,000	0	11.25	45	2030		
		16,934							
		115,901							
1986	326,694	283,066	100,000	0	8.15	10	1996		
		43,628	300,000	0	8.95	45	2031	8/31/1992	107,800 [7/]
								8/31/1992	107,700 [8/ 22/]
								5/31/1994	43,000 [11/]
		326,694							
1987	167,781	56,372	100,000	0	9.30	45	2032	4/30/1992	80,000 [6/]
									28,300 [6/]
		100,000	100,000	0	8.35	5	1992		
		11,409	50,000	0	9.55	45	2032		
		167,781							
1988	96,878	38,591	150,000	0	9.50	45	2033	10/31/1993	108,400 [10/]
								5/31/1994	54,100 [11/]
		58,287	40,000	0	9.90	45	2033		
		96,878							
1989	211,811	91,713	75,000	0	8.95	10	1999	5/31/1999	26,200 [25/]
		40,000							

Table 6.2: Association of Transmission Construction Investment [1/] Funded by Bonds 1977 - 2006

($000s)

(A) Fiscal Year	(B) Plant in Service [2/]	(C) Amount Funded by Bonds	(D) Amount of Bond Sales	(E) Amount Outstanding	(F) Interest Rate	(G) Term	(H) Year Due	(I) Refinancing Date	(J) Refinancing Amount
		75,000							
		5,098							
		211,811							
1990	88,894	44,902	50,000	0	9.25	40	2030	1/31/2000	53,500 [26/]
		43,992							
		88,894							
1991	139,891	16,008	60,000	0	7.55	4	1995		
		123,883							
		139,891							
1992	214,883	26,117	150,000	0	8.80	40	2032	8/31/1997	111,300 [17/]
		50,000	50,000	0	7.00	5	1997		
		138,766	150,000	0	8.13	40	2032	4/30/1998	75,300 [18/]
		214,883						5/31/1998	72,700 [19/]
								8/31/2000	15,300 [28/]
1993	209,541	11,234	50,000	0	6.05	5	1998		
		50,000	99,962 [9/]	0	8.35	40	2033		
		99,962	130,000	0	7.80	40	2033	5/31/1998	40,000 [20/]
		48,345							98,900 [20/]
			100,000	0	7.50	40	2033	8/31/1998	106,500 [21/]
			110,000	0	6.95	40	2033		
		209,541							
1994	239,060	81,655	50,000	0	6.85	40	2034		
		100,000	50,000	0	7.05	40	2034		
		57,405	50,000	0	8.20	40	2034		
			55,000	0	7.65	5	1999		
		239,060							
1995	290,154	52,595	55,000	0	8.35	6	2001		
		50,000	49,933 [12/]	0	7.70	30	2025		
		50,000	65,000	0	7.70	30	2025		
		50,000							
		55,000							
		32,559							
		290,154							
1996	146,886	49,933	15,000 [13/]						
		65,000	54,378 [14/]	0	5.90	7	2003		
		15000	70,000	0	7.05	10	2006		
		16,953							
		146,886							
1997	178,551	37,425	15,000 [15/]						
		70,000	22,600 [16/]	0	6.80	7	2004		
		15,000	80,000	0	6.90	8	2005		
		22,600							
		33,526							
		178,551							
1998	149,940	46,474	50,000	50,000	6.65	30	2028		
		50,000	36,819 [23/]	36,819	5.75	10	2008		
		36,819	40,000	40,000	6.20	13	2011		
		16,647							
		149,940							
1999	126,238	23,353	59,050 [24/]	59,050	5.90	15	2014		
		59,050	40,000	0	6.20	3	2002		

Table 6.2: Association of Transmission Construction Investment [1/] Funded by Bonds 1977 - 2006

($000s)

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
								Refinancing	
Fiscal Year	Plant in Service [2/]	Amount Funded by Bonds	Amount of Bond Sales	Amount Outstanding	Interest Rate	Term	Year Due	Date	Amount
		40,000							
		3,835							
		126,238							
2000	104,957	36,165	40,000	0	6.40	3	2002		
		39,052	39,052 [27/]	0	7.00	4	2004		
		29,740	40,000	0	6.75	6	2006		
		104,957							
2001	126,298	10,260	20,000	0	5.65	4	2005		
		20,000	59,932 [29/]	59,933	6.05	9	2010		
		59,932	25,000	25,000	5.95	10	2011		
		25,000	50,000	50,000	5.75	10	2011		
		11,106							
		126,298							
2002	273,625	38,894	108,010 [30/]	0	4.60	3	2005		
		108,010	60,000	0	3.75	3	2005		
		60,000	100,000	0	3.05	4	2006		
		66,721							
		273,625							
2003	266,971	33,279	4,938 [31/]	0	3.00	3	2005		
		4,938	40,000	0	2.80	3	2005		
		40,000	40,000	40,000	2.90	4	2007		
		40,000	40,000	40,000	5.55	30	2033		
		40,000	75,000	0	2.30	3	2006		
		75,000	25,000	25,000	2.95	4	2007		
		25,000	20,000	0	2.50	3	2006	9/30/2006	20000 [36/]
		8,754							
		266,971							
2004	270,077	11,246	15,000 [32/]						
		15,000	46,643 [33/]	46643	2.50	3	2007		
		46,643	65,000	65,000	2.95	4	2008		
		65,000	65,000	65,000	2.95	3	2007		
		65,000	50,000	50,000	3.45	3	2007		
		50,000	25,000	25,000	3.80	4	2008		
		17,188	30,000	30,000	3.10	3	2007		
			40,000	40,000	5.60	30	2034		
		270,077							
2005	295,585	7,812	27,010 [34/]	27,010	3.75	4	2009		
		30,000	40,000	40,000	5.40	30	2035		
		40,000	15,000 [32/]						
		27,010	40,000	40,000	5.50	30	2035		
		40,000	40,000	40,000	4.00	4	2009		
		15,000	45,000	45,000	5.25	30	2035		
		40,000							
		40,000							
		45,000							
		10,763							
		295,585							
2006	164,769	9,237	20,000	20,000	5.05	3	2009		
		70,000	70,000	70,000	5.35	3	2009		
		20,000	20,000	20,000	4.95	4	2010		
		5,319	5,319 [35/]	5,319	4.95	4	2010		
		60,213 [38/]							
		164,769							

Table 6.2: Association of Transmission Construction Investment [1/] Funded by Bonds 1977 - 2006

($000s)

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
								Refinancing	
Fiscal Year	Plant in Service	Amount Funded by Bonds [2/]	Amount of Bond Sales	Amount Outstanding	Interest Rate	Term	Year Due	Date	Amount
2006	Schultz-Wautoma	[37/] 109,906	109,906	109,906	5.52	30	2034		

1/ These investments have an estimated average service life of 40 years and a maximum repayment period of 40 years
2/ BPA's Summary Financial data, Analysis of Funds Returned to the U.S Treasury and Cash Amortization Table change in Total column from previous year
3/ Funded by appropriations (Reference WP-89-E-BPA-01A1, Documentation for the Revenue Requirement Study - Volume 1, 1989 Rate Proposal, page 195)
4/ Refinanced on 7/31/87 with $ 95,000 issued at 9.55%, 30 year term, due 2017
5/ Refinanced on 2/29/88 with $43,700 issued at 9.50%, 30 year term, due 2018
6/ Refinanced on 4/30/92 with $80,000 issued at 6.20%, 3 year term, due 1995; and $28,300 issued at 7.00%, 5 year term, due 1997
7/ Refinanced on 8/31/92 with $107,800 issued at 6.60%, 8 year term, due 2000
8/ Refinanced on 8/31/92 with $107,700 issued at 7.25%, 15 year term, due 2007
9/ $100,000 bond, $38 functionalized to Generation 1993
10/ Refinanced on 10/31/93 with $108,400 issued at 6.85%, 40 year term, due 2033.
11/ Refinanced on 5/31/94 with $97,100 issued at 7.1%, 4 year term, due 1998 (this new bond also refinanced one other bond
12/ $50,000 bond, $67 functionalized to Generation 1995
13/ As proposed in Revenue Requirements for 1996 in the 1995 Final Rate Proposal $15 million of revenue financing
14/ $60,000 bond, $5,622 functionalized to Generation 1996
15/ As proposed in Revenue Requirements for 1997 in the 1996 Final Rate Proposal $15 million of revenue financing
16/ $30,000 bond, $7,400 functionalized to Generation 1997
17/ Refinanced remaining $103,300 on 8/31/97 with $111,300 at 6.65% for 10 year term, due 2007.
18/ Partial refinance of $70,300 on 4/30/1998 with $75,300 issued at 6.0%, 10 year term, due 2009
19/ Paid $11,800, and refinanced $67,900 on 5/31/98 with $72,700 at 6.00% for 11 year term, due 2009\.
20/ Refinanced on 5/31/98 with $40,000 issued at 6.20% for 13 year term, due 2011; and refinanced on 5/31/98 with $98,900 issued at 6.70%, 34 year term, due 2032
21/ Refinanced on 8/31/98 with $106,500 at 5.85% for 30 year term, due 2028
22/ Refinanced again on 8/31/98 with $112,300 at 5.85%, 30 year term, due 2028
23/ $40,000 bond, $3,181 functionalized to Generation 1998
24/ $60,000 bond, $950 functionalized to Generation 1999
25/ Refinanced on 5/31/99 with $26,200 issued at 5.95%, 5 year term, due 2004
26/ Refinanced on 1/31/00 with $53,500 issued at 7.15%, 5 year term, due 2005
27/ $50,000 bond, $10,948 functionalized to Generation 2000
28/ Refinanced on 8/31/00 with $15,300 at 6.85% for 3 year term, due 2003
29/ $60,000 bond, $68 functionalized to Generation 2001
30/ $110,000 bond, $1,990 functionalized to Generation 2002
31/ $50,000 bond, $45,062 functionalized to Generation 2003
32/ As proposed in Revenue Requirements for 2004 in the 2004 Final Rate Proposal $15 million of revenue financing
33/ $60,000 bond, $13,357 functionalized to Generation 2004
34/ $35,000 bond, $,7990 functionalized to Generation 2005
35/ $15,000 bond, $9,681 functionalized to Generation 2006
36/ Rolled on 9/30/06 with $20,000 issued at 4.95%, 4 year term, due 2010
37/ Schultz-Wautoma plant and customer financing
38/ Not yet borrowed for

Table 6.3: Association of Environment Investment Funded by Bonds 1977 - 2006

($000s)

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
								Refinancing	
Fiscal Year	Plant in Service [1/]	Amount Funded by Bonds	Amount of Bond Sales	Amount Outstanding	Interest Rate	Term	Year Due	Date	Amount
1995	16,014	16,014 [2/]							
1997	40,000	40,000	40,000	0	6.95	15	2011		
1999	10,517	10,517							
2000	9,394	9,394							
2001	12,091	10,089	30,000	0	6.05	9	2010		
		2,002							
		12,091							
2002	8,651	8,651	30,000	0	3.05	4	2006		
2003	7,953	7,953							
2004	4,528	4,528							
2005	13,900	6,866							
		7,034							
		13,900							
2006	5,286	5,286	20,000	20,000	5.05	3	2009		

1/ Data is from Year End Capital Spending Sheet
2/ Funded by construction bond

CHAPTER 7

NON-FEDERAL PAYMENT OBLIGATIONS

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1. Introduction

There are two forms of non-Federal payment obligations associated with transmission assets in this rate filing. One is a lease-purchase arrangement for capitalized asset purchases. The other is the functional reassignment to transmission of debt service payment obligations associated with non-Federal, Energy Northwest (EN) bonds that are typically recovered in power rates.

2. Lease-Purchase Agreement

BPA entered into a lease-purchase agreement with the Northwest Infrastructure Financing Corporation (NIFC) to provide for the construction of the 500 kV Schultz-Wautoma transmission line. The resulting semi-annual lease payments are treated as fixed obligations in the transmission repayment study. Table 7.1 displays the payment stream.

Table 7.1 Lease-Purchase Payment Stream

Northwest Infrastructure Financing Corporation
Lease Payment

	Debt Service			NIFC Annual costs							
	(A)	(B)	(C) (A+B)	(D)	(E)	(F)	(G)	(H)	(I) (D+E+F+G+H)	(J)	(K) (C+I+J)
	Prinicpal	Interest	Total DS	Audit (PWC)	Trustee	JH Mgmt Annual Fee	JH Mgmt Maintenance	Potential Legal Exp	Total	Capitalized Interest Fund	Lease Payment
3/25/04											
7/1/04		1,715,327	1,715,327							(1,715,327)	
1/1/05		3,216,239	3,216,239	24,000	2,000	10,000	2,000	3,000	41,000	(3,257,239)	
7/1/05		3,216,239	3,216,239							(3,216,239)	41,000
1/1/06		3,216,239	3,216,239	24,960	2,000	10,000	2,080	3,120	42,160		3,258,399
7/1/06		3,216,239	3,216,239								3,216,239
1/1/07		3,216,239	3,216,239	25,958	2,000	10,000	2,163	3,245	43,366		3,259,605
7/1/07		3,216,239	3,216,239								3,216,239
1/1/08		3,216,239	3,216,239	26,997	2,000	10,000	2,250	3,375	44,621		3,260,860
7/1/08		3,216,239	3,216,239								3,216,239
1/1/09		3,216,239	3,216,239	28,077	2,000	10,000	2,340	3,510	45,926		3,262,164
7/1/09		3,216,239	3,216,239								3,216,239
1/1/10		3,216,239	3,216,239	29,200	2,000	10,000	2,433	3,650	47,283		3,263,522
7/1/10		3,216,239	3,216,239								3,216,239
1/1/11		3,216,239	3,216,239	30,368	2,000	10,000	2,531	3,796	48,694		3,264,933
7/1/11		3,216,239	3,216,239								3,216,239
1/1/12		3,216,239	3,216,239	31,582	2,000	10,000	2,632	3,948	50,162		3,266,401
7/1/12		3,216,239	3,216,239								3,216,239
1/1/13		3,216,239	3,216,239	32,846	2,000	10,000	2,737	4,106	51,689		3,267,927
7/1/13		3,216,239	3,216,239								3,216,239
1/1/14		3,216,239	3,216,239	34,159	2,000	10,000	2,847	4,270	53,276		3,269,515
7/1/14		3,216,239	3,216,239								3,216,239
1/1/15		3,216,239	3,216,239	35,526	2,000	10,000	2,960	4,441	54,927		3,271,166
7/1/15		3,216,239	3,216,239								3,216,239
1/1/16		3,216,239	3,216,239	36,947	2,000	10,000	3,079	4,618	56,644		3,272,883
7/1/16		3,216,239	3,216,239								3,216,239
1/1/17		3,216,239	3,216,239	38,425	2,000	10,000	3,202	4,803	58,430		3,274,669
7/1/17		3,216,239	3,216,239								3,216,239
1/1/18		3,216,239	3,216,239	39,962	2,000	10,000	3,330	4,995	60,287		3,276,526
7/1/18		3,216,239	3,216,239								3,216,239
1/1/19		3,216,239	3,216,239	41,560	2,000	10,000	3,463	5,195	62,219		3,278,457
7/1/19		3,216,239	3,216,239								3,216,239
1/1/20		3,216,239	3,216,239	43,223	2,000	10,000	3,602	5,403	64,227		3,280,466
7/1/20		3,216,239	3,216,239								3,216,239
1/1/21		3,216,239	3,216,239	44,952	2,000	10,000	3,746	5,619	66,316		3,282,555
7/1/21		3,216,239	3,216,239								3,216,239
1/1/22		3,216,239	3,216,239	46,750	2,000	10,000	3,896	5,844	68,489		3,284,728
7/1/22		3,216,239	3,216,239								3,216,239
1/1/23		3,216,239	3,216,239	48,620	2,000	10,000	4,052	6,077	70,749		3,286,987
7/1/23		3,216,239	3,216,239								3,216,239
1/1/24		3,216,239	3,216,239	50,564	2,000	10,000	4,214	6,321	73,099		3,289,337
7/1/24		3,216,239	3,216,239								3,216,239
1/1/25		3,216,239	3,216,239	52,587	2,000	10,000	4,382	6,573	75,543		3,291,781
7/1/25		3,216,239	3,216,239								3,216,239
1/1/26		3,216,239	3,216,239	54,690	2,000	10,000	4,558	6,836	78,084		3,294,323
7/1/26		3,216,239	3,216,239								3,216,239
1/1/27		3,216,239	3,216,239	56,878	2,000	10,000	4,740	7,110	80,728		3,296,966
7/1/27		3,216,239	3,216,239								3,216,239
1/1/28		3,216,239	3,216,239	59,153	2,000	10,000	4,929	7,394	83,477		3,299,715
7/1/28		3,216,239	3,216,239								3,216,239
1/1/29		3,216,239	3,216,239	61,519	2,000	10,000	5,127	7,690	86,336		3,302,574
7/1/29		3,216,239	3,216,239								3,216,239
1/1/30		3,216,239	3,216,239	63,980	2,000	10,000	5,332	7,998	89,309		3,305,548
7/1/30		3,216,239	3,216,239								3,216,239
1/1/31		3,216,239	3,216,239	66,539	2,000	10,000	5,545	8,317	92,402		3,308,640
7/1/31		3,216,239	3,216,239								3,216,239
1/1/32		3,216,239	3,216,239	69,201	2,000	10,000	5,767	8,650	95,618		3,311,856
7/1/32		3,216,239	3,216,239								3,216,239
1/1/33		3,216,239	3,216,239	71,969	2,000	10,000	5,997	8,996	98,962		3,315,201
7/1/33		3,216,239	3,216,239								3,216,239
1/1/34	119,585,000	3,216,239	122,801,238.58	74,848	2,000	10,000	6,237	9,356	102,441		122,903,679
Total	**119,585,000**	**191,473,403**	**311,058,403**	**1,346,039**	**60,000**	**300,000**	**112,170**	**168,255**	**1,986,463**	**(8,188,804)**	**313,044,867**

3. Debt Service Reassignment

Debt Service Reassignment (DSR) is an accounting and ratemaking mechanism created to make full use of the Debt Optimization program (DO). When the cash flows from DO are applied to Transmission obligations, DSR ensures that Transmission revenues repay the full cost of the associated EN debt.

Under DO, the proceeds from EN refinancing bonds are used to pay principal on the currently maturing EN bonds in a given fiscal year. Since BPA Power rates were set to recover the originally-expected EN principal payments on the maturing bonds, and the associated debt service requirement was expected to go down in the EN budget (when the principal was paid from the proceeds of the newly-issued refinancing bonds), funds in the BPA Fund then became available for other purposes. The amount made available is equal to the principal of the amortized EN bonds. BPA uses these funds to amortize Federal obligations associated with Generation and Transmission assets ahead of schedule, thereby replenishing or creating future opportunities to replenish BPA's available Treasury borrowing authority.

DSR occurs when BPA uses the funds made available from DO to early-amortize Federal Transmission obligations. The stream of annual all-in costs from the DSR transaction is assigned to Transmission and recovered in Transmission rates. The all-in costs include debt service on tax-exempt and taxable bonds and other costs associated with the DSR transaction, which are described later. Conversely, the costs attached to these EN refinancing bonds are no longer assigned for recovery from Power revenues.

The next section is an explanation of how the debt service stream associated with DSR is calculated. The allocation of DO cash flows to Transmission and Generation can be different each fiscal year. For illustration purposes, the following explanation of the process for determining the Transmission payment obligation uses data from the 2006 EN bond issuance.

4. Calculation of Debt Service Reassignment

Prior to calculating the Transmission DSR obligation, two sets of data are required. First, the final pricing data from the EN refunding forms the basis of all calculations. Second, the amount of debt service assigned to Transmission for repayment is determined based on the allocation of the Federal principal payment between Transmission and Generation.

<u>Step 1: Determine the Total Base Debt Service</u>. This is the sum of the debt service on the newly-issued EN bonds assigned to Transmission plus the transaction costs associated with the issuance of the bonds. *See* Table 7.2.

Table 7.2: Base Debt Service for Transmission

		A	B	C	D	E	F	G
	EN	New EN Bonds		Transaction Costs		Total Base Debt Service		
	Fiscal Year	Principal	Interest	Principal	Interest	Principal	Interest	Total
1	2006	-	1,892,939	-	1,435	-	1,894,374	1,894,374
2	2007	-	9,598,000	50,000	7,278	50,000	9,605,278	9,655,278
3	2008	-	9,598,000	45,000	4,698	45,000	9,602,698	9,647,698
4	2009	-	9,598,000	-	2,354	-	9,600,354	9,600,354
5	2010	-	9,598,000	-	2,354	-	9,600,354	9,600,354
6	2011	-	9,598,000	45,000	2,354	45,000	9,600,354	9,645,354
7	2012	-	9,598,000	-	-	-	9,598,000	9,598,000
8	2013	9,885,000	9,598,000	-	-	9,885,000	9,598,000	19,483,000
9	2014	9,885,000	9,103,750	-	-	9,885,000	9,103,750	18,988,750
10	2015	17,920,000	8,609,500	-	-	17,920,000	8,609,500	26,529,500
11	2016	17,925,000	7,713,500	-	-	17,925,000	7,713,500	25,638,500
12	2017	17,920,000	6,817,250	-	-	17,920,000	6,817,250	24,737,250
13	2018	17,920,000	5,921,250	-	-	17,920,000	5,921,250	23,841,250
14	2019	-	5,025,250	-	-	-	5,025,250	5,025,250
15	2020	18,190,000	5,025,250	-	-	18,190,000	5,025,250	23,215,250
16	2021	19,100,000	4,115,750	-	-	19,100,000	4,115,750	23,215,750
17	2022	20,050,000	3,160,750	-	-	20,050,000	3,160,750	23,210,750
18	2023	21,055,000	2,158,250	-	-	21,055,000	2,158,250	23,213,250
19	2024	22,110,000	1,105,500	-	-	22,110,000	1,105,500	23,215,500
	Total	**191,960,000**	**127,834,939**	**140,000**	**20,472**	**192,100,000**	**127,855,411**	**319,955,411**

Step 2: Convert the Base Debt Service to BPA Fiscal Years. The debt service on the newly-issued EN bonds is based on the EN July-June fiscal year. The debt service stream is converted into BPA's October-September fiscal year. *See* Table 7.3.

Table 7.3: Convert to BPA Fiscal Year

		A	B	C
			BPA FY Conversion	
	Fiscal Year	Principal	Interest	Total
1	2006	12,500	3,822,100	3,834,600
2	2007	48,750	9,604,633	9,653,383
3	2008	33,750	9,602,112	9,635,862
4	2009	-	9,600,354	9,600,354
5	2010	11,250	9,600,354	9,611,604
6	2011	33,750	9,599,765	9,633,515
7	2012	2,471,250	9,598,000	12,069,250
8	2013	9,885,000	9,474,438	19,359,438
9	2014	11,893,750	8,980,188	20,873,938
10	2015	17,921,250	8,385,500	26,306,750
11	2016	17,923,750	7,489,438	25,413,188
12	2017	17,920,000	6,593,250	24,513,250
13	2018	13,440,000	5,697,250	19,137,250
14	2019	4,547,500	5,025,250	9,572,750
15	2020	18,417,500	4,797,875	23,215,375
16	2021	19,337,500	3,877,000	23,214,500
17	2022	20,301,250	2,910,125	23,211,375
18	2023	21,318,750	1,895,063	23,213,813
19	2024	16,582,500	829,125	17,411,625
	Total	**192,100,000**	**127,381,817**	**319,481,817**

Step 3: Calculate the "Carrying Charge" and "Taxable Note Charge." The "carrying charge" and "taxable note charge" are necessary because the debt service expense on the newly-issued EN bonds begins on July 1, but the Transmission Federal principal payment is not made until September 30. It is on October 1, the day after the Federal payment has been made, that all debt service and other costs associated with DSR are assigned to Transmission. The carrying charge is the interest accrued and debt service payments made from July 1 to October 1. The interest accrued portion of the carrying charge is calculated by multiplying the sum of the Federal Transmission principal retired and the EN transaction costs by one-twelfth of BPA's weighted average cost of capital, then compounding this monthly amount for three months. The carrying charge is treated like a bond with interest at BPA's weighted average cost of capital and spread on a pro-rata basis through the final maturities of the newly-issued EN bonds. The taxable note charge represents the interest costs associated with a loan taken out by EN in order to facilitate the refinancing of EN debt on a tax-exempt basis. The taxable note charge is spread using the same methodology as the carrying charge. The carrying charge and taxable note charge are reflected in Table 7.4

Step 4: Calculate the Total Payment Obligation for Transmission. The total payment obligation for Transmission is the sum of the base debt service converted from an EN FY to a BPA FY in Table 7.3, the carrying charge, and the taxable note charge. *See* Table 7.4

Table 7.4: Total Payment Obligation

		A	B	C	D	E	F	G
	BPA	Carrying Charge		Taxable Note Charge		Total Payment Obligation		
	Fiscal Year	Principal	Interest	Principal	Interest	Principal	Interest	Total
1	2007	1,603	304,365	648	123,005	51,000	10,032,003	10,083,003
2	2008	1,109	304,287	448	122,974	35,308	10,029,373	10,064,681
3	2009	-	304,234	-	122,952	-	10,027,540	10,027,540
4	2010	370	304,234	149	122,952	11,769	10,027,540	10,039,309
5	2011	1,109	304,216	448	122,945	35,308	10,026,926	10,062,234
6	2012	81,239	304,163	32,832	122,923	2,585,321	10,025,086	12,610,407
7	2013	324,956	300,247	131,327	121,341	10,341,283	9,896,025	20,237,308
8	2014	390,991	284,584	158,014	115,011	12,442,755	9,379,783	21,822,538
9	2015	589,137	265,738	238,092	107,395	18,748,479	8,758,633	27,507,112
10	2016	589,219	237,342	238,125	95,919	18,751,095	7,822,698	26,573,793
11	2017	589,096	208,942	238,076	84,441	18,747,172	6,886,633	25,633,804
12	2018	441,822	180,547	178,557	72,966	14,060,379	5,950,763	20,011,142
13	2019	149,493	159,251	60,416	64,359	4,757,409	5,248,861	10,006,269
14	2020	605,451	152,046	244,685	61,447	19,267,636	5,011,368	24,279,004
15	2021	635,695	122,863	256,908	49,653	20,230,102	4,049,516	24,279,619
16	2022	667,377	92,222	269,712	37,271	21,238,338	3,039,618	24,277,956
17	2023	700,825	60,055	283,230	24,270	22,302,805	1,979,388	24,282,193
18	2024	545,128	26,275	220,306	10,619	17,347,934	866,019	18,213,953
	Total	**6,314,620**	**3,915,611**	**2,551,973**	**1,582,444**	**200,954,093**	**129,057,772**	**330,011,865**

Step 5: Reshape the Debt Service. The total principal payment obligation is reshaped to equal the total Federal Transmission principal retired in advance due to DSR. The EN principal maturing can differ from the principal on the newly-issued EN bonds because municipal bonds are often sold at a premium or discount, based on the market conditions at the time of the sale. With premium bonds, a lower aggregate par amount is issued to pay off the maturing bonds. The opposite is true with discount bonds. BPA made a policy decision that requires the DSR-related Transmission principal obligation to equal the amount of Federal Transmission principal repaid due to DSR.

The calculation of the debt service on the EN bonds increases or decreases the total principal payments with corresponding changes to interest. The principal is proportionately recalculated using the ratio of annual principal payments to the total, displayed previously in Table 7.4. The EN principal maturities that were issued at a premium or a discount are adjusted on a pro-rata basis to equal the total amount of Federal Transmission principal repaid. The Excel solver function is used to calculate the new interest stream for the adjusted principal. The total debt service does not change. *See* Table 7.5.

Table 7.5: Calculate the Debt Service

		A	B	C
	BPA		Transmission DSR	
	Fiscal Year	Principal	Interest	Total
1	2007	51,849	9,771,720	9,823,569
2	2008	35,896	9,769,240	9,805,135
3	2009	-	9,767,523	9,767,523
4	2010	11,965	9,767,523	9,779,488
5	2011	35,896	9,766,950	9,802,846
6	2012	2,628,367	9,765,233	12,393,600
7	2013	10,513,467	9,639,518	20,152,985
8	2014	12,649,928	9,136,656	21,786,585
9	2015	19,060,644	8,531,607	27,592,251
10	2016	19,063,303	7,619,932	26,683,234
11	2017	19,059,314	6,708,129	25,767,443
12	2018	14,294,486	5,796,518	20,091,003
13	2019	4,836,620	5,112,809	9,949,429
14	2020	19,588,444	4,881,472	24,469,916
15	2021	20,566,936	3,944,552	24,511,488
16	2022	21,591,959	2,960,830	24,552,789
17	2023	22,674,149	1,928,082	24,602,231
18	2024	17,636,779	843,571	18,480,350
	Total	**204,300,000**	**125,711,865**	**330,011,865**

Transmission's total DSR payment obligation and the related relief of Generation's payment obligations are shown in Table 7.6. Transmission's total principal obligation can be higher or lower than the total principal relief for Generation if premium or discount bonds are issued.

Table 7.6: FY 2003 – 2006 Relief of Generation & Transmission's DSR Obligation

		A	B	C	D	E	F
		Relief of Generation Payment Obligation			Transmission DSR Payment Obligation		
	BPA FY	Principal	Interest	Total DS	Principal	Interest	Total DS
1	2004	0	16,418,815	16,418,815	0	15,227,105	15,227,105
2	2005	0	27,558,861	27,558,861	0	25,380,111	25,380,111
3	2006	0	35,834,302	35,834,302	0	32,802,639	32,802,639
4	2007	674,279	45,866,305	46,540,584	715,562	42,574,359	43,289,921
5	2008	4,270,748	45,838,059	50,108,806	4,510,058	42,545,978	47,056,036
6	2009	7,096,811	45,662,077	52,758,888	7,449,072	42,346,604	49,795,676
7	2010	11,769	45,370,184	45,381,953	11,965	41,986,744	41,998,709
8	2011	35,308	45,369,571	45,404,879	35,896	41,986,172	42,022,067
9	2012	31,105,978	45,367,731	76,473,708	32,425,389	41,984,455	74,409,844
10	2013	119,627,508	43,085,702	162,713,211	124,893,285	40,466,265	165,359,550
11	2014	105,125,510	35,142,496	140,268,006	110,307,427	34,641,573	144,949,000
12	2015	111,937,460	30,802,048	142,739,508	117,120,201	29,568,016	146,688,216
13	2016	120,584,185	25,935,526	146,519,711	125,761,169	24,197,296	149,958,465
14	2017	135,923,929	19,632,252	155,556,181	141,513,716	18,427,116	159,940,832
15	2018	138,544,494	12,500,903	151,045,397	143,338,373	11,879,055	155,217,427
16	2019	4,757,409	5,248,861	10,006,269	4,836,620	5,112,809	9,949,429
17	2020	19,267,636	5,011,368	24,279,004	19,588,444	4,881,472	24,469,916
18	2021	20,230,102	4,049,516	24,279,619	20,566,936	3,944,552	24,511,488
19	2022	21,238,338	3,039,618	24,277,956	21,591,959	2,960,830	24,552,789
20	2023	22,302,805	1,979,388	24,282,193	22,674,149	1,928,082	24,602,231
21	2024	17,347,934	866,019	18,213,953	17,636,779	843,571	18,480,350
		880,082,202	**540,579,601**	**1,420,661,803**	**914,977,000**	**505,684,802**	**1,420,661,802**

Table 7.7: Total Non-Federal Repayment Obligation

Fiscal Year	Principal	Interest	Expenses	CIF	Net New D/S
2002	-	-	-	-	-
2003	-	-	-	-	-
2004	-	18,550,551	10,250	(3,323,447)	15,237,355
2005	-	31,812,588	41,290	(4,824,358)	27,029,520
2006	-	39,235,117	42,462	-	39,277,578
2007	715,562	49,006,836	43,680	-	49,766,078
2008	4,510,058	48,978,455	44,947	-	53,533,460
2009	7,449,072	48,779,081	46,265	-	56,274,418
2010	11,965	48,419,221	47,636	-	48,478,822
2011	35,896	48,418,649	49,061	-	48,503,606
2012	32,425,389	48,416,932	50,544	-	80,892,864
2013	124,893,285	46,898,742	52,086	-	171,844,113
2014	110,307,427	41,074,050	53,689	-	151,435,166
2015	117,120,201	36,000,493	55,356	-	153,176,050
2016	125,761,171	30,629,773	57,091	-	156,448,034
2017	141,513,716	24,859,593	58,894	-	166,432,204
2018	143,338,374	18,311,532	60,770	-	161,710,676
2019	4,836,620	11,545,286	62,721	-	16,444,627
2020	19,588,444	11,313,949	64,749	-	30,967,143
2021	20,566,936	10,377,029	66,859	-	31,010,824
2022	21,591,959	9,393,308	69,054	-	31,054,320
2023	22,674,149	8,360,559	71,337	-	31,106,044
2024	17,636,779	7,276,049	73,710	-	24,986,537
2025	-	6,432,477	76,178	-	6,508,655
2026	-	6,432,477	78,745	-	6,511,222
2027	-	6,432,477	81,415	-	6,513,892
2028	-	6,432,477	84,192	-	6,516,669
2029	-	6,432,477	87,079	-	6,519,556
2030	-	6,432,477	90,082	-	6,522,559
2031	-	6,432,477	93,206	-	6,525,683
2032	-	6,432,477	96,454	-	6,528,931
2033	29,896,250	5,628,418	99,832	-	35,624,499
2034	89,688,750	2,412,179	76,831	-	92,177,760
-	**$1,034,562,001**	**$697,158,206**	**$1,986,464**	**(8,147,804)**	**$1,725,558,867**

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CHAPTER 8

REPAYMENT PERIOD REPLACEMENTS

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1. Introduction

Consistent with the requirements of RA 6120.2, each repayment study includes funding for replacements to the transmission system during the repayment period. The purpose of these investments is to maintain the existing revenue-generating capability of the system. This schedule is expressed in mid-year dollars for the study year and is assigned the interest rates of the projected study year long-term borrowings .

2. Transmission Replacements

The Iowa Curve methodology was used to calculate replacements for the transmission system. The Iowa Curves are a set of curves with different shapes corresponding to how much of an initial asset survives as a function of time. They are described in the book “Statistical Analyses of Industrial Property Retirements” by Robley Winfrey, Bulletin 125 Revised, Engineering Research Institute, Iowa State University, April 1967. The specific curves are assigned to FERC Accounts in BPA's depreciation study.

BPA's total plant, by FERC account and in-service date, was analyzed and the various FERC accounts were assigned Iowa Curves as determined by the depreciation study. A table from Winfrey's book, TABLE 22 - TOTAL RENEWALS FOR TYPE CURVES, tells what fraction of plant represented by a given curve will have to be replaced each tenth-of-lifetime to maintain the initial plant. A data file with the contents of that table accurate to twelve lifetimes was created for use in calculating repayment period transmission replacements. For each of the Iowa Curves, Table 22 calls for replacements equal to about 50 percent of the initial plant in the first lifetime

and approaching 100 percent of initial plant in later lifetimes. Table 22 gives replacement plant in the same physical units as the initial plant.

The net investment in plant of any historical year must first be converted to units of physical plant by dividing the investment by an appropriate historical cost per unit plant. BPA's plant cost was converted to quasi-physical units of plant by use of the Handy-Whitman Index. The Handy-Whitman Index provides cost trends for electric, gas, telephone, and water utilities in geographical regions of generally similar characteristics. The Handy-Whitman Index numbers are widely used in the industry to trend original cost records to estimate reproduction cost at prices prevailing at a later date. The cost trends for each of the utilities are further subdivided by type of plant. In particular, the cost trends for electrical utilities include trends for total transmission plant and trends for the major FERC accounts within transmission plant. The trends for individual FERC accounts were used when available. The trends for total transmission plant were used for those accounts for which no specific trend was included.

Surviving transmission plant investment by FERC account and in-service year was obtained from BPA's plant investment records. The plant investment of each year and account was divided by the corresponding Handy-Whitman number to obtain plant in quasi-physical units. The quasi-physical plant was then multiplied by factors obtained by interpolating in the appropriate column of Table 22 to obtain quasi-physical replacements for all years from the last year of the Handy-Whitman index through the last year of the repayment period. The resulting quasi-physical units were multiplied by the Handy-Whitman number for the last year of the

index for the corresponding FERC account to yield replacement costs in the dollars of that last year. These replacement costs were accumulated by future year and FERC account.

Gross plant investment data for the cost evaluation period were first de-escalated to the dollars of the last year of the Handy-Whitman index and then distributed among the various FERC accounts in the same proportions as the total plant of BPA's summary of investment from plant balances. Some historical plant would be retired during the cost evaluation period and be replaced with plant funded from the Transmission System Replacements capital program. If future replacements were calculated for both, a double counting would occur. Therefore the projections for a cost evaluation period year were reduced by the amount calculated for replacements for the same year. Future replacements were then calculated for only the remaining net initial investment of that year.

The replacement costs of each future year and FERC account were then accumulated for all FERC accounts and inflated from the dollars of the most recent Handy-Whitman year to the dollars of the rate test period year *See* Tables 8-1 and 8-2.

3. AC Intertie Replacements

Repayment period replacements for the AC Intertie facilities were calculated separately so that the contributions made toward those replacements by Non-Federal Capacity Owners could be properly credited in the repayment studies. For historical plant, the plant investment in each of the lines and substations composing the AC Intertie System was apportioned among the years on the basis of the same line or substation data in a recent plant investment file. These investments

by year were accumulated for all lines and substations to obtain historical plant investment by year. These annual investments were apportioned among land and the major FERC accounts on the same basis as the total lines and substations.

The cost-evaluation period data for the AC Intertie was then processed by the replacement methodology described above. Those listings that apply only to the AC Intertie follow those for the transmission system. The results are the future replacements for the total AC Intertie and have to be multiplied by the appropriate fraction, 21 percent, to obtain the future contributions required from capacity owners. These fractional parts, together with the amounts for the cost evaluation period, are included in the repayment studies as negative expenses. *See* Table 8-3 and 8-4.

Table 8-1: Future Replacements for FY 2008
($000s)

FY	Amount	Rate	Due
2009	131758	6.32	2044
2010	135676	6.32	2045
2011	139414	6.32	2046
2012	143127	6.32	2047
2013	146922	6.32	2048
2014	150857	6.32	2049
2015	154791	6.32	2050
2016	158743	6.32	2051
2017	162655	6.32	2052
2018	166326	6.32	2053
2019	169951	6.32	2054
2020	173552	6.32	2055
2021	177062	6.32	2056
2022	180503	6.32	2057
2023	183943	6.32	2058
2024	187246	6.32	2059
2025	190220	6.32	2060
2026	192822	6.32	2061
2027	195063	6.32	2062
2028	196971	6.32	2063
2029	198398	6.32	2064
2030	199491	6.32	2065
2031	200228	6.32	2066
2032	200720	6.32	2067
2033	200953	6.32	2068
2034	200750	6.32	2069
2035	200456	6.32	2070
2036	200111	6.32	2071
2037	199555	6.32	2072
2038	198918	6.32	2073
2039	198326	6.32	2074
2040	197820	6.32	2075
2041	197448	6.32	2076
2042	197229	6.32	2077
2043	197298	6.32	2078

Table 8-2: Future Replacements for FY 2009
($000s)

FY	Amount	Rate	Due
2010	138518	6.63	2045
2011	142344	6.63	2046
2012	146082	6.63	2047
2013	149873	6.63	2048
2014	153759	6.63	2049
2015	157625	6.63	2050
2016	161504	6.63	2051
2017	165366	6.63	2052
2018	169032	6.63	2053
2019	172691	6.63	2054
2020	176324	6.63	2055
2021	179835	6.63	2056
2022	183289	6.63	2057
2023	186755	6.63	2058
2024	190108	6.63	2059
2025	193171	6.63	2060
2026	195875	6.63	2061
2027	198203	6.63	2062
2028	200172	6.63	2063
2029	201644	6.63	2064
2030	202753	6.63	2065
2031	203445	6.63	2066
2032	203905	6.63	2067
2033	204093	6.63	2068
2034	203814	6.63	2069
2035	203451	6.63	2070
2036	203064	6.63	2071
2037	202476	6.63	2072
2038	201802	6.63	2073
2039	201196	6.63	2074
2040	200683	6.63	2075
2041	200342	6.63	2076
2042	200136	6.63	2077
2043	200208	6.63	2078
2044	200682	6.63	2079

Table 8-3: 2008 AC Credits
($000s)

	FY 2008
2009	-1319
2010	-1385
2011	-1453
2012	-1516
2013	-1580
2014	-1647
2015	-1715
2016	-1781
2017	-1849
2018	-1922
2019	-1999
2020	-2075
2021	-2154
2022	-2237
2023	-2314
2024	-2394
2025	-2471
2026	-2542
2027	-2605
2028	-2659
2029	-2702
2030	-2738
2031	-2757
2032	-2755
2033	-2746
2034	-2716
2035	-2674
2036	-2624
2037	-2565
2038	-2495
2039	-2429
2040	-2367
2041	-2310
2042	-2258
2043	-2210
2044	0

Table 8-4: 2009 AC Credits
($000s)

	FY 2009
2009	0
2010	-1415
2011	-1483
2012	-1547
2013	-1612
2014	-1679
2015	-1748
2016	-1815
2017	-1885
2018	-1959
2019	-2036
2020	-2113
2021	-2193
2022	-2277
2023	-2355
2024	-2436
2025	-2513
2026	-2585
2027	-2649
2028	-2704
2029	-2746
2030	-2781
2031	-2800
2032	-2796
2033	-2786
2034	-2754
2035	-2709
2036	-2656
2037	-2594
2038	-2520
2039	-2451
2040	-2386
2041	-2326
2042	-2271
2043	-2220
2044	-2181

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CHAPTER 9

FINANCIAL RISK AND MITIGATION

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1. Background

BPA adopted a long-term policy in its 1993 Final Rate Proposal calling for setting rates that build and maintain financial reserves sufficient for the agency to achieve a 95 percent probability of meeting U.S. Treasury payments in full and on time for each two-year rate period. *See* 1993 Final Rate Proposal, Administrator's Record of Decision, WP-93-A-02 at page 72.

In this rate proposal, BPA has analyzed its transmission risks and has determined that the rate proposal achieves the 95 percent probability standard for the transmission function.

To achieve this Treasury Payment Probability (TPP), the following risk mitigation "tools" were considered in the rate proposal:

1. Starting financial reserves: Starting financial reserves include cash in the BPA Fund and the deferred borrowing balance attributed to the transmission function. The most likely value for starting reserves is projected to be $287.8 million at the beginning of FY 2008.

2. Planned Net Revenues for Risk (PNRR). PNRR is a component of the revenue requirement that is added to annual expenses. PNRR adds to cash flows so that financial reserves mitigate short-run cost and revenue risk and achieve the TPP goal. No PNRR was required in the revenue requirement to achieve the TPP standard under the rate proposal.

3. Two Year Rate Period. BPA is proposing to adopt rates for a two-year period. The ability to revise rates after two years, or more frequently if need be, serves as an important risk mitigation tool for BPA's transmission function. By adopting a two-year rate period TS limits the amount of risk that must be covered by financial reserves and PNRR.

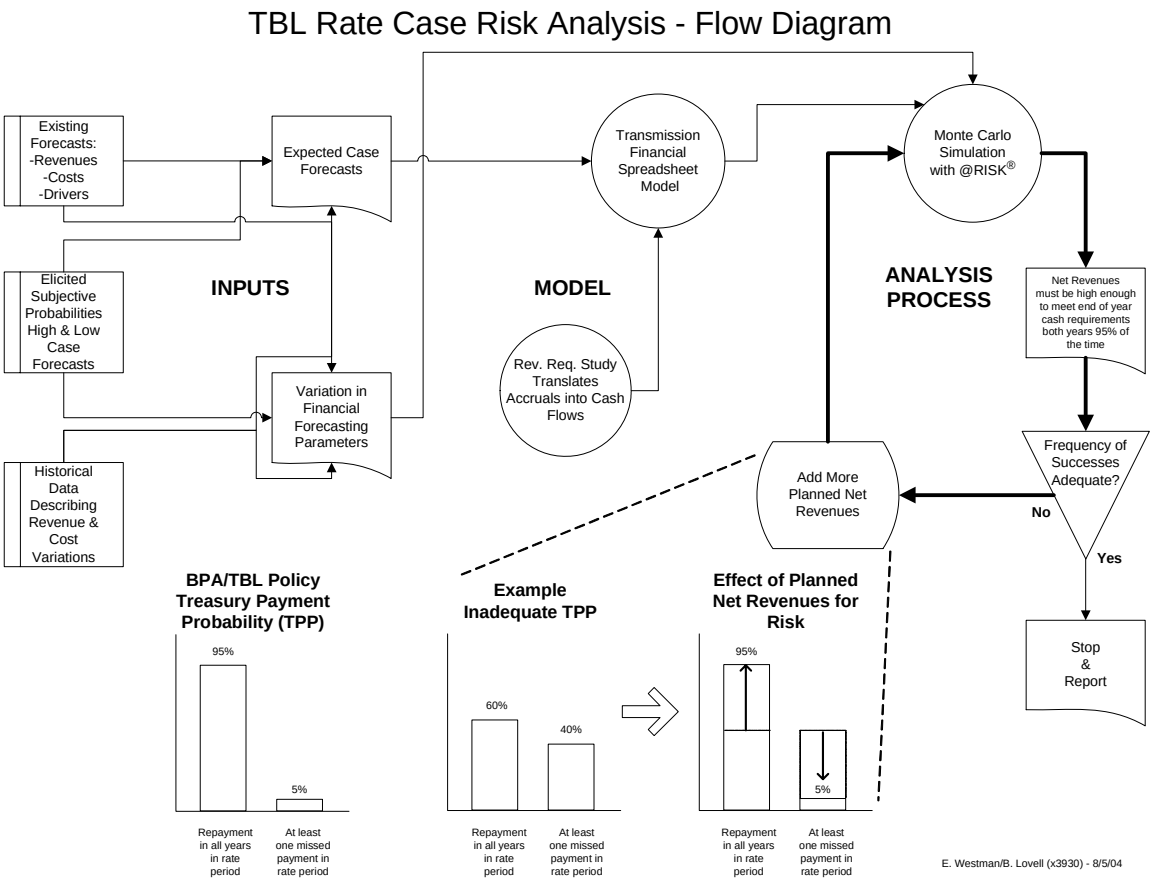
2. Transmission Risk Analysis

To quantify the effects of risk on the finances of BPA's transmission function, BPA analyzes the effects of uncertainty in expenses and revenues on transmission cash flows using a Monte Carlo simulation method. *See* Figure 9.1. The analysis is used to estimate the probability of successful Treasury payment on time and in full during the rate period, FYs 2008 and 2009. Successful Treasury payment is assumed to occur when the end-of-year cash reserve for the transmission function is at least sufficient to cover the TS's liquidity reserves requirement of $20 million per year. The liquidity reserves requirement was estimated based on historical monthly net cash flow patterns and monthly cash requirements for the TS. The value of $20 million was used in the 2002, 2004, and 2006 Transmission rate cases.

The risk analysis is part of the Revenue Requirements Study (RRS). It uses inputs that come from the RRS and transmission sales, revenue, and expense forecasts. *See* the Programs in Review close-out letter in the 2008 Revenue Requirement Study, TR-08-FS-BPA-01, Appendix B, 2008 Revenue Requirement Study Documentation, TR-08-FS-BPA-01A, and Knudsen and Woerner, TR-08-E-BPA-04. The risk analysis simulates the financial reserves available at the beginning of the rate period and calculates the probability that financial reserves will be

sufficient in both years of the rate period to make the scheduled Treasury payments in full and on time. If this probability is below BPA's TPP standard of 95% for two years, it calculates the PNRR needed to raise the TPP to 95%. Initial input values for point estimates of expenses and revenues come from the applicable forecasts and when combined with inputs describing uncertainty in expenses and revenues, provide the basis for the initial estimate of PNRR. The PNRR is in turn provided, if appropriate, as an expense input to the RRS, changing the transmission revenue requirement and ultimately transmission rates.

Figure 9.1 TS Rate Case Risk Analysis – Flow Diagram



The adjusted transmission rates increase expected revenues during the rate period. The revised estimates of expected revenues combined with the revenue and expense uncertainties are used to update the risk analysis, TPP and adequacy of PNRR. This iterative analysis process is

continued until estimates of PNRR converge on a particular amount of PNRR. The estimated amount of PNRR is used to set the PNRR expense for the RRS.

The risk analysis covers the period of FYs 2007 through 2009. The analysis begins with an historical period, FY 2006. The change in revenues, expenses, and accrual to cash adjustments that are expected to occur by the end of the next rate period is analyzed. The amount of cash reserves at the start of the next rate period has a direct effect on the amount of financial reserves and PNRR needed to achieve BPA's TPP standard. The FY 2006 information reflects historical data. FY 2007 uses forecast data, and FYs 2008 and 2009 cover the next rate period forecast.

3. Transmission Risk Analysis Model

The foundation of the risk analysis is a transmission financial spreadsheet model. This model was developed in Microsoft Excel to estimate the effects of risk and risk mitigation on end-of-year financial reserves and likelihood of successful Treasury payment during the rate period. Cash reserve levels at the end of a FY determine whether BPA is able to meet its Treasury payment obligation. The model is organized as a "workbook" with individual work sheets including: an input matrix of revenues and expenses, an income statement, a cash flow statement, and individual work sheets for the risks analyzed using the model.

The calculation of end-of-year financial reserves starts with historical data on end-of-year financial reserves for FY 2006 (Tables 9.1 and 9.2). The year-end cash balance for FY 2006 becomes the start-of-year cash balance for FY 2007. The structure of the income statement and cash flow statement used in the risk analysis is similar to those contained in the RRS, but does

not match precisely. The tables contained in the risk analysis are for the purpose of forecasting net cash flow instead of determining the revenue requirement, and the values found are expected values instead of point estimates. The net cash flow provides an estimate of the annual change in cash balance which, when added to the start-of-year cash balance, yields the year-end cash balance. The year-end cash balance, when combined with deferred borrowing, provides an estimate of end-of-year financial reserves. This flow of computations is repeated sequentially for each year from FYs 2007 through 2009.

Simulating transmission cash flows in this manner permits forecasting start-of-year reserves at the beginning of the rate period instead of defining FY 2008 start-of-year reserves as an uncertain input variable. The model forecasts the start-of-year FY 2008 financial reserves based on transmission function historical cash flows, current forecasts of expenses and revenues, and uncertainty in expenses and revenues explicitly modeled for FY 2007 (Table 9.1). Table 9.1 shows the most likely value forecasts of expenses and revenues used in the RRS and the most likely revenue forecast. *See* generally Documentation, TR-08-FS-BPA-01A. The "most likely" forecasts are equal to the "mode" or peak of the underlying probability distribution for all uncertain variables. The most likely (mode or peak) forecast will also be equal to the mean or "expected" value when the underlying distribution is symmetric or the value is a single point estimate. However, in a few cases the "most likely" forecast is greater or less than the "expected" (or mean) value if the underlying uncertainty distribution is not symmetric.

4. Risk Analysis Computer Software

The model used to perform the risk analysis was developed with Microsoft® Office Excel Professional Edition 2003 and @RISK, version 4.5.4 (©Palisade Corporation). Microsoft Excel is a basic spreadsheet computer program and @RISK is an Excel add-in computer program available from Palisade Corporation. The @RISK software allows the user to develop models incorporating uncertainty in a spreadsheet computer program environment. Uncertainty is incorporated by specifying model variables as probability distributions that reflect the variability in an input variable of interest. With model input variables specified as probability distributions instead of as point estimates, @RISK samples values from the probability distributions and then carries out the spreadsheet computations. Randomly sampled sets of input values are drawn for each game in a Monte Carlo simulation process that involves computing results of large numbers of games in order to describe a probability distribution of outcomes, such as net revenues or financial reserves. The values sampled from the probability distributions are drawn with probability based on their relative likelihood of occurrence as specified in the input probability distributions. While @RISK provides tools that enable users to turn spreadsheet models into Monte Carlo simulation models, the user still has the burden of determining the input probability distributions for uncertain variables in the model. This is done in analyses external to the @RISK computer program.

5. Risk Factors

Transmission risk factors used in the risk analysis include:

(1) Network long-term firm NT revenues;

(2) Network long-term firm Take or Pay (PTP, IR, FPT) revenues;

(3) Network short-term firm PTP and hourly non-firm revenues;

(4) Southern Intertie long-term firm PTP revenues;

(5) Southern Intertie short-term firm PTP and hourly non-firm revenues;

(6) Regulation & frequency response revenues;

(7) Total transmission expense annual variation, excluding between business line expenses paid to Power Services and Corporate expense;

(8) Between business line expense (operating reserve under-recovery by Power Services);

(9) BPA Corporate expenses paid by the transmission function; and

(10) Effects of interest rates on interest expense for new borrowing.

The ancillary service "reactive supply & voltage control" revenues is treated as a point estimate forecast, since the pass through of actual costs provided in the formula rate means that this item entails little risk. Revenue from leasing fiber; proceeds from the sale of delivery facilities; delivery segment revenues, and a variety of "other revenues" are also treated as point forecasts for this analysis due to their small size and the low level of additional uncertainty these are expected to contribute.

The risk variables analyzed were those judged to represent a significant impact on net revenues and cash flows, and that reasonably bear on estimating the amount of required PNRR during the next rate period. Other long-run risks such as variation in capital investment patterns, changes in generation and load patterns that may change transmission expenses and capacity availability, the price-elasticity effects of TS transmission rate increases on load, the effect of secondary transmission markets on transmission revenues, and potential changes in transmission industry

structure are more speculative and not included in the analysis. Such risks are mitigated by the combination of financial reserves at the beginning of the rate period and the option of future rate increases if the unforeseen events occur. In other words, these long-run risks are considered exogenous risks mitigated by the TS's ability to change rate levels in response to fundamental changes in business environment and long-term changes in cost structure.

BPA relied on two approaches to forecasting the uncertainty in risk variables modeled. When historical data were present on which to base the estimation of uncertainty in a risk variable, BPA estimated the uncertainty in the historical data as the basis for forecasting the uncertainty in the variable. The underlying rationale for this approach is that the variation in the recent past is a reasonable basis for forecasting the short-run future (5 years or less). When historical data were not reasonably available, or when the future is expected to be different from the past, BPA relied on the judgment of technical staff familiar with specific areas of transmission risk as the basis for forecasting the uncertainty in those risks.

6. Network and Intertie Transmission Revenue Uncertainties

Although the Network and Intertie rates are fixed during the rate period, the amount of revenue earned can be expected to vary due to uncertainty surrounding the quantity of service purchased by transmission customers. This is generally referred to as volumetric risk. Various underlying factors can affect the quantity of transmission service purchased. Some of these factors are related to weather such as the effect of temperature upon electric load and precipitation upon stream flows that determine the amount of generation output at hydro facilities in the Northwest. Influences outside the Northwest (e.g., the price of natural gas and relative hydro levels) can

influence regional prices at Mid-Columbia, California-Oregon Border, and Palo Verde hubs and the amount of transmission purchased to move power between regions. Factors such as growth rates in the regional economy and the competitiveness of electricity-intensive industries (e.g., DSIs) also influence the quantity of electricity usage and the amount of transmission needed to serve the demand for electricity. The existence of a growing secondary transmission market which competes with TS on price, and the arbitrage between short-term and long-term transmission services, also introduce risk. Technical factors such as outages and de-ratings can affect revenues. A combination of these factors has caused substantial swings in TS revenues in the past since the California power crisis of 2000-1, and could cause them again. It is important, therefore, to be sure that either transmission financial reserves provide a high enough cushion against reasonable adverse events or, if not, PNRR is set high enough to meet BPA's TPP standard. To model intertie and network revenue uncertainty appropriately in the current transmission environment, TS believes there is a higher likelihood that revenues may be above its "most likely" (or mode) values than at or below such values for both Network Point-to-Point and Intertie. The probability distributions are then skewed toward higher revenues for a robust risk analysis that adequately weights these adverse outcomes. The result of this analysis is that expected or mean total revenues produced by the risk analysis are $10.3 million higher for FY 2007, $10.3 million higher for FY 2008, and $3.0 million higher for FY 2009, than "most likely" or mode revenues as presented in the accompanying tables. The important result from this analysis is that TPP remains well above 95% and PNRR is zero.

7. Transmission Operations and Maintenance Expense

The uncertainty in transmission O&M expense was estimated differently from the manner described in the 2006 Revenue Requirements Study Documentation,TR-06-FS-BPA-01A. In that rate case it was assumed that the variety of factors that influenced year-to-year variations in transmission O&M expense in the historical period can reasonably be expected to prevail during the future, particularly the near term future. For this risk analysis, BPA examined actual O&M expense for the past 5 years, as it compared to the forecast for those years. Based on this analysis, BPA developed a risk distribution that allows O&M to be up to 10% higher or 10% lower than the forecast value. As in the case of transmission revenues, the objective is to describe short-run volatility and not long-run variability or variation in trend that may be due to factors such as changes in the structure of the transmission industry in the Northwest. Such long-term effects are mitigated by the TS's ability to change rate levels as frequently as every two years.

The risk analysis model includes subcategories of transmission O&M expense with forecasted point estimates of expenses. The volatility in total O&M expense was distributed proportionally based on the relative size of individual expense categories to the total O&M expense, with the exception of BPA Corporate and Shared Services and inter-business line expenses.

BPA Corporate and Shared Services expense uncertainty was treated in a similar manner to the 2006 rate case (i.e., skewed in the direction of higher cost). This is partly to reflect the move of Information Technology tech support to corporate and the concern that Corporate and Shared Services costs may exceed expectations in the future. Such skew has the effect of causing the

“expected” or mean value of TS corporate expense to exceed the most likely or mode value (shown in Table 9.3) by approximately $0.5 million per year. Even with this “adverse bias”, the risk analysis shows TPP exceeds 95% and the PNRR is zero.

Except for the cost of operating reserves purchased from Power Services, inter-business line expenses are treated as a point-estimate forecast. Prices for these services were established in the 2007 Power rate case. However, it was decided in the accompanying ROD that 25% of any under-recovery of operating reserves revenues by Power Services would be the responsibility of the transmission function. The probability distribution for the TS share of any revenue under-recovery is shown in Table 9.3. The specific “most likely” input values for Transmission O&M Expense are shown in Table 9.3.

8. Ancillary Services Revenue

In the 2006 Rate Case, two of the six ancillary services revenue categories were modeled with uncertainty in the risk analysis: Scheduling, System Control, and Dispatch and Regulation and Frequency Response Service. For this risk analysis, only Regulation and Frequency Response Service is modeled with uncertainty. Reactive Supply & Voltage Control from Generation (Generation Supplied Reactive or GSR) is treated as entailing no significant risk as this is a periodically trued-up cost passed onto ratepayers via a formula rate. The remaining three ancillary services revenues were treated as risks borne by BPA’s power marketing function either because the transmission function only buys what it sells or the amount of revenue expected to be earned from the sale of the service was too small to warrant modeling revenue uncertainty.

Scheduling, System Control and Dispatch is an additional charge associated with the provision of transmission services and transmission customers are not permitted to self-supply this service. There is no price risk since the rate for this service is set in the rates process. The volumetric risk is assumed to vary in a manner directly proportional to the uncertainty in the total of transmission revenue. Therefore, the Scheduling, System Control and Dispatch revenues are included in the forecast of Network and Intertie revenues, and the uncertainty is included implicitly in the uncertainty around the Network and Intertie revenues.

Reactive Supply and Voltage Control from Generation Sources (GSR) service also is a mandatory service required for each transmission transaction. This service must be acquired from TS unless the transmission customer demonstrates that it can self-supply a portion of its requirements. TS currently pays qualifying generators for GSR through FERC-approved rates. TS intends to file with the FERC to extinguish GSR payments to non-federal generators beginning Oct. 2007. Depending on the Commission's response and the timing of that response, TS may have to continue payments to third parties for some period of time. These potential exposures—self-supply and GSR payments-- will be recovered via a formula rate that will be periodically trued-up to reflect actual costs throughout the rate period. Although there are other risk exposures associated with selling GSR service, because these exposures are small the revenue associated with selling GSR service is treated as a point estimate forecast (i.e., as entailing no risk). *See* Table 9.6.

Regulation and Frequency Response service is a load-based service that only is applied to load in BPA's control area. The amount of revenue earned from this service is dependent on the amount of load that exists within TS's control area and the rate of load growth. The risk analysis adopted the triangular distribution as a means of approximating the uncertainty that is expected to be associated with revenues earned from this service in the same manner as described in TR-06-FS-BPA-01A. *See* Table 9.6.

9. Interest Rate Risk

Annual volatility in Treasury borrowing rates can affect short-run interest expense for new debt required to finance transmission capital program additions. This effect was modeled by defining Treasury borrowing rates as an uncertain variable using the same distribution assumptions as in the 2006 Transmission rate case and estimating the effects of the uncertain interest rates on incremental transmission interest expense each year from FYs 2007 through 2009. *See* 2006 Revenue Requirement Study Documentation, TR-06-E-BPA-01A, Chapter 9. In each year, a randomly sampled interest rate is drawn in each game for the debt added in that year. The extent to which the interest rate is above or below the expected rate determines whether there is an increase or decrease in interest expense compared to the expected interest expense for that new investment. The change in interest expense applies only to the new debt for the year in which the debt was incurred and for subsequent years during which interest payments are made on the debt. Since new debt is assumed issued midway through the fiscal year, the interest expense deviation for the first year is only half of the total interest expense deviation expected to occur for an entire year. The entire deviation in interest expense affects subsequent years. New debt in each successive year is treated similarly. Randomly sampled interest rates are drawn

independently for each year in which new debt is added and for each game of the simulation. The specific input values for Interest Rate Risk are shown in Table 9.9. Since this table shows expected value deviations in interest expense for new transmission debt, the actual deviation in net interest expense values shown are nil because the expected value or mean deviation in interest expense is nil.

10. Risk Correlations

The risk analysis models revenue and expense risks as diversified risks. The chances of outcomes for individual risk factors are therefore independent of each other. The result is that the chance of consistently good luck or consistently bad luck across all of the risks is very low. More frequently in any individual simulation game the chances are that some risks will harm the TS's financial reserves while others will benefit or increase financial reserves. However, the TPP standard is focused on the downside risk or the chances of the TS not being able to meet it Treasury payment obligations.

If there were significant correlations between risk factors the assumption of diversified risks could serve to either bias the risk analysis in the direction of excessive risk mitigation or insufficient risk mitigation depending on the direction of the correlation. Risks can either be positively correlated or negatively correlated. Where data were available BPA analyzed risk factor correlation and found no compelling basis for explicitly modeling the effects of correlations among revenue and expense risks. *See* 2002 Final Transmission Proposal Revenue Requirement Documentation, TR-02-FS-BPA-01A, Chapter 8.

11. Risk Analysis Results

The transmission risk analysis simulation resulted in 5000 games out of 5000 in which end-of-year financial reserves were sufficient to pay Treasury on time and in full in both years of the FY 2008 through 2009 rate period. This represents a 100% TPP for the rate period. These results were obtained with a pseudo random number seed value of "77" and the @RISK sampling option set for Latin Hypercube sampling.

12. Financial Reserves and PNRR

The most likely (or mode) year-end financial reserves for FYs 2008 and 2009 are estimated to be $309.4 million and $302.2 million, respectively. *See* Table 9.2. The range of possible financial reserves at the end of the current rate period and each year of the next rate period is shown in Figure 9.2. Since the 5th percentile of year-end reserves stays above $20 million, assuming $287.8 million start-of-year reserves in 2008 and the proposed rate levels, no PNRR were necessary to achieve the 95% TPP.

Figure 9-2: End-of-Year Reserves, FY 2006 through FY 2009

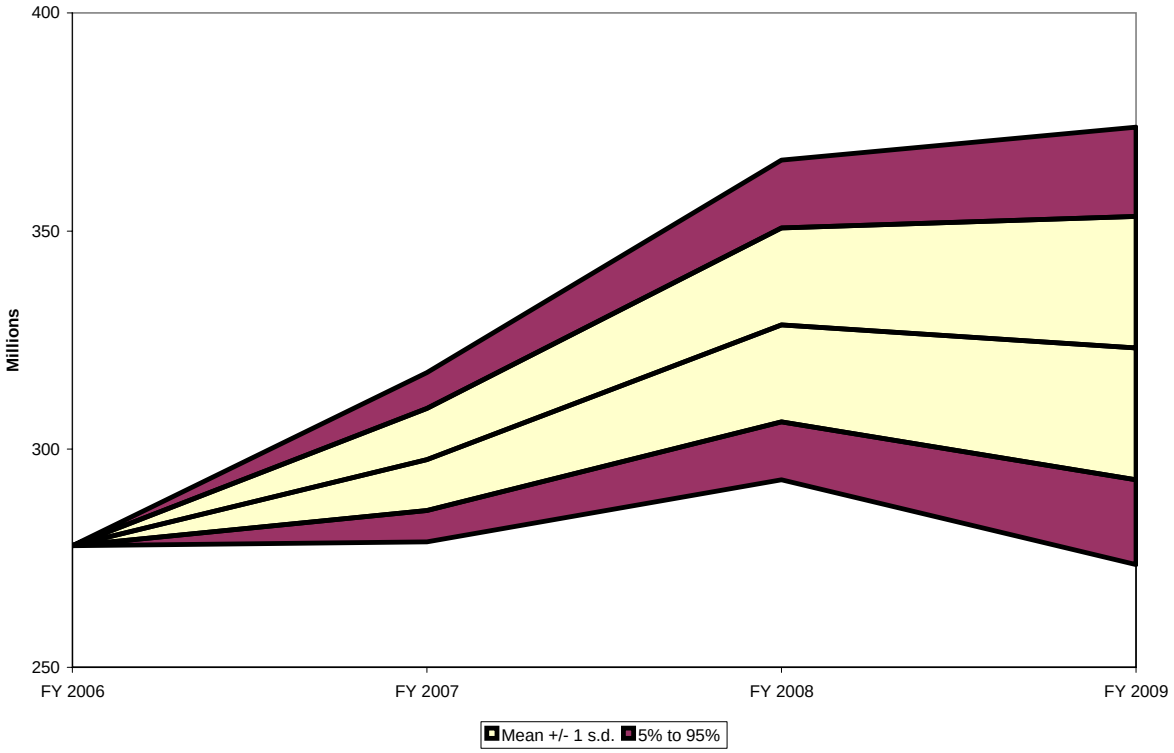


Table 9-1: Statement of Revenues and Expenses - Transmission Services

	($ millions)	2007	2008	2009
	Operating Revenues (Most Likely)			
1.	Transmission Revenues	643.839	669.526	678.266
2.	Ancillary Services Revenues	39.345	40.979	41.218
3.	Delivery Segment Revenues	4.011	3.773	3.731
4.	Fiber & PCS Revenues	12.695	13.596	14.503
5.	TBL Services Revenues	0.000	0.000	0.000
6.	Other Revenues & Credits	39.469	37.828	38.101
7.	**Total Operating Revenues**	**739.359**	**765.702**	**775.819**
	Operating Expenses			
8.	Transmission G&A	25.705	25.270	25.806
9.	CSRS Pension Expense	10.550	9.000	15.277
10.	Transmission Marketing	12.123	11.084	11.340
11.	Transmission Scheduling	9.394	9.577	9.767
12.	Transmission System Operations	41.526	42.688	43.539
13.	Transmission System Maintenance	90.855	91.675	93.992
14.	Transmission System Development	12.799	17.078	16.250
15.	Wheeling/Leases	22.458	17.589	20.098
16.	Environment	4.516	4.655	4.798
17.	Other Expenses & Adjustments	0.000	(2.000)	(2.000)
18.	TBL Services Expenses	0.000	0.000	0.000
19.	Between Business Line Expenses	73.132	55.762	56.507
20.	Corporate Expenses	64.131	66.044	66.359
21.	Non-Federal Projects Debt Service	5.873	6.064	11.544
22.	**Total Transmission Operating Expense**	**373.064**	**354.487**	**373.279**
23.	**Net Operating Margin**	**366.295**	**411.216**	**402.541**
24.	Federal Projects Depreciation	179.779	190.229	198.535
25.	**Total Operating Expense & Depreciation**	**552.843**	**544.716**	**571.814**
26.	**Net Operating Revenue**	**186.516**	**220.987**	**204.006**
	Interest Expense			
27.	Interest on Appropriated Funds	44.614	37.918	35.714
28.	Debt Service Re-assignment Interest	42.574	42.546	42.347
29.	Interest on Long-Term Debt Issued to Treasury	88.825	112.896	125.472
30.	Interest Credit on Cash Reserves	(14.500)	(10.506)	(9.876)
31.	Amortization of Capitalized Bond Premiums	2.900	1.489	1.051
32.	Capitalization Adjustment	(18.968)	(18.968)	(18.968)
33.	AFUDC	(8.767)	(10.295)	(10.798)
34.	Net Interest Expense	136.678	155.080	164.942
35.	**Total Operating & Net Interest Expenses**	**689.521**	**699.796**	**736.756**
36.	**Net Revenues**	**49.838**	**65.907**	**39.064**

Table 9-2: Statement of Cash Flows - Transmission Services

	($ millions)	2006	2007	2008	2009
	Cash Provided by Current Operations				
1.	Net Revenues		49.838	65.907	39.064
	Expenses not Requiring Cash				
2.	Depreciation/Amortization		179.779	190.229	198.535
3.	Amort of Capitalized Bond Premiums		2.900	1.489	1.051
4.	Capitalization Adjustment		(18.968)	(18.968)	(18.968)
5.	Revenue Recognition (Third AC)		(3.065)	(3.065)	(3.065)
6.	Revenue Recognition (Fiberoptics)		(1.393)	(0.897)	(0.897)
7.	Revenue Recognition (LGIA)		(16.193)	(29.081)	(36.647)
8.	Proceeds from Sale of Assets		4.871	4.871	4.871
9.	Non-Federal Projects Debt Service		5.873	6.064	11.544
10.	AFUDC		0.000		
11.	Inter Business Line Transfers		0.000	0.000	0.000
12.	Net Cash Inflow from 3rd Party Leases		0.000		
13.	ELI Prepay & Other Fiber Lease Advances		(2.781)	(2.781)	(2.781)
14.	Other Accrual to Cash Adjustments				
15.	Cash Provided by Current Operations		200.861	213.767	192.706
	Cash Used for Capital Investments				
16.	Investment in Gross Utility Plant and CWIP		(254.010)	(305.318)	(279.982)
17.	Cash Used for Capital Investments		(254.010)	(305.318)	(279.982)
	Cash From Borrowing and Appropriations				
18.	Cash from Borrowing & Appropriations		239.010	290.318	264.982
19.	Debt Service Reassignment Principal		(0.716)	(4.510)	(7.449)
20.	Repayment of Long-term Debt		(116.097)	(137.119)	(128.480)
21.	Accelerated Repayment of Debt (Debt Mgt.)		0.000		
22.	Accelerated Repayment of Debt (Asset Sales)		(4.871)	(4.871)	(4.871)
23.	Repayment of Capital Appropriations		(54.203)	(30.662)	(44.178)
24.	**Subtotal Cash from Borrowing & Approp**		63.123	113.156	80.004
25.	**Annual Change in Cash Balance**		9.974	21.605	(7.272)
26.	Plus Beginning Cash Balance		277.867	287.841	309.446
27.	Year End Cash Balance		287.841	309.446	302.174
28.	Deferred Borrowing		0.001	0.001	0.001
29.	Total Reserves	277.867	287.841	309.446	302.174

Table 9-3: Transmission Expense Risk

	Operating Expenses	FY 2007	FY 2008	FY 2009
	($000s)			
1.	**Trans O&M Expense Change From Exp Value**	0	0	0
2.	Total Trans O&M Expense (With Uncertainty)	229,927	228,617	240,868
3.	Min Transmission O&M Expense (90% of most likely)	206,935	205,755	216,781
4.	Max Transmission O&M Expense (110% of most likely)	252,920	251,478	264,955
	Transmission O&M Expenses (With Uncertainty)			
5.	Transmission G&A	25,705	25,270	25,806
6.	CSRS Pension Expense	10,550	9,000	15,277
7.	Transmission Marketing and Scheduling	12,123	11,084	11,340
8.	Transmission Scheduling	9,394	9,577	9,767
9.	Transmission System Operations	41,526	42,688	43,539
10.	Transmission System Maintenance	90,855	91,675	93,992
11.	Transmission System Development	12,799	17,078	16,250
12.	Wheeling/Leases	22,458	17,589	20,098
13.	Environment	4,516	4,655	4,798
14.	Other Expenses & Adjustments	0	0	0
15.	TBL Services (Reimbursable)	0	0	0
16.	**Trans Exp excl Corp,BBL & CSRS**	229,927	228,617	240,868
17.	**TBL Corp & Shared Serv Expense (Mean Value)**	64,666	66,594	66,912
18.	TBL Corp & Shared Serv. Expenses (Most Likely or Mode)	64,131	66,044	66,359
19.	Min Corp & Shared Serv Exp (95% of most likely)	60,925	62,742	63,041
20.	Max Corp & Shared Serv Exp (110% 0f most likely)	70,545	72,648	72,995
21.	Between Business Line Expenses	73,132	56,262	57,007

Prob	TS share of under-recovery
25%	$ 2,000
75%	$ -
E. V.	$ 500

Table 9-4: Network Transmission Revenue Risk

	Operating Revenues	FY 2007	FY 2008	FY 2009
	($000s)			
	Long Term Firm (Take or Pay)			
1.	Network LT Firm (Mean)	401,691	422,676	423,539
2.	Network LT Firm (Most Likely or Mode)	394,111	416,016	425,397
3.	Min	391,764	388,734	382,452
4.	Max	419,199	463,278	462,768
	Long Term Firm (NT Load)			
5.	Network NT Service (Mean)	124,988	130,970	132,763
6.	Network NT Service (Most Likely or Mode)	124,793	130,970	132,763
7.	Min	114,948	121,229	122,912
8.	Max	135,223	140,711	142,614
	Short Term Firm and Nonfirm			
9.	Network ST Firm (Mean)	27,728	20,540	22,362
10.	Network ST Firm (Most Likely or Mode)	27,064	20,051	21,831
11.	Min	21,200	15,740	17,137
12.	Max	34,919	25,828	28,119
13.	**Network Grand Total (Most Likely or Mode)**	545,968	567,037	579,991

Table 9-5: Intertie Transmission Revenue Risk

	Operating Revenues	FY 2007	FY 2008	FY 2009
	($000s)			
	Long Term Firm			
1.	IS LT Firm (Mean)	95,100	100,905	97,835
2.	IS LT Firm (Most Likely or mode)	92,861	97,312	93,098
3.	Min	92,500	97,300	93,000
4.	Max	99,938	108,102	107,407
	Short Term Firm and Nonfirm			
5.	IS ST Firm (Mean)	5,037	5,126	5,126
6.	IS ST Firm (Mode)	5,010	5,177	5,177
7.	Min	5,000	5,000	5,000
8.	Max	5,100	5,200	5,200
9.	**IS Total (Most Likely)**	**97,871**	**102,489**	**98,275**

Table 9-6: Ancillary Services Revenue Risk

Operating Revenues ($000s)	FY 2007	FY 2008	FY 2009
1. **Scheduling, System Control, & Dispatch (Mean)**	0	0	0
2. Most Likely (Mode)	0	0	0
3. Standard Deviation	0	0	0
4. **Generation Supplied Reactive (Point Estimate)***	0	0	0
5. Most Likely (Point Estimate)	0	0	0
* Treated as zero risk item due to formula rate pass through			
6. **Regulation and Frequency Response Service (Mean)**	12,574	14,208	14,448
7. Most Likely (Mode)	12,948	14,582	14,821
8. Min	9,828	11,462	11,701
9. Max	14,948	16,582	16,821
10. **Operating Reserve - Spinning Reserve Service**	13,199	13,199	13,199
11. **Operating Reserve - Supplemental Reserve Serv.**	13,199	13,199	13,199
12. **Energy Imbalance Service**	0	0	0
13. **Generation Imbalance Service**	0	0	0
14. **Total Ancillary Services (Most Likely or Mode)**	39,345	40,979	41,218

Table 9-7: Delivery Segment Revenue

Operating Revenues ($000s)	FY 2007	FY 2008	FY 2009
1. Utility	2,207	1,970	1,928
2. Utility PBL Payments	0	0	0
3. Industrial (UFT Method)	1,804	1,804	1,804
4. **Delivery Segment Revenue**	**4,011**	**3,773**	**3,731**

Table 9-8: Fiber & PCS Revenue Risk

Operating Revenues ($000s)	FY 2007	FY 2008	FY 2009
1. **Fiber**	8,446	9,208	9,975
2. **PCS**	4,249	4,388	4,528
3. **Fiber&PCS Revenue (Point Estimate)**	12,695	13,596	14,503

Table 9-9: Treasury Borrowing Rate Interest Expense Risk ($000s)

	Bond type	Principal original	Principal outstanding	E(rate)	rate	Bonds due	issued	annual interest	Fiscal Year Interest Expense Impact 2007	2008	2009
1.	Construction	232,010	232,010	6.00%	6.00%	2042	2007	13,921	6,960	13,921	13,921
2.	Environment	7,000	7,000	5.66%	5.66%	2022	2007	396	198	396	396
3.	Subtotal								7,158	14,317	14,317
4.	Subtotal Based on E(Interest Rate)								7,158	14,317	14,317
5.	Deviation in Net Interest Expense (Bonds Issued in 2007)								-	-	-
6.	Construction	285,189	285,189	6.32%	6.32%	2043	2008	18,024		9,012	18,024
7.	Environment	5,129	5,129	5.94%	5.94%	2023	2008	305		152	305
8.	Subtotal									9,164	18,329
9.	Subtotal Based on E(Interest Rate)									9,164	18,329
10.	Deviation in Net Interest Expense (Bonds Issued in 2008)									-	-
11.	Construction	259,531	259,531	6.63%	6.63%	2044	2009	17,207			8,603
12.	Environment	5,451	5,451	6.23%	6.23%	2024	2009	340			170
12.	Subtotal										8,773
14.	Subtotal Based on E(Interest Rate)										8,773
15.	Deviation in Net Interest Expense (Bonds Issued in 2009)										-
16.	**Total Annual Variation in Net Interest Expense for New Debt**								-	-	-

Uncertainty in Treasury Borrowing Rates

	Δ ρ	p(D r)
17.	-2.00%	0.05
18.	-1.25%	0.1
19.	-0.75%	0.2
20.	0.00%	0.3
21.	0.75%	0.2
22.	1.25%	0.1
23.	2.00%	0.05

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CHAPTER 10

REPAYMENT STUDY INPUT DATA CURRENT STUDY

FY 2008 AND FY 2009

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Table 10-1: Historical Investments ($000s) (FY 2008)

Project	Original Principal	Current Principal	Interest Rate	Due Date	Replace ment?	In Service Date	Month	Rollover Date	Rollover Rate
BONNEVILLE POWER ADMINISTRATION	6,812	-	2.500%	1985	No	1940	-	-	-
BONNEVILLE POWER ADMINISTRATION	18,906	-	2.500%	1986	No	1941	-	-	-
BONNEVILLE POWER ADMINISTRATION	461	-	2.500%	1986	No	1941	-	-	-
BONNEVILLE POWER ADMINISTRATION	8,446	-	2.500%	1987	No	1942	-	-	-
BONNEVILLE POWER ADMINISTRATION	1,052	-	2.500%	1987	No	1942	-	-	-
BONNEVILLE POWER ADMINISTRATION	16,083	-	2.500%	1988	No	1943	-	-	-
BONNEVILLE POWER ADMINISTRATION	4,538	-	2.500%	1988	No	1943	-	-	-
BONNEVILLE POWER ADMINISTRATION	583	-	2.500%	1989	No	1944	-	-	-
BONNEVILLE POWER ADMINISTRATION	249	-	2.500%	1989	No	1944	-	-	-
BONNEVILLE POWER ADMINISTRATION	3,366	-	2.500%	1990	No	1945	-	-	-
BONNEVILLE POWER ADMINISTRATION	1,306	-	2.500%	1990	No	1945	-	-	-
BONNEVILLE POWER ADMINISTRATION	2,488	-	2.500%	1991	No	1946	-	-	-
BONNEVILLE POWER ADMINISTRATION	732	-	2.500%	1991	No	1946	-	-	-
BONNEVILLE POWER ADMINISTRATION	1,773	-	2.500%	1992	No	1947	-	-	-
BONNEVILLE POWER ADMINISTRATION	1,330	-	2.500%	1992	No	1947	-	-	-
BONNEVILLE POWER ADMINISTRATION	7,468	-	2.500%	1993	No	1948	-	-	-
BONNEVILLE POWER ADMINISTRATION	2,290	-	2.500%	1993	No	1948	-	-	-
BONNEVILLE POWER ADMINISTRATION	6,809	-	2.500%	1994	No	1949	-	-	-
BONNEVILLE POWER ADMINISTRATION	2,719	-	2.500%	1994	No	1949	-	-	-
BONNEVILLE POWER ADMINISTRATION	24,111	-	2.500%	1995	No	1950	-	-	-
BONNEVILLE POWER ADMINISTRATION	6,124	-	2.500%	1995	No	1950	-	-	-
BONNEVILLE POWER ADMINISTRATION	13,266	-	2.500%	1996	No	1951	-	-	-
BONNEVILLE POWER ADMINISTRATION	7,040	-	2.500%	1996	No	1951	-	-	-
BONNEVILLE POWER ADMINISTRATION	18,610	-	2.500%	1997	No	1952	-	-	-
BONNEVILLE POWER ADMINISTRATION	8,979	-	2.500%	1997	No	1952	-	-	-
BONNEVILLE POWER ADMINISTRATION	23,550	-	6.330%	1998	No	1953	-	-	-
BONNEVILLE POWER ADMINISTRATION	11,605	-	6.330%	1998	No	1953	-	-	-
BONNEVILLE POWER ADMINISTRATION	23,614	-	6.510%	1999	No	1954	-	-	-
BONNEVILLE POWER ADMINISTRATION	17,370	-	6.510%	1999	No	1954	-	-	-
BONNEVILLE POWER ADMINISTRATION	11,827	-	6.620%	2000	No	1955	-	-	-
BONNEVILLE POWER ADMINISTRATION	10,283	-	6.620%	2000	No	1955	-	-	-
BONNEVILLE POWER ADMINISTRATION	32,221	-	6.710%	2001	No	1956	-	-	-
BONNEVILLE POWER ADMINISTRATION	14,573	-	6.710%	2001	No	1956	-	-	-
BONNEVILLE POWER ADMINISTRATION	15,980	-	6.790%	2002	No	1957	-	-	-
BONNEVILLE POWER ADMINISTRATION	7,933	-	6.790%	2002	No	1957	-	-	-
BONNEVILLE POWER ADMINISTRATION	15,593	-	6.840%	2003	No	1958	-	-	-
BONNEVILLE POWER ADMINISTRATION	10,654	-	6.840%	2003	No	1958	-	-	-
BONNEVILLE POWER ADMINISTRATION	8,863	-	6.880%	2004	No	1959	-	-	-
BONNEVILLE POWER ADMINISTRATION	8,157	-	6.880%	2004	No	1959	-	-	-
BONNEVILLE POWER ADMINISTRATION	4,218	-	6.910%	2005	No	1960	-	-	-
BONNEVILLE POWER ADMINISTRATION	3,598	-	6.910%	2005	No	1960	-	-	-
BONNEVILLE POWER ADMINISTRATION	11,271	-	6.950%	2006	No	1961	-	-	-
BONNEVILLE POWER ADMINISTRATION	4,468	-	6.950%	2006	No	1961	-	-	-
BONNEVILLE POWER ADMINISTRATION	19,597	19,597	6.980%	2007	No	1962	-	-	-
BONNEVILLE POWER ADMINISTRATION	4,877	4,877	6.980%	2007	No	1962	-	-	-
BONNEVILLE POWER ADMINISTRATION	4,876	4,876	7.020%	2008	No	1963	-	-	-
BONNEVILLE POWER ADMINISTRATION	4,330	4,330	7.020%	2008	No	1963	-	-	-
BONNEVILLE POWER ADMINISTRATION	904	904	7.020%	2008	No	1963	-	-	-
BONNEVILLE POWER ADMINISTRATION	803	803	7.020%	2008	No	1963	-	-	-
BONNEVILLE POWER ADMINISTRATION	5,738	5,738	7.060%	2009	No	1964	-	-	-
BONNEVILLE POWER ADMINISTRATION	4,151	4,151	7.060%	2009	No	1964	-	-	-
BONNEVILLE POWER ADMINISTRATION	10,171	10,171	7.090%	2010	No	1965	-	-	-
BONNEVILLE POWER ADMINISTRATION	7,248	7,248	7.090%	2010	No	1965	-	-	-
BONNEVILLE POWER ADMINISTRATION	5,202	5,202	7.090%	2010	No	1965	-	-	-
BONNEVILLE POWER ADMINISTRATION	3,706	3,706	7.090%	2010	No	1965	-	-	-
BONNEVILLE POWER ADMINISTRATION	11,830	11,830	7.130%	2011	No	1966	-	-	-
BONNEVILLE POWER ADMINISTRATION	6,647	6,353	7.130%	2011	No	1966	-	-	-
BONNEVILLE POWER ADMINISTRATION	3,049	3,049	7.130%	2011	No	1966	-	-	-
BONNEVILLE POWER ADMINISTRATION	1,714	-	7.130%	2011	No	1966	-	-	-
BONNEVILLE POWER ADMINISTRATION	19,003	19,003	7.160%	2012	No	1967	-	-	-
BONNEVILLE POWER ADMINISTRATION	14,300	-	7.160%	2012	No	1967	-	-	-
BONNEVILLE POWER ADMINISTRATION	4,566	355	7.160%	2012	No	1967	-	-	-
BONNEVILLE POWER ADMINISTRATION	3,436	-	7.160%	2012	No	1967	-	-	-
BONNEVILLE POWER ADMINISTRATION	41,070	18,250	7.200%	2013	No	1968	-	-	-
BONNEVILLE POWER ADMINISTRATION	23,202	-	7.200%	2013	No	1968	-	-	-
BONNEVILLE POWER ADMINISTRATION	8,076	-	7.200%	2013	No	1968	-	-	-
BONNEVILLE POWER ADMINISTRATION	4,562	-	7.200%	2013	No	1968	-	-	-
BONNEVILLE POWER ADMINISTRATION	42,237	19,198	7.230%	2014	No	1969	-	-	-
BONNEVILLE POWER ADMINISTRATION	22,537	-	7.230%	2014	No	1969	-	-	-
BONNEVILLE POWER ADMINISTRATION	384	-	7.230%	2014	No	1969	-	-	-
BONNEVILLE POWER ADMINISTRATION	205	-	7.230%	2014	No	1969	-	-	-
BONNEVILLE POWER ADMINISTRATION	64,977	64,977	7.270%	2015	No	1970	-	-	-
BONNEVILLE POWER ADMINISTRATION	24,412	23,551	7.270%	2015	No	1970	-	-	-
BONNEVILLE POWER ADMINISTRATION	7,995	7,995	7.270%	2015	No	1970	-	-	-
BONNEVILLE POWER ADMINISTRATION	3,003	-	7.270%	2015	No	1970	-	-	-
BONNEVILLE POWER ADMINISTRATION	17,805	-	7.290%	2016	No	1971	-	-	-
BONNEVILLE POWER ADMINISTRATION	17,766	-	7.290%	2016	No	1971	-	-	-
BONNEVILLE POWER ADMINISTRATION	12,051	-	7.290%	2016	No	1971	-	-	-

Table 10-1: Historical Investments ($000s) (FY 2008)

Project	Original Principal	Current Principal	Interest Rate	Due Date	Replace ment?	In Service Date	Month	Rollover Date	Rollover Rate
BONNEVILLE POWER ADMINISTRATION	12,025	-	7.290%	2016	No	1971	-	-	-
BONNEVILLE POWER ADMINISTRATION	29,326	20,056	7.290%	2017	No	1972	-	-	-
BONNEVILLE POWER ADMINISTRATION	21,170	8,364	7.290%	2017	No	1972	-	-	-
BONNEVILLE POWER ADMINISTRATION	3,980	-	7.290%	2017	No	1972	-	-	-
BONNEVILLE POWER ADMINISTRATION	2,873	-	7.290%	2017	No	1972	-	-	-
BONNEVILLE POWER ADMINISTRATION	33,788	33,788	7.280%	2018	No	1973	-	-	-
BONNEVILLE POWER ADMINISTRATION	21,656	21,656	7.280%	2018	No	1973	-	-	-
BONNEVILLE POWER ADMINISTRATION	16,368	16,368	7.280%	2018	No	1973	-	-	-
BONNEVILLE POWER ADMINISTRATION	10,491	10,491	7.280%	2018	No	1973	-	-	-
BONNEVILLE POWER ADMINISTRATION	21,826	21,826	7.270%	2019	No	1974	-	-	-
BONNEVILLE POWER ADMINISTRATION	20,984	20,984	7.270%	2019	No	1974	-	-	-
BONNEVILLE POWER ADMINISTRATION	12,563	12,563	7.270%	2019	No	1974	-	-	-
BONNEVILLE POWER ADMINISTRATION	12,079	12,079	7.270%	2019	No	1974	-	-	-
BONNEVILLE POWER ADMINISTRATION	32,026	32,026	7.250%	2020	No	1975	-	-	-
BONNEVILLE POWER ADMINISTRATION	21,916	21,916	7.250%	2020	No	1975	-	-	-
BONNEVILLE POWER ADMINISTRATION	17,158	17,158	7.250%	2020	No	1975	-	-	-
BONNEVILLE POWER ADMINISTRATION	11,742	11,742	7.250%	2020	No	1975	-	-	-
BONNEVILLE POWER ADMINISTRATION	61,025	61,025	7.230%	2021	No	1976	-	-	-
BONNEVILLE POWER ADMINISTRATION	2,212	2,212	7.230%	2021	No	1976	-	-	-
BONNEVILLE POWER ADMINISTRATION	33,702	33,702	7.210%	2022	No	1977	-	-	-
BONNEVILLE POWER ADMINISTRATION	5,380	5,380	7.210%	2022	No	1977	-	-	-
BONNEVILLE POWER ADMINISTRATION	4,981	4,981	7.210%	2022	No	1977	-	-	-
BONNEVILLE POWER ADMINISTRATION	3,948	3,948	7.210%	2022	No	1977	-	-	-
BPA PROGRAM	24,222	-	8.950%	2013	Yes	1978	9	-	-
BPA PROGRAM	17,770	-	8.950%	2013	No	1978	9	-	-
BPA PROGRAM	4,619	-	8.950%	2013	Yes	1978	9	-	-
BPA PROGRAM	3,389	-	8.950%	2013	No	1978	9	-	-
BPA PROGRAM	21,228	-	9.900%	2014	No	1979	9	-	-
BPA PROGRAM	14,340	-	9.900%	2014	Yes	1979	9	-	-
BPA PROGRAM	10,610	-	9.900%	2014	No	1979	9	-	-
BPA PROGRAM	2,888	-	9.900%	2014	Yes	1979	9	-	-
BPA PROGRAM	605	-	9.900%	2014	No	1979	9	-	-
BPA PROGRAM	165	-	9.900%	2014	Yes	1979	9	-	-
BPA PROGRAM	98	-	9.900%	2014	No	1979	9	-	-
BPA PROGRAM	66	-	9.900%	2014	Yes	1979	9	-	-
BPA PROGRAM	26,690	-	9.450%	2014	No	1979	6	-	-
BPA PROGRAM	21,977	-	9.450%	2014	Yes	1979	6	-	-
BPA PROGRAM	9,804	-	9.450%	2014	Yes	1979	6	-	-
BPA PROGRAM	7,010	-	9.450%	2014	No	1979	6	-	-
BPA PROGRAM	6,026	-	9.450%	2014	Yes	1979	6	-	-
BPA PROGRAM	1,870	-	9.450%	2014	Yes	1979	6	-	-
BPA PROGRAM	1,371	-	9.450%	2014	No	1979	6	-	-
BPA PROGRAM	150	-	9.450%	2014	No	1979	6	-	-
BPA PROGRAM	102	-	9.450%	2014	Yes	1979	6	-	-
BPA PROGRAM	44,811	-	13.000%	2015	No	1980	9	-	-
BPA PROGRAM	39,696	-	13.000%	2015	No	1980	9	-	-
BPA PROGRAM	10,806	-	13.000%	2015	Yes	1980	9	-	-
BPA PROGRAM	9,292	-	13.000%	2015	No	1980	9	-	-
BPA PROGRAM	4,253	-	13.000%	2015	Yes	1980	9	-	-
BPA PROGRAM	2,263	-	13.000%	2015	No	1980	9	-	-
BPA PROGRAM	1,707	-	13.000%	2015	No	1980	9	-	-
BPA PROGRAM	1,469	-	13.000%	2015	Yes	1980	9	-	-
BPA PROGRAM	616	-	13.000%	2015	Yes	1980	9	-	-
BPA PROGRAM	56	-	13.000%	2015	Yes	1980	9	-	-
BPA PROGRAM	21	-	13.000%	2015	No	1980	9	-	-
BPA PROGRAM	10	-	13.000%	2015	Yes	1980	9	-	-
BPA PROGRAM	119,775	-	16.600%	2016	No	1981	9	-	-
BPA PROGRAM	54,821	-	16.600%	2016	Yes	1981	9	-	-
BPA PROGRAM	277	-	16.600%	2016	No	1981	9	-	-
BPA PROGRAM	127	-	16.600%	2016	Yes	1981	9	-	-
BPA PROGRAM	46,980	-	14.400%	2017	No	1982	4	-	-
BPA PROGRAM	37,455	-	14.400%	2017	Yes	1982	4	-	-
BPA PROGRAM	34,221	-	14.400%	2017	No	1982	12	-	-
BPA PROGRAM	15,663	-	14.400%	2017	Yes	1982	12	-	-
BPA PROGRAM	9,975	-	14.400%	2017	No	1982	4	-	-
BPA PROGRAM	4,566	-	14.400%	2017	Yes	1982	4	-	-
BPA PROGRAM	551	-	14.400%	2017	No	1982	4	-	-
BPA PROGRAM	439	-	14.400%	2017	Yes	1982	4	-	-
BPA PROGRAM	80	-	14.400%	2017	No	1982	12	-	-
BPA PROGRAM	36	-	14.400%	2017	Yes	1982	12	-	-
BPA PROGRAM	23	-	14.400%	2017	No	1982	4	-	-
BPA PROGRAM	11	-	14.400%	2017	Yes	1982	4	-	-
BPA PROGRAM	77,807	-	14.150%	2017	No	1982	7	-	-
BPA PROGRAM	3,677	-	14.150%	2017	No	1982	7	-	-
BPA PROGRAM	2,932	-	14.150%	2017	Yes	1982	7	-	-
BPA PROGRAM	402	-	14.150%	2017	No	1982	7	-	-
BPA PROGRAM	105	-	14.150%	2017	Yes	1982	7	-	-
BPA PROGRAM	43	-	14.150%	2017	No	1982	7	-	-

Table 10-1: Historical Investments ($000s) (FY 2008)

Project	Original Principal	Current Principal	Interest Rate	Due Date	Replace ment?	In Service Date	Month	Rollover Date	Rollover Rate
BPA PROGRAM	34	-	14.150%	2017	Yes	1982	7	-	-
BPA PROGRAM	37,235	-	12.250%	2018	No	1983	9	-	-
BPA PROGRAM	6,708	-	12.250%	2018	Yes	1983	9	-	-
BPA PROGRAM	814	-	12.250%	2018	No	1983	9	-	-
BPA PROGRAM	203	-	12.250%	2018	No	1983	9	-	-
BPA PROGRAM	35	-	12.250%	2018	Yes	1983	9	-	-
BPA PROGRAM	4	-	12.250%	2018	No	1983	9	-	-
BPA PROGRAM	1	-	12.250%	2018	Yes	1983	9	-	-
BPA PROGRAM	29,806	-	11.700%	2018	No	1983	6	-	-
BPA PROGRAM	154	-	11.700%	2018	No	1983	6	-	-
BPA PROGRAM	40	-	11.700%	2018	Yes	1983	6	-	-
BPA PROGRAM	39,741	-	10.850%	2018	No	1983	11	-	-
BPA PROGRAM	205	-	10.850%	2018	No	1983	11	-	-
BPA PROGRAM	54	-	10.850%	2018	Yes	1983	11	-	-
BPA PROGRAM	50,567	-	13.050%	2019	No	1984	9	-	-
BPA PROGRAM	9,109	-	13.050%	2019	Yes	1984	9	-	-
BPA PROGRAM	276	-	13.050%	2019	No	1984	9	-	-
BPA PROGRAM	48	-	13.050%	2019	Yes	1984	9	-	-
BPA PROGRAM	25,283	-	12.300%	2019	No	1984	11	-	-
BPA PROGRAM	4,555	-	12.300%	2019	Yes	1984	11	-	-
BPA PROGRAM	138	-	12.300%	2019	No	1984	11	-	-
BPA PROGRAM	24	-	12.300%	2019	Yes	1984	11	-	-
BPA PROGRAM	15,182	-	11.250%	2029	Yes	1985	6	-	-
BPA PROGRAM	460	-	11.250%	2029	No	1985	6	-	-
BPA PROGRAM	80	-	11.250%	2029	Yes	1985	6	-	-
BPA PROGRAM	84,278	-	11.250%	2030	No	1985	6	-	-
BPA PROGRAM	68,194	-	8.150%	1996	Yes	1986	3	-	-
BPA PROGRAM	30,161	-	8.150%	1996	No	1986	3	-	-
BPA PROGRAM	870	-	8.150%	1996	No	1986	3	-	-
BPA PROGRAM	443	-	8.150%	1996	No	1986	3	-	-
BPA PROGRAM	169	-	8.150%	1996	Yes	1986	3	-	-
BPA PROGRAM	157	-	8.150%	1996	Yes	1986	3	-	-
BPA PROGRAM	5	-	8.150%	1996	No	1986	3	-	-
BPA PROGRAM	1	-	8.150%	1996	Yes	1986	3	-	-
BPA PROGRAM	180,054	-	8.950%	2031	No	1986	6	-	-
BPA PROGRAM	57,354	-	8.950%	2031	Yes	1986	6	-	-
BPA PROGRAM	40,000	-	8.950%	2031	Yes	1986	6	-	-
BPA PROGRAM	11,668	-	8.950%	2031	Yes	1986	6	-	-
BPA PROGRAM	5,161	-	8.950%	2031	No	1986	6	-	-
BPA PROGRAM	3,117	-	8.950%	2031	Yes	1986	6	-	-
BPA PROGRAM	1,819	-	8.950%	2031	No	1986	6	-	-
BPA PROGRAM	722	-	8.950%	2031	Yes	1986	6	-	-
BPA PROGRAM	76	-	8.950%	2031	No	1986	6	-	-
BPA PROGRAM	29	-	8.950%	2031	Yes	1986	6	-	-
BPA PROGRAM	96,519	-	8.350%	1992	No	1987	6	-	-
BPA PROGRAM	2,498	-	8.350%	1992	No	1987	6	-	-
BPA PROGRAM	983	-	8.350%	1992	No	1987	6	-	-
BPA PROGRAM	86,958	-	9.550%	2017	No	1987	7	-	-
BPA PROGRAM	4,113	-	9.550%	2017	No	1987	7	-	-
BPA PROGRAM	3,274	-	9.550%	2017	Yes	1987	7	-	-
BPA PROGRAM	569	-	9.550%	2017	No	1987	7	-	-
BPA PROGRAM	48	-	9.550%	2017	No	1987	7	-	-
BPA PROGRAM	38	-	9.550%	2017	Yes	1987	7	-	-
BPA PROGRAM	37,342	-	9.550%	2032	No	1987	7	-	-
BPA PROGRAM	7,903	-	9.550%	2032	No	1987	7	-	-
BPA PROGRAM	3,109	-	9.550%	2032	Yes	1987	7	-	-
BPA PROGRAM	631	-	9.550%	2032	No	1987	7	-	-
BPA PROGRAM	618	-	9.550%	2032	Yes	1987	7	-	-
BPA PROGRAM	285	-	9.550%	2032	No	1987	7	-	-
BPA PROGRAM	112	-	9.550%	2032	Yes	1987	7	-	-
BPA PROGRAM	54,409	-	9.300%	2032	Yes	1987	4	-	-
BPA PROGRAM	43,236	-	9.300%	2032	No	1987	4	-	-
BPA PROGRAM	1,409	-	9.300%	2032	No	1987	4	-	-
BPA PROGRAM	554	-	9.300%	2032	No	1987	4	-	-
BPA PROGRAM	281	-	9.300%	2032	No	1987	4	-	-
BPA PROGRAM	111	-	9.300%	2032	No	1987	4	-	-
BPA PROGRAM	43,417	-	9.500%	2018	No	1988	2	-	-
BPA PROGRAM	283	-	9.500%	2018	No	1988	2	-	-
BPA PROGRAM	30,004	-	9.900%	2033	Yes	1988	6	-	-
BPA PROGRAM	9,018	-	9.900%	2033	No	1988	6	-	-
BPA PROGRAM	752	-	9.900%	2033	Yes	1988	6	-	-
BPA PROGRAM	226	-	9.900%	2033	No	1988	6	-	-
BPA PROGRAM	45,870	-	9.500%	2033	Yes	1988	2	-	-
BPA PROGRAM	28,513	-	9.500%	2033	No	1988	2	-	-
BPA PROGRAM	27,887	-	9.500%	2033	Yes	1988	2	-	-
BPA PROGRAM	22,923	-	9.500%	2033	Yes	1988	2	-	-
BPA PROGRAM	20,677	-	9.500%	2033	No	1988	2	-	-
BPA PROGRAM	1,725	-	9.500%	2033	Yes	1988	2	-	-

Table 10-1: Historical Investments ($000s) (FY 2008)

Project	Original Principal	Current Principal	Interest Rate	Due Date	Replace ment?	In Service Date	Month	Rollover Date	Rollover Rate
BPA PROGRAM	954	-	9.500%	2033	No	1988	2	-	-
BPA PROGRAM	933	-	9.500%	2033	Yes	1988	2	-	-
BPA PROGRAM	518	-	9.500%	2033	No	1988	2	-	-
BPA PROGRAM	56,257	-	8.950%	1999	Yes	1989	5	-	-
BPA PROGRAM	16,909	-	8.950%	1999	No	1989	5	-	-
BPA PROGRAM	1,410	-	8.950%	1999	No	1989	5	-	-
BPA PROGRAM	424	-	8.950%	1999	No	1989	5	-	-
BPA PROGRAM	41,894	-	9.250%	2030	No	1990	1	-	-
BPA PROGRAM	3,824	-	9.250%	2030	Yes	1990	1	-	-
BPA PROGRAM	3,008	-	9.250%	2030	No	1990	1	-	-
BPA PROGRAM	1,149	-	9.250%	2030	No	1990	1	-	-
BPA PROGRAM	96	-	9.250%	2030	Yes	1990	1	-	-
BPA PROGRAM	29	-	9.250%	2030	No	1990	1	-	-
BPA PROGRAM	54,145	-	7.550%	1995	No	1991	2	-	-
BPA PROGRAM	5,855	-	7.550%	1995	No	1991	2	-	-
BPA PROGRAM	80,000	-	6.200%	1995	No	1992	4	-	-
BPA PROGRAM	50,000	-	7.000%	1997	No	1992	4	-	-
BPA PROGRAM	28,300	-	7.000%	1997	No	1992	4	-	-
BPA PROGRAM	107,800	-	6.600%	2000	No	1992	8	-	-
BPA PROGRAM	107,700	-	7.250%	2007	No	1992	8	-	-
BPA PROGRAM	147,521	-	8.800%	2032	No	1992	4	-	-
BPA PROGRAM	2,479	-	8.800%	2032	No	1992	4	-	-
BPA PROGRAM	150,000	-	8.130%	2032	No	1992	7	-	-
BPA PROGRAM	50,000	-	6.050%	1998	No	1993	10	-	-
BPA PROGRAM	99,962	-	8.350%	2033	No	1993	10	-	-
BPA PROGRAM	130,000	-	7.800%	2033	No	1993	2	-	-
BPA PROGRAM	100,000	-	7.500%	2033	No	1993	4	-	-
BPA PROGRAM	110,000	-	6.950%	2033	No	1993	8	-	-
BPA PROGRAM	49,489	-	7.100%	1998	No	1994	5	-	-
BPA PROGRAM	43,155	-	7.100%	1998	No	1994	5	-	-
BPA PROGRAM	4,456	-	7.100%	1998	No	1994	5	-	-
BPA PROGRAM	55,000	-	7.650%	1999	No	1994	9	-	-
BPA PROGRAM	50,000	-	8.200%	2034	No	1994	5	-	-
BPA PROGRAM	50,000	-	7.050%	2034	No	1994	1	-	-
BPA PROGRAM	108,400	-	6.850%	2034	No	1994	10	-	-
BPA PROGRAM	50,000	-	6.850%	2034	No	1994	10	-	-
BPA PROGRAM	55,000	-	8.350%	2001	No	1995	1	-	-
BPA PROGRAM	65,000	-	7.700%	2025	No	1995	8	-	-
BPA PROGRAM	49,933	-	7.700%	2025	No	1995	7	-	-
BPA PROGRAM	54,378	-	5.900%	2003	No	1996	1	-	-
BPA PROGRAM	70,000	-	7.050%	2006	No	1996	8	-	-
BPA PROGRAM	22,600	-	6.800%	2004	No	1997	1	-	-
BPA PROGRAM	80,000	-	6.900%	2005	No	1997	5	-	-
BPA PROGRAM	111,254	111,254	6.650%	2007	No	1997	8	2025	5.750%
BPA PROGRAM	75,300	75,300	6.000%	2008	No	1998	4	-	-
BPA PROGRAM	36,819	36,819	5.750%	2008	No	1998	8	-	-
BPA PROGRAM	72,700	72,700	6.000%	2009	No	1998	5	-	-
BPA PROGRAM	40,000	40,000	6.200%	2011	No	1998	5	-	-
BPA PROGRAM	50,000	50,000	6.650%	2028	No	1998	4	-	-
BPA PROGRAM	112,300	112,300	5.850%	2028	No	1998	8	-	-
BPA PROGRAM	106,600	106,600	5.850%	2028	No	1998	8	2031	6.000%
BPA PROGRAM	98,900	98,900	6.700%	2032	No	1998	5	-	-
BPA PROGRAM	40,000	-	6.200%	2002	No	1999	9	-	-
BPA PROGRAM	26,200	-	5.950%	2004	No	1999	5	-	-
BPA PROGRAM	59,050	59,050	5.900%	2014	No	1999	2	-	-
BPA PROGRAM	15,300	-	6.850%	2003	No	2000	8	-	-
BPA PROGRAM	40,000	-	6.400%	2003	No	2000	11	-	-
BPA PROGRAM	39,052	-	7.000%	2004	No	2000	7	-	-
BPA PROGRAM	53,500	-	7.150%	2005	No	2000	1	-	-
BPA PROGRAM	40,000	-	6.750%	2006	No	2000	9	-	-
BPA PROGRAM	20,000	-	5.650%	2005	No	2001	1	-	-
BPA PROGRAM	59,932	59,932	6.050%	2010	No	2001	1	-	-
BPA PROGRAM	25,000	25,000	5.950%	2011	No	2001	6	-	-
BPA PROGRAM	50,000	50,000	5.750%	2011	No	2001	8	-	-
BPA PROGRAM	108,010	-	4.600%	2005	No	2002	3	-	-
BPA PROGRAM	60,000	-	3.750%	2005	No	2002	6	-	-
BPA PROGRAM	100,000	-	3.050%	2006	No	2002	9	-	-
BPA PROGRAM	4,938	-	3.000%	2006	No	2003	10	-	-
BPA PROGRAM	40,000	-	2.800%	2006	No	2003	11	-	-
BPA PROGRAM	20,000	-	2.500%	2006	No	2003	9	-	-
BPA PROGRAM	75,000	-	2.300%	2006	No	2003	7	-	-
BPA PROGRAM	25,000	25,000	2.950%	2007	No	2003	7	2022	5.650%
BPA PROGRAM	40,000	40,000	2.900%	2007	No	2003	4	2024	5.720%
BPA PROGRAM	40,000	40,000	5.550%	2033	No	2003	4	-	-
BPA PROGRAM	50,000	50,000	3.450%	2007	No	2004	7	2024	5.720%
BPA PROGRAM	30,000	30,000	3.100%	2007	No	2004	9	-	-
BPA PROGRAM	65,000	65,000	2.950%	2007	No	2004	4	2023	5.680%
BPA PROGRAM	46,643	46,643	2.500%	2007	No	2004	1	-	-

Table 10-1: Historical Investments ($000s) (FY 2008)

Project	Original Principal	Current Principal	Interest Rate	Due Date	Replacement?	In Service Date	Month	Rollover Date	Rollover Rate
BPA PROGRAM	25,000	25,000	3.800%	2008	No	2004	7	-	-
BPA PROGRAM	65,000	65,000	2.950%	2008	No	2004	1	2036	6.370%
BPA PROGRAM	40,000	40,000	5.600%	2034	No	2004	9	-	-
BPA PROGRAM	40,000	40,000	4.000%	2009	No	2005	6	2037	6.680%
BPA PROGRAM	15,780	15,780	3.750%	2009	No	2005	11	-	-
BPA PROGRAM	40,000	40,000	5.500%	2035	No	2005	4	-	-
BPA PROGRAM	40,000	40,000	5.400%	2035	No	2005	1	-	-
BPA PROGRAM	45,000	45,000	5.250%	2035	No	2005	9	-	-
BPA PROGRAM	70,000	70,000	5.350%	2009	No	2006	7	2038	6.720%
BPA PROGRAM	20,000	20,000	5.050%	2009	No	2006	3	-	-
BPA PROGRAM	20,000	20,000	4.950%	2010	No	2006	9	-	-
BPA PROGRAM	5,000	5,000	4.950%	2010	No	2006	9	-	-
ENVIRONMENT	40,000	-	6.950%	2012	No	1997	11	-	-
ENVIRONMENT	30,000	30,000	6.050%	2010	No	2001	1	-	-
ENVIRONMENT	30,000	-	3.050%	2006	No	2002	9	-	-
ENVIRONMENT	20,000	20,000	5.050%	2009	No	2006	3	-	-

Table 10-2: Projected Federal Investments ($000s)(FY 2008)

Project	Original Principal	Current Principal	Interest Rate	Due Date	Replace ment?	In Service Date	Month	Rollover Date	Rollover Rate
BPA PROGRAM	232,010	232,010	6.000%	2042	No	2007	3	-	-
BPA PROGRAM	285,189	285,189	6.320%	2043	No	2008	3	-	-
ENVIRONMENT	7,000	7,000	5.660%	2022	No	2007	3	-	-
ENVIRONMENT	5,129	5,129	5.940%	2023	No	2008	3	-	-

Table 10-3: Historical Federal Investments ($000s)(FY 2009)

Project	Original Principal	Current Principal	Interest Rate	Due Date	Replacement?	In Service Date	Month	Rollover Date	Rollover Rate
BONNEVILLE POWER ADMINISTRATION	6,812	-	2.500%	1985	No	1940	-	-	-
BONNEVILLE POWER ADMINISTRATION	18,906	-	2.500%	1986	No	1941	-	-	-
BONNEVILLE POWER ADMINISTRATION	461	-	2.500%	1986	No	1941	-	-	-
BONNEVILLE POWER ADMINISTRATION	8,446	-	2.500%	1987	No	1942	-	-	-
BONNEVILLE POWER ADMINISTRATION	1,052	-	2.500%	1987	No	1942	-	-	-
BONNEVILLE POWER ADMINISTRATION	16,083	-	2.500%	1988	No	1943	-	-	-
BONNEVILLE POWER ADMINISTRATION	4,538	-	2.500%	1988	No	1943	-	-	-
BONNEVILLE POWER ADMINISTRATION	583	-	2.500%	1989	No	1944	-	-	-
BONNEVILLE POWER ADMINISTRATION	249	-	2.500%	1989	No	1944	-	-	-
BONNEVILLE POWER ADMINISTRATION	3,366	-	2.500%	1990	No	1945	-	-	-
BONNEVILLE POWER ADMINISTRATION	1,306	-	2.500%	1990	No	1945	-	-	-
BONNEVILLE POWER ADMINISTRATION	2,488	-	2.500%	1991	No	1946	-	-	-
BONNEVILLE POWER ADMINISTRATION	732	-	2.500%	1991	No	1946	-	-	-
BONNEVILLE POWER ADMINISTRATION	1,773	-	2.500%	1992	No	1947	-	-	-
BONNEVILLE POWER ADMINISTRATION	1,330	-	2.500%	1992	No	1947	-	-	-
BONNEVILLE POWER ADMINISTRATION	7,468	-	2.500%	1993	No	1948	-	-	-
BONNEVILLE POWER ADMINISTRATION	2,290	-	2.500%	1993	No	1948	-	-	-
BONNEVILLE POWER ADMINISTRATION	6,809	-	2.500%	1994	No	1949	-	-	-
BONNEVILLE POWER ADMINISTRATION	2,719	-	2.500%	1994	No	1949	-	-	-
BONNEVILLE POWER ADMINISTRATION	24,111	-	2.500%	1995	No	1950	-	-	-
BONNEVILLE POWER ADMINISTRATION	6,124	-	2.500%	1995	No	1950	-	-	-
BONNEVILLE POWER ADMINISTRATION	13,266	-	2.500%	1996	No	1951	-	-	-
BONNEVILLE POWER ADMINISTRATION	7,040	-	2.500%	1996	No	1951	-	-	-
BONNEVILLE POWER ADMINISTRATION	18,610	-	2.500%	1997	No	1952	-	-	-
BONNEVILLE POWER ADMINISTRATION	8,979	-	2.500%	1997	No	1952	-	-	-
BONNEVILLE POWER ADMINISTRATION	23,550	-	6.330%	1998	No	1953	-	-	-
BONNEVILLE POWER ADMINISTRATION	11,605	-	6.330%	1998	No	1953	-	-	-
BONNEVILLE POWER ADMINISTRATION	23,614	-	6.510%	1999	No	1954	-	-	-
BONNEVILLE POWER ADMINISTRATION	17,370	-	6.510%	1999	No	1954	-	-	-
BONNEVILLE POWER ADMINISTRATION	11,827	-	6.620%	2000	No	1955	-	-	-
BONNEVILLE POWER ADMINISTRATION	10,283	-	6.620%	2000	No	1955	-	-	-
BONNEVILLE POWER ADMINISTRATION	32,221	-	6.710%	2001	No	1956	-	-	-
BONNEVILLE POWER ADMINISTRATION	14,573	-	6.710%	2001	No	1956	-	-	-
BONNEVILLE POWER ADMINISTRATION	15,980	-	6.790%	2002	No	1957	-	-	-
BONNEVILLE POWER ADMINISTRATION	7,933	-	6.790%	2002	No	1957	-	-	-
BONNEVILLE POWER ADMINISTRATION	15,593	-	6.840%	2003	No	1958	-	-	-
BONNEVILLE POWER ADMINISTRATION	10,654	-	6.840%	2003	No	1958	-	-	-
BONNEVILLE POWER ADMINISTRATION	8,863	-	6.880%	2004	No	1959	-	-	-
BONNEVILLE POWER ADMINISTRATION	8,157	-	6.880%	2004	No	1959	-	-	-
BONNEVILLE POWER ADMINISTRATION	4,218	-	6.910%	2005	No	1960	-	-	-
BONNEVILLE POWER ADMINISTRATION	3,598	-	6.910%	2005	No	1960	-	-	-
BONNEVILLE POWER ADMINISTRATION	11,271	-	6.950%	2006	No	1961	-	-	-
BONNEVILLE POWER ADMINISTRATION	4,468	-	6.950%	2006	No	1961	-	-	-
BONNEVILLE POWER ADMINISTRATION	19,597	19,597	6.980%	2007	No	1962	-	-	-
BONNEVILLE POWER ADMINISTRATION	4,877	4,877	6.980%	2007	No	1962	-	-	-
BONNEVILLE POWER ADMINISTRATION	4,876	4,876	7.020%	2008	No	1963	-	-	-
BONNEVILLE POWER ADMINISTRATION	4,330	4,330	7.020%	2008	No	1963	-	-	-
BONNEVILLE POWER ADMINISTRATION	904	904	7.020%	2008	No	1963	-	-	-
BONNEVILLE POWER ADMINISTRATION	803	803	7.020%	2008	No	1963	-	-	-
BONNEVILLE POWER ADMINISTRATION	5,738	5,738	7.060%	2009	No	1964	-	-	-
BONNEVILLE POWER ADMINISTRATION	4,151	4,151	7.060%	2009	No	1964	-	-	-
BONNEVILLE POWER ADMINISTRATION	10,171	10,171	7.090%	2010	No	1965	-	-	-
BONNEVILLE POWER ADMINISTRATION	7,248	7,248	7.090%	2010	No	1965	-	-	-
BONNEVILLE POWER ADMINISTRATION	5,202	5,202	7.090%	2010	No	1965	-	-	-
BONNEVILLE POWER ADMINISTRATION	3,706	3,706	7.090%	2010	No	1965	-	-	-
BONNEVILLE POWER ADMINISTRATION	11,830	11,830	7.130%	2011	No	1966	-	-	-
BONNEVILLE POWER ADMINISTRATION	6,647	6,353	7.130%	2011	No	1966	-	-	-
BONNEVILLE POWER ADMINISTRATION	3,049	3,049	7.130%	2011	No	1966	-	-	-
BONNEVILLE POWER ADMINISTRATION	1,714	-	7.130%	2011	No	1966	-	-	-
BONNEVILLE POWER ADMINISTRATION	19,003	19,003	7.160%	2012	No	1967	-	-	-
BONNEVILLE POWER ADMINISTRATION	14,300	-	7.160%	2012	No	1967	-	-	-
BONNEVILLE POWER ADMINISTRATION	4,566	355	7.160%	2012	No	1967	-	-	-
BONNEVILLE POWER ADMINISTRATION	3,436	-	7.160%	2012	No	1967	-	-	-
BONNEVILLE POWER ADMINISTRATION	41,070	18,250	7.200%	2013	No	1968	-	-	-
BONNEVILLE POWER ADMINISTRATION	23,202	-	7.200%	2013	No	1968	-	-	-
BONNEVILLE POWER ADMINISTRATION	8,076	-	7.200%	2013	No	1968	-	-	-
BONNEVILLE POWER ADMINISTRATION	4,562	-	7.200%	2013	No	1968	-	-	-
BONNEVILLE POWER ADMINISTRATION	42,237	19,198	7.230%	2014	No	1969	-	-	-
BONNEVILLE POWER ADMINISTRATION	22,537	-	7.230%	2014	No	1969	-	-	-

Table 10-3: Historical Federal Investments ($000s)(FY 2009)

Project	Original Principal	Current Principal	Interest Rate	Due Date	Replacement?	In Service Date	Month	Rollover Date	Rollover Rate
BONNEVILLE POWER ADMINISTRATION	384	-	7.230%	2014	No	1969	-	-	-
BONNEVILLE POWER ADMINISTRATION	205	-	7.230%	2014	No	1969	-	-	-
BONNEVILLE POWER ADMINISTRATION	64,977	64,977	7.270%	2015	No	1970	-	-	-
BONNEVILLE POWER ADMINISTRATION	24,412	23,551	7.270%	2015	No	1970	-	-	-
BONNEVILLE POWER ADMINISTRATION	7,995	7,995	7.270%	2015	No	1970	-	-	-
BONNEVILLE POWER ADMINISTRATION	3,003	-	7.270%	2015	No	1970	-	-	-
BONNEVILLE POWER ADMINISTRATION	17,805	-	7.290%	2016	No	1971	-	-	-
BONNEVILLE POWER ADMINISTRATION	17,766	-	7.290%	2016	No	1971	-	-	-
BONNEVILLE POWER ADMINISTRATION	12,051	-	7.290%	2016	No	1971	-	-	-
BONNEVILLE POWER ADMINISTRATION	12,025	-	7.290%	2016	No	1971	-	-	-
BONNEVILLE POWER ADMINISTRATION	29,326	20,056	7.290%	2017	No	1972	-	-	-
BONNEVILLE POWER ADMINISTRATION	21,170	8,364	7.290%	2017	No	1972	-	-	-
BONNEVILLE POWER ADMINISTRATION	3,980	-	7.290%	2017	No	1972	-	-	-
BONNEVILLE POWER ADMINISTRATION	2,873	-	7.290%	2017	No	1972	-	-	-
BONNEVILLE POWER ADMINISTRATION	33,788	33,788	7.280%	2018	No	1973	-	-	-
BONNEVILLE POWER ADMINISTRATION	21,656	21,656	7.280%	2018	No	1973	-	-	-
BONNEVILLE POWER ADMINISTRATION	16,368	16,368	7.280%	2018	No	1973	-	-	-
BONNEVILLE POWER ADMINISTRATION	10,491	10,491	7.280%	2018	No	1973	-	-	-
BONNEVILLE POWER ADMINISTRATION	21,826	21,826	7.270%	2019	No	1974	-	-	-
BONNEVILLE POWER ADMINISTRATION	20,984	20,984	7.270%	2019	No	1974	-	-	-
BONNEVILLE POWER ADMINISTRATION	12,563	12,563	7.270%	2019	No	1974	-	-	-
BONNEVILLE POWER ADMINISTRATION	12,079	12,079	7.270%	2019	No	1974	-	-	-
BONNEVILLE POWER ADMINISTRATION	32,026	32,026	7.250%	2020	No	1975	-	-	-
BONNEVILLE POWER ADMINISTRATION	21,916	21,916	7.250%	2020	No	1975	-	-	-
BONNEVILLE POWER ADMINISTRATION	17,158	17,158	7.250%	2020	No	1975	-	-	-
BONNEVILLE POWER ADMINISTRATION	11,742	11,742	7.250%	2020	No	1975	-	-	-
BONNEVILLE POWER ADMINISTRATION	61,025	61,025	7.230%	2021	No	1976	-	-	-
BONNEVILLE POWER ADMINISTRATION	2,212	2,212	7.230%	2021	No	1976	-	-	-
BONNEVILLE POWER ADMINISTRATION	33,702	33,702	7.210%	2022	No	1977	-	-	-
BONNEVILLE POWER ADMINISTRATION	5,380	5,380	7.210%	2022	No	1977	-	-	-
BONNEVILLE POWER ADMINISTRATION	4,981	4,981	7.210%	2022	No	1977	-	-	-
BONNEVILLE POWER ADMINISTRATION	3,948	3,948	7.210%	2022	No	1977	-	-	-
BPA PROGRAM	24,222	-	8.950%	2013	Yes	1978	9	-	-
BPA PROGRAM	17,770	-	8.950%	2013	No	1978	9	-	-
BPA PROGRAM	4,619	-	8.950%	2013	Yes	1978	9	-	-
BPA PROGRAM	3,389	-	8.950%	2013	No	1978	9	-	-
BPA PROGRAM	21,228	-	9.900%	2014	No	1979	9	-	-
BPA PROGRAM	14,340	-	9.900%	2014	Yes	1979	9	-	-
BPA PROGRAM	10,610	-	9.900%	2014	No	1979	9	-	-
BPA PROGRAM	2,888	-	9.900%	2014	Yes	1979	9	-	-
BPA PROGRAM	605	-	9.900%	2014	No	1979	9	-	-
BPA PROGRAM	165	-	9.900%	2014	Yes	1979	9	-	-
BPA PROGRAM	98	-	9.900%	2014	No	1979	9	-	-
BPA PROGRAM	66	-	9.900%	2014	Yes	1979	9	-	-
BPA PROGRAM	26,690	-	9.450%	2014	No	1979	6	-	-
BPA PROGRAM	21,977	-	9.450%	2014	Yes	1979	6	-	-
BPA PROGRAM	9,804	-	9.450%	2014	Yes	1979	6	-	-
BPA PROGRAM	7,010	-	9.450%	2014	No	1979	6	-	-
BPA PROGRAM	6,026	-	9.450%	2014	Yes	1979	6	-	-
BPA PROGRAM	1,870	-	9.450%	2014	Yes	1979	6	-	-
BPA PROGRAM	1,371	-	9.450%	2014	No	1979	6	-	-
BPA PROGRAM	150	-	9.450%	2014	No	1979	6	-	-
BPA PROGRAM	102	-	9.450%	2014	Yes	1979	6	-	-
BPA PROGRAM	44,811	-	13.000%	2015	No	1980	9	-	-
BPA PROGRAM	39,696	-	13.000%	2015	No	1980	9	-	-
BPA PROGRAM	10,806	-	13.000%	2015	Yes	1980	9	-	-
BPA PROGRAM	9,292	-	13.000%	2015	No	1980	9	-	-
BPA PROGRAM	4,253	-	13.000%	2015	Yes	1980	9	-	-
BPA PROGRAM	2,263	-	13.000%	2015	No	1980	9	-	-
BPA PROGRAM	1,707	-	13.000%	2015	No	1980	9	-	-
BPA PROGRAM	1,469	-	13.000%	2015	Yes	1980	9	-	-
BPA PROGRAM	616	-	13.000%	2015	Yes	1980	9	-	-
BPA PROGRAM	56	-	13.000%	2015	Yes	1980	9	-	-
BPA PROGRAM	21	-	13.000%	2015	No	1980	9	-	-
BPA PROGRAM	10	-	13.000%	2015	Yes	1980	9	-	-
BPA PROGRAM	119,775	-	16.600%	2016	No	1981	9	-	-
BPA PROGRAM	54,821	-	16.600%	2016	Yes	1981	9	-	-
BPA PROGRAM	277	-	16.600%	2016	No	1981	9	-	-
BPA PROGRAM	127	-	16.600%	2016	Yes	1981	9	-	-

Table 10-3: Historical Federal Investments ($000s)(FY 2009)

Project	Original Principal	Current Principal	Interest Rate	Due Date	Replacement?	In Service Date	Month	Rollover Date	Rollover Rate
BPA PROGRAM	46,980	-	14.400%	2017	No	1982	4	-	-
BPA PROGRAM	37,455	-	14.400%	2017	Yes	1982	4	-	-
BPA PROGRAM	34,221	-	14.400%	2017	No	1982	12	-	-
BPA PROGRAM	15,663	-	14.400%	2017	Yes	1982	12	-	-
BPA PROGRAM	9,975	-	14.400%	2017	No	1982	4	-	-
BPA PROGRAM	4,566	-	14.400%	2017	Yes	1982	4	-	-
BPA PROGRAM	551	-	14.400%	2017	No	1982	4	-	-
BPA PROGRAM	439	-	14.400%	2017	Yes	1982	4	-	-
BPA PROGRAM	80	-	14.400%	2017	No	1982	12	-	-
BPA PROGRAM	36	-	14.400%	2017	Yes	1982	12	-	-
BPA PROGRAM	23	-	14.400%	2017	No	1982	4	-	-
BPA PROGRAM	11	-	14.400%	2017	Yes	1982	4	-	-
BPA PROGRAM	77,807	-	14.150%	2017	No	1982	7	-	-
BPA PROGRAM	3,677	-	14.150%	2017	No	1982	7	-	-
BPA PROGRAM	2,932	-	14.150%	2017	Yes	1982	7	-	-
BPA PROGRAM	402	-	14.150%	2017	No	1982	7	-	-
BPA PROGRAM	105	-	14.150%	2017	Yes	1982	7	-	-
BPA PROGRAM	43	-	14.150%	2017	No	1982	7	-	-
BPA PROGRAM	34	-	14.150%	2017	Yes	1982	7	-	-
BPA PROGRAM	37,235	-	12.250%	2018	No	1983	9	-	-
BPA PROGRAM	6,708	-	12.250%	2018	Yes	1983	9	-	-
BPA PROGRAM	814	-	12.250%	2018	No	1983	9	-	-
BPA PROGRAM	203	-	12.250%	2018	No	1983	9	-	-
BPA PROGRAM	35	-	12.250%	2018	Yes	1983	9	-	-
BPA PROGRAM	4	-	12.250%	2018	No	1983	9	-	-
BPA PROGRAM	1	-	12.250%	2018	Yes	1983	9	-	-
BPA PROGRAM	29,806	-	11.700%	2018	No	1983	6	-	-
BPA PROGRAM	154	-	11.700%	2018	No	1983	6	-	-
BPA PROGRAM	40	-	11.700%	2018	Yes	1983	6	-	-
BPA PROGRAM	39,741	-	10.850%	2018	No	1983	11	-	-
BPA PROGRAM	205	-	10.850%	2018	No	1983	11	-	-
BPA PROGRAM	54	-	10.850%	2018	Yes	1983	11	-	-
BPA PROGRAM	50,567	-	13.050%	2019	No	1984	9	-	-
BPA PROGRAM	9,109	-	13.050%	2019	Yes	1984	9	-	-
BPA PROGRAM	276	-	13.050%	2019	No	1984	9	-	-
BPA PROGRAM	48	-	13.050%	2019	Yes	1984	9	-	-
BPA PROGRAM	25,283	-	12.300%	2019	No	1984	11	-	-
BPA PROGRAM	4,555	-	12.300%	2019	Yes	1984	11	-	-
BPA PROGRAM	138	-	12.300%	2019	No	1984	11	-	-
BPA PROGRAM	24	-	12.300%	2019	Yes	1984	11	-	-
BPA PROGRAM	15,182	-	11.250%	2029	Yes	1985	6	-	-
BPA PROGRAM	460	-	11.250%	2029	No	1985	6	-	-
BPA PROGRAM	80	-	11.250%	2029	Yes	1985	6	-	-
BPA PROGRAM	84,278	-	11.250%	2030	No	1985	6	-	-
BPA PROGRAM	68,194	-	8.150%	1996	Yes	1986	3	-	-
BPA PROGRAM	30,161	-	8.150%	1996	No	1986	3	-	-
BPA PROGRAM	870	-	8.150%	1996	No	1986	3	-	-
BPA PROGRAM	443	-	8.150%	1996	No	1986	3	-	-
BPA PROGRAM	169	-	8.150%	1996	Yes	1986	3	-	-
BPA PROGRAM	157	-	8.150%	1996	Yes	1986	3	-	-
BPA PROGRAM	5	-	8.150%	1996	No	1986	3	-	-
BPA PROGRAM	1	-	8.150%	1996	Yes	1986	3	-	-
BPA PROGRAM	180,054	-	8.950%	2031	No	1986	6	-	-
BPA PROGRAM	57,354	-	8.950%	2031	Yes	1986	6	-	-
BPA PROGRAM	40,000	-	8.950%	2031	Yes	1986	6	-	-
BPA PROGRAM	11,668	-	8.950%	2031	Yes	1986	6	-	-
BPA PROGRAM	5,161	-	8.950%	2031	No	1986	6	-	-
BPA PROGRAM	3,117	-	8.950%	2031	Yes	1986	6	-	-
BPA PROGRAM	1,819	-	8.950%	2031	No	1986	6	-	-
BPA PROGRAM	722	-	8.950%	2031	Yes	1986	6	-	-
BPA PROGRAM	76	-	8.950%	2031	No	1986	6	-	-
BPA PROGRAM	29	-	8.950%	2031	Yes	1986	6	-	-
BPA PROGRAM	96,519	-	8.350%	1992	No	1987	6	-	-
BPA PROGRAM	2,498	-	8.350%	1992	No	1987	6	-	-
BPA PROGRAM	983	-	8.350%	1992	No	1987	6	-	-
BPA PROGRAM	86,958	-	9.550%	2017	No	1987	7	-	-
BPA PROGRAM	4,113	-	9.550%	2017	No	1987	7	-	-
BPA PROGRAM	3,274	-	9.550%	2017	Yes	1987	7	-	-
BPA PROGRAM	569	-	9.550%	2017	No	1987	7	-	-

Table 10-3: Historical Federal Investments ($000s)(FY 2009)

Project	Original Principal	Current Principal	Interest Rate	Due Date	Replacement?	In Service Date	Month	Rollover Date	Rollover Rate
BPA PROGRAM	48	-	9.550%	2017	No	1987	7	-	-
BPA PROGRAM	38	-	9.550%	2017	Yes	1987	7	-	-
BPA PROGRAM	37,342	-	9.550%	2032	No	1987	7	-	-
BPA PROGRAM	7,903	-	9.550%	2032	No	1987	7	-	-
BPA PROGRAM	3,109	-	9.550%	2032	Yes	1987	7	-	-
BPA PROGRAM	631	-	9.550%	2032	No	1987	7	-	-
BPA PROGRAM	618	-	9.550%	2032	Yes	1987	7	-	-
BPA PROGRAM	285	-	9.550%	2032	No	1987	7	-	-
BPA PROGRAM	112	-	9.550%	2032	Yes	1987	7	-	-
BPA PROGRAM	54,409	-	9.300%	2032	Yes	1987	4	-	-
BPA PROGRAM	43,236	-	9.300%	2032	No	1987	4	-	-
BPA PROGRAM	1,409	-	9.300%	2032	No	1987	4	-	-
BPA PROGRAM	554	-	9.300%	2032	No	1987	4	-	-
BPA PROGRAM	281	-	9.300%	2032	No	1987	4	-	-
BPA PROGRAM	111	-	9.300%	2032	No	1987	4	-	-
BPA PROGRAM	43,417	-	9.500%	2018	No	1988	2	-	-
BPA PROGRAM	283	-	9.500%	2018	No	1988	2	-	-
BPA PROGRAM	30,004	-	9.900%	2033	Yes	1988	6	-	-
BPA PROGRAM	9,018	-	9.900%	2033	No	1988	6	-	-
BPA PROGRAM	752	-	9.900%	2033	Yes	1988	6	-	-
BPA PROGRAM	226	-	9.900%	2033	No	1988	6	-	-
BPA PROGRAM	45,870	-	9.500%	2033	Yes	1988	2	-	-
BPA PROGRAM	28,513	-	9.500%	2033	No	1988	2	-	-
BPA PROGRAM	27,887	-	9.500%	2033	Yes	1988	2	-	-
BPA PROGRAM	22,923	-	9.500%	2033	Yes	1988	2	-	-
BPA PROGRAM	20,677	-	9.500%	2033	No	1988	2	-	-
BPA PROGRAM	1,725	-	9.500%	2033	Yes	1988	2	-	-
BPA PROGRAM	954	-	9.500%	2033	No	1988	2	-	-
BPA PROGRAM	933	-	9.500%	2033	Yes	1988	2	-	-
BPA PROGRAM	518	-	9.500%	2033	No	1988	2	-	-
BPA PROGRAM	56,257	-	8.950%	1999	Yes	1989	5	-	-
BPA PROGRAM	16,909	-	8.950%	1999	No	1989	5	-	-
BPA PROGRAM	1,410	-	8.950%	1999	No	1989	5	-	-
BPA PROGRAM	424	-	8.950%	1999	No	1989	5	-	-
BPA PROGRAM	41,894	-	9.250%	2030	No	1990	1	-	-
BPA PROGRAM	3,824	-	9.250%	2030	Yes	1990	1	-	-
BPA PROGRAM	3,008	-	9.250%	2030	No	1990	1	-	-
BPA PROGRAM	1,149	-	9.250%	2030	No	1990	1	-	-
BPA PROGRAM	96	-	9.250%	2030	Yes	1990	1	-	-
BPA PROGRAM	29	-	9.250%	2030	No	1990	1	-	-
BPA PROGRAM	54,145	-	7.550%	1995	No	1991	2	-	-
BPA PROGRAM	5,855	-	7.550%	1995	No	1991	2	-	-
BPA PROGRAM	80,000	-	6.200%	1995	No	1992	4	-	-
BPA PROGRAM	50,000	-	7.000%	1997	No	1992	4	-	-
BPA PROGRAM	28,300	-	7.000%	1997	No	1992	4	-	-
BPA PROGRAM	107,800	-	6.600%	2000	No	1992	8	-	-
BPA PROGRAM	107,700	-	7.250%	2007	No	1992	8	-	-
BPA PROGRAM	147,521	-	8.800%	2032	No	1992	4	-	-
BPA PROGRAM	2,479	-	8.800%	2032	No	1992	4	-	-
BPA PROGRAM	150,000	-	8.130%	2032	No	1992	7	-	-
BPA PROGRAM	50,000	-	6.050%	1998	No	1993	10	-	-
BPA PROGRAM	99,962	-	8.350%	2033	No	1993	10	-	-
BPA PROGRAM	130,000	-	7.800%	2033	No	1993	2	-	-
BPA PROGRAM	100,000	-	7.500%	2033	No	1993	4	-	-
BPA PROGRAM	110,000	-	6.950%	2033	No	1993	8	-	-
BPA PROGRAM	49,489	-	7.100%	1998	No	1994	5	-	-
BPA PROGRAM	43,155	-	7.100%	1998	No	1994	5	-	-
BPA PROGRAM	4,456	-	7.100%	1998	No	1994	5	-	-
BPA PROGRAM	55,000	-	7.650%	1999	No	1994	9	-	-
BPA PROGRAM	50,000	-	8.200%	2034	No	1994	5	-	-
BPA PROGRAM	50,000	-	7.050%	2034	No	1994	1	-	-
BPA PROGRAM	108,400	-	6.850%	2034	No	1994	10	-	-
BPA PROGRAM	50,000	-	6.850%	2034	No	1994	10	-	-
BPA PROGRAM	55,000	-	8.350%	2001	No	1995	1	-	-
BPA PROGRAM	65,000	-	7.700%	2025	No	1995	8	-	-
BPA PROGRAM	49,933	-	7.700%	2025	No	1995	7	-	-
BPA PROGRAM	54,378	-	5.900%	2003	No	1996	1	-	-
BPA PROGRAM	70,000	-	7.050%	2006	No	1996	8	-	-
BPA PROGRAM	22,600	-	6.800%	2004	No	1997	1	-	-

Table 10-3: Historical Federal Investments ($000s)(FY 2009)

Project	Original Principal	Current Principal	Interest Rate	Due Date	Replacement?	In Service Date	Month	Rollover Date	Rollover Rate
BPA PROGRAM	80,000	-	6.900%	2005	No	1997	5	-	-
BPA PROGRAM	111,254	111,254	6.650%	2007	No	1997	8	2025	5.750%
BPA PROGRAM	75,300	75,300	6.000%	2008	No	1998	4	-	-
BPA PROGRAM	36,819	36,819	5.750%	2008	No	1998	8	-	-
BPA PROGRAM	72,700	72,700	6.000%	2009	No	1998	5	-	-
BPA PROGRAM	40,000	40,000	6.200%	2011	No	1998	5	-	-
BPA PROGRAM	50,000	50,000	6.650%	2028	No	1998	4	-	-
BPA PROGRAM	112,300	112,300	5.850%	2028	No	1998	8	-	-
BPA PROGRAM	106,600	106,600	5.850%	2028	No	1998	8	2031	6.000%
BPA PROGRAM	98,900	98,900	6.700%	2032	No	1998	5	-	-
BPA PROGRAM	40,000	-	6.200%	2002	No	1999	9	-	-
BPA PROGRAM	26,200	-	5.950%	2004	No	1999	5	-	-
BPA PROGRAM	59,050	59,050	5.900%	2014	No	1999	2	-	-
BPA PROGRAM	15,300	-	6.850%	2003	No	2000	8	-	-
BPA PROGRAM	40,000	-	6.400%	2003	No	2000	11	-	-
BPA PROGRAM	39,052	-	7.000%	2004	No	2000	7	-	-
BPA PROGRAM	53,500	-	7.150%	2005	No	2000	1	-	-
BPA PROGRAM	40,000	-	6.750%	2006	No	2000	9	-	-
BPA PROGRAM	20,000	-	5.650%	2005	No	2001	1	-	-
BPA PROGRAM	59,932	59,932	6.050%	2010	No	2001	1	-	-
BPA PROGRAM	25,000	25,000	5.950%	2011	No	2001	6	-	-
BPA PROGRAM	50,000	50,000	5.750%	2011	No	2001	8	-	-
BPA PROGRAM	108,010	-	4.600%	2005	No	2002	3	-	-
BPA PROGRAM	60,000	-	3.750%	2005	No	2002	6	-	-
BPA PROGRAM	100,000	-	3.050%	2006	No	2002	9	-	-
BPA PROGRAM	4,938	-	3.000%	2006	No	2003	10	-	-
BPA PROGRAM	40,000	-	2.800%	2006	No	2003	11	-	-
BPA PROGRAM	20,000	-	2.500%	2006	No	2003	9	-	-
BPA PROGRAM	75,000	-	2.300%	2006	No	2003	7	-	-
BPA PROGRAM	25,000	25,000	2.950%	2007	No	2003	7	2022	5.650%
BPA PROGRAM	40,000	40,000	2.900%	2007	No	2003	4	2024	5.720%
BPA PROGRAM	40,000	40,000	5.550%	2033	No	2003	4	-	-
BPA PROGRAM	50,000	50,000	3.450%	2007	No	2004	7	2024	5.720%
BPA PROGRAM	30,000	30,000	3.100%	2007	No	2004	9	-	-
BPA PROGRAM	65,000	65,000	2.950%	2007	No	2004	4	2023	5.680%
BPA PROGRAM	46,643	46,643	2.500%	2007	No	2004	1	-	-
BPA PROGRAM	25,000	25,000	3.800%	2008	No	2004	7	-	-
BPA PROGRAM	65,000	65,000	2.950%	2008	No	2004	1	2036	6.370%
BPA PROGRAM	40,000	40,000	5.600%	2034	No	2004	9	-	-
BPA PROGRAM	40,000	40,000	4.000%	2009	No	2005	6	2037	6.680%
BPA PROGRAM	15,780	15,780	3.750%	2009	No	2005	11	-	-
BPA PROGRAM	40,000	40,000	5.500%	2035	No	2005	4	-	-
BPA PROGRAM	40,000	40,000	5.400%	2035	No	2005	1	-	-
BPA PROGRAM	45,000	45,000	5.250%	2035	No	2005	9	-	-
BPA PROGRAM	70,000	70,000	5.350%	2009	No	2006	7	2038	6.720%
BPA PROGRAM	20,000	20,000	5.050%	2009	No	2006	3	-	-
BPA PROGRAM	20,000	20,000	4.950%	2010	No	2006	9	-	-
BPA PROGRAM	5,000	5,000	4.950%	2010	No	2006	9	-	-
ENVIRONMENT	40,000	-	6.950%	2012	No	1997	11	-	-
ENVIRONMENT	30,000	30,000	6.050%	2010	No	2001	1	-	-
ENVIRONMENT	30,000	-	3.050%	2006	No	2002	9	-	-
ENVIRONMENT	20,000	20,000	5.050%	2009	No	2006	3	-	-

Table 10-4: Projected Federal Investments ($000s)(FY 2009)

Project	Original Principal	Current Principal	Interest Rate	Due Date	Replace ment?	In Service Date	Month	Rollover Date	Rollover Rate
BPA PROGRAM	232,010	232,010	6.000%	2042	No	2007	3	-	-
BPA PROGRAM	285,189	285,189	6.320%	2043	No	2008	3	-	-
BPA PROGRAM	259,531	259,531	6.630%	2044	No	2009	3	-	-
ENVIRONMENT	7,000	7,000	5.660%	2022	No	2007	3	-	-
ENVIRONMENT	5,129	5,129	5.940%	2023	No	2008	3	-	-
ENVIRONMENT	5,451	5,451	6.230%	2024	No	2009	3	-	-

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CHAPTER 11

REPAYMENT STUDY RESULTS CURRENT STUDY

FY 2008 AND FY 2009

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Table 11-1: Summary of Interest ($000s) (FY 2008)

Project	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BONNEVILLE POWER ADMINISTRATION	44,665	37,918	35,714	33,413	29,661	25,768	15,780	12,474	12,402	8,622	5,539	3,712	2,170	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL APPROPRIATIONS	44,665	37,918	35,714	33,413	29,661	25,768	15,780	12,474	12,402	8,622	5,539	3,712	2,170	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA BORROWING	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA PROGRAM	91,935	109,523	117,336	121,854	125,684	127,770	136,935	146,345	152,520	162,427	172,583	182,979	193,606	195,895	198,004
ENVIRONMENT	3,023	3,374	3,526	2,516	701	701	701	701	701	701	701	701	701	701	701
PREMIUMS	-	-	-	-	-	-	-	-	-	-	-	-	3,115	5,354	5,504
(LESS INTEREST INCOME)	-6,119	-6,162	-5,951	-6,096	-6,074	-5,287	-3,039	-3,402	-3,289	-3,097	-2,743	-2,732	-6,052	-5,681	-5,656
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL BPA BORROWING	88,839	106,734	114,911	118,274	120,311	123,183	134,597	143,644	149,931	160,031	170,541	180,948	191,370	196,269	198,553
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS	133,505	144,651	150,625	151,687	149,971	148,951	150,377	156,118	162,333	168,653	176,080	184,660	193,540	196,269	198,553

Bonneville Power Administration
Transmission Repayment Study
October 1, 2006 to September 30, 2009 Cost Evaluation Period

Table 11-1: Summary of Interest ($000s) (FY 2008)

Project	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BONNEVILLE POWER ADMINISTRATION	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL APPROPRIATIONS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA BORROWING	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA PROGRAM	200,546	203,993	207,876	211,558	214,519	217,419	220,627	224,575	228,391	232,498	237,014	241,701	248,835	259,782	266,304
ENVIRONMENT	701	305	-	-	-	-	-	-	-	-	-	-	-	-	-
PREMIUMS	4,137	2,515	1,859	1,569	5,292	5,207	1,185	4,764	4,627	936	4,117	1,172	20	-	1,126
(LESS INTEREST INCOME)	-5,626	-5,590	-5,690	-6,089	-6,056	-6,024	-5,987	-5,942	-5,898	-5,850	-5,796	-5,052	-3,630	-5,679	-5,601
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL BPA BORROWING	199,758	201,222	204,045	207,038	213,755	216,602	215,824	223,397	227,120	227,584	235,335	237,820	245,224	254,103	261,829
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS	199,758	201,222	204,045	207,038	213,755	216,602	215,824	223,397	227,120	227,584	235,335	237,820	245,224	254,103	261,829

Table 11-1: Summary of Interest ($000s) (FY 2008)

Project	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BONNEVILLE POWER ADMINISTRATION	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL APPROPRIATIONS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA BORROWING	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA PROGRAM	272,165	278,281	284,559	291,601	299,198	307,232	315,744	318,419	315,165	311,706	308,021	304,100	299,927	295,483	290,756
ENVIRONMENT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PREMIUMS	1,521	584	1,840	280	127	-	916	770	791	737	714	715	635	657	575
(LESS INTEREST INCOME)	-5,530	-5,456	-5,380	-5,295	-5,204	-5,108	-5,006	-4,885	-4,924	-4,965	-5,008	-5,055	-5,104	-5,157	-5,212
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL BPA BORROWING	268,157	273,409	281,019	286,585	294,120	302,124	311,654	314,303	311,032	307,478	303,727	299,760	295,458	290,983	286,119
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS	268,157	273,409	281,019	286,585	294,120	302,124	311,654	314,303	311,032	307,478	303,727	299,760	295,458	290,983	286,119

Table 11-1: Summary of Interest ($000s) (FY 2008)

Project	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	Total
	-	-	-	-	-	-	-	-	-	-	-
BONNEVILLE POWER ADMINISTRATION	-	-	-	-	-	-	-	-	-	-	267,837
	-	-	-	-	-	-	-	-	-	-	-
TOTAL APPROPRIATIONS	-	-	-	-	-	-	-	-	-	-	267,837
	-	-	-	-	-	-	-	-	-	-	-
BPA BORROWING	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
BPA PROGRAM	285,722	280,364	274,660	268,589	262,124	255,246	247,921	240,125	231,827	222,993	12,712,962
ENVIRONMENT	-	-	-	-	-	-	-	-	-	-	21,153
PREMIUMS	559	489	464	369	369	258	223	171	80	0	66,341
(LESS INTEREST INCOME)	-5,272	-5,335	-5,403	-5,475	-5,551	-5,632	-5,719	-5,811	-5,909	-6,014	-289,302
	-	-	-	-	-	-	-	-	-	-	-
TOTAL BPA BORROWING	281,009	275,518	269,721	263,484	256,942	249,872	242,425	234,485	225,998	216,980	12,511,154
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
TOTALS	281,009	275,518	269,721	263,484	256,942	249,872	242,425	234,485	225,998	216,980	12,778,991

Table 11-2: Interest Calculation Summary ($000s) (FY 2008)

Date	Project	TYPE	Principal	Rate	Interest	Premium	Total
FY 2007	BONNEVILLE POWER ADMINISTRATION	HISTORICAL	618,429	7.222%	44,665	-	44,665
FY 2007	BPA PROGRAM	HISTORICAL	1,620,278	5.244%	84,975	-	84,975
FY 2007	BPA PROGRAM	NEW	232,010	3.000%	6,960	-	6,960
FY 2007	ENVIRONMENT	HISTORICAL	50,000	5.650%	2,825	-	2,825
FY 2007	ENVIRONMENT	NEW	7,000	2.830%	198	-	198
FY 2007	Float	HISTORICAL	-	-	-6,119	-	-6,119
Subtotal			**$2,527,717**	**-**	**$133,505**	**-**	**$133,505**
FY 2008	BONNEVILLE POWER ADMINISTRATION	HISTORICAL	524,772	7.226%	37,918	-	37,918
FY 2008	BPA PROGRAM	HISTORICAL	1,775,645	5.661%	100,511	-	100,511
FY 2008	BPA PROGRAM	NEW	285,189	3.160%	9,012	-	9,012
FY 2008	ENVIRONMENT	HISTORICAL	57,000	5.651%	3,221	-	3,221
FY 2008	ENVIRONMENT	NEW	5,129	2.970%	152	-	152
FY 2008	Float	HISTORICAL	-	-	-6,162	-	-6,162
Subtotal			**$2,647,735**	**-**	**$144,651**	**-**	**$144,651**
FY 2009	BONNEVILLE POWER ADMINISTRATION	HISTORICAL	494,110	7.228%	35,714	-	35,714
FY 2009	BPA PROGRAM	HISTORICAL	1,923,715	5.883%	113,173	-	113,173
FY 2009	ENVIRONMENT	HISTORICAL	62,129	5.675%	3,526	-	3,526
FY 2009	BPA PROGRAM	NEW	131,758	3.160%	4,164	-	4,164
FY 2009	Float	HISTORICAL	-	-	-5,951	-	-5,951
Subtotal			**$2,611,712**	**-**	**$150,625**	**-**	**$150,625**
FY 2010	BONNEVILLE POWER ADMINISTRATION	HISTORICAL	462,203	7.229%	33,413	-	33,413
FY 2010	BPA PROGRAM	HISTORICAL	1,815,235	6.018%	109,240	-	109,240
FY 2010	ENVIRONMENT	HISTORICAL	42,129	5.972%	2,516	-	2,516
FY 2010	BPA PROGRAM	HISTORICAL	131,758	6.320%	8,327	-	8,327
FY 2010	BPA PROGRAM	NEW	135,676	3.160%	4,287	-	4,287
FY 2010	Float	HISTORICAL	-	-	-6,096	-	-6,096
Subtotal			**$2,587,001**	**-**	**$151,687**	**-**	**$151,687**
FY 2011	BONNEVILLE POWER ADMINISTRATION	HISTORICAL	409,941	7.235%	29,661	-	29,661
FY 2011	BPA PROGRAM	HISTORICAL	1,730,303	6.032%	104,377	-	104,377
FY 2011	ENVIRONMENT	HISTORICAL	12,129	5.778%	701	-	701
FY 2011	BPA PROGRAM	HISTORICAL	267,434	6.320%	16,902	-	16,902
FY 2011	BPA PROGRAM	NEW	139,414	3.160%	4,405	-	4,405
FY 2011	Float	HISTORICAL	-	-	-6,074	-	-6,074
Subtotal			**$2,559,221**	**-**	**$149,971**	**-**	**$149,971**
FY 2012	BONNEVILLE POWER ADMINISTRATION	HISTORICAL	355,988	7.238%	25,768	-	25,768
FY 2012	BPA PROGRAM	HISTORICAL	1,615,303	6.038%	97,534	-	97,534
FY 2012	ENVIRONMENT	HISTORICAL	12,129	5.778%	701	-	701
FY 2012	BPA PROGRAM	HISTORICAL	406,848	6.320%	25,713	-	25,713
FY 2012	BPA PROGRAM	NEW	143,127	3.160%	4,523	-	4,523
FY 2012	Float	HISTORICAL	-	-	-5,287	-	-5,287
Subtotal			**$2,533,395**	**-**	**$148,951**	**-**	**$148,951**
FY 2013	BONNEVILLE POWER ADMINISTRATION	HISTORICAL	218,275	7.229%	15,780	-	15,780
FY 2013	BPA PROGRAM	HISTORICAL	1,615,303	6.038%	97,534	-	97,534
FY 2013	ENVIRONMENT	HISTORICAL	12,129	5.778%	701	-	701
FY 2013	BPA PROGRAM	HISTORICAL	549,975	6.320%	34,758	-	34,758
FY 2013	BPA PROGRAM	NEW	146,922	3.160%	4,643	-	4,643
FY 2013	Float	HISTORICAL	-	-	-3,039	-	-3,039
Subtotal			**$2,542,604**	**-**	**$150,377**	**-**	**$150,377**
FY 2014	BONNEVILLE POWER ADMINISTRATION	HISTORICAL	172,492	7.231%	12,474	-	12,474
FY 2014	BPA PROGRAM	HISTORICAL	1,615,303	6.038%	97,534	-	97,534
FY 2014	ENVIRONMENT	HISTORICAL	12,129	5.778%	701	-	701
FY 2014	BPA PROGRAM	HISTORICAL	696,897	6.320%	44,044	-	44,044
FY 2014	BPA PROGRAM	NEW	150,857	3.160%	4,767	-	4,767
FY 2014	Float	HISTORICAL	-	-	-3,402	-	-3,402
Subtotal			**$2,647,678**	**-**	**$156,118**	**-**	**$156,118**

Table 11-2: Interest Calculation Summary ($000s) (FY 2008)

Date	Project	TYPE	Principal	Rate	Interest	Premium	Total
FY 2015	BONNEVILLE POWER ADMINISTRATION	HISTORICAL	171,501	7.231%	12,402	-	12,402
FY 2015	BPA PROGRAM	HISTORICAL	1,556,253	6.043%	94,050	-	94,050
FY 2015	ENVIRONMENT	HISTORICAL	12,129	5.778%	701	-	701
FY 2015	BPA PROGRAM	HISTORICAL	847,754	6.320%	53,578	-	53,578
FY 2015	BPA PROGRAM	NEW	154,791	3.160%	4,891	-	4,891
FY 2015	Float	HISTORICAL	-	-	-3,289	-	-3,289
Subtotal			**$2,742,428**	**-**	**$162,333**	**-**	**$162,333**
FY 2016	BONNEVILLE POWER ADMINISTRATION	HISTORICAL	119,367	7.223%	8,622	-	8,622
FY 2016	BPA PROGRAM	HISTORICAL	1,556,253	6.043%	94,050	-	94,050
FY 2016	ENVIRONMENT	HISTORICAL	12,129	5.778%	701	-	701
FY 2016	BPA PROGRAM	HISTORICAL	1,002,545	6.320%	63,361	-	63,361
FY 2016	BPA PROGRAM	NEW	158,743	3.160%	5,016	-	5,016
FY 2016	Float	HISTORICAL	-	-	-3,097	-	-3,097
Subtotal			**$2,849,037**	**-**	**$168,653**	**-**	**$168,653**
FY 2017	BONNEVILLE POWER ADMINISTRATION	HISTORICAL	76,745	7.217%	5,539	-	5,539
FY 2017	BPA PROGRAM	HISTORICAL	1,556,253	6.043%	94,050	-	94,050
FY 2017	ENVIRONMENT	HISTORICAL	12,129	5.778%	701	-	701
FY 2017	BPA PROGRAM	HISTORICAL	1,161,288	6.320%	73,393	-	73,393
FY 2017	BPA PROGRAM	NEW	162,655	3.160%	5,140	-	5,140
FY 2017	Float	HISTORICAL	-	-	-2,743	-	-2,743
Subtotal			**$2,969,070**	**-**	**$176,080**	**-**	**$176,080**
FY 2018	BONNEVILLE POWER ADMINISTRATION	HISTORICAL	51,469	7.211%	3,712	-	3,712
FY 2018	BPA PROGRAM	HISTORICAL	1,556,253	6.043%	94,050	-	94,050
FY 2018	ENVIRONMENT	HISTORICAL	12,129	5.778%	701	-	701
FY 2018	BPA PROGRAM	HISTORICAL	1,323,943	6.320%	83,673	-	83,673
FY 2018	BPA PROGRAM	NEW	166,326	3.160%	5,256	-	5,256
FY 2018	Float	HISTORICAL	-	-	-2,732	-	-2,732
Subtotal			**$3,110,120**	**-**	**$184,660**	**-**	**$184,660**
FY 2019	BONNEVILLE POWER ADMINISTRATION	HISTORICAL	30,102	7.210%	2,170	-	2,170
FY 2019	BPA PROGRAM	HISTORICAL	1,556,253	6.043%	94,050	3,115	97,165
FY 2019	ENVIRONMENT	HISTORICAL	12,129	5.778%	701	-	701
FY 2019	BPA PROGRAM	HISTORICAL	1,490,269	6.320%	94,185	-	94,185
FY 2019	BPA PROGRAM	NEW	169,951	3.160%	5,370	-	5,370
FY 2019	Float	HISTORICAL	-	-	-6,052	-	-6,052
Subtotal			**$3,258,704**	**-**	**$190,425**	**$3,115**	**$193,540**
FY 2020	BPA PROGRAM	HISTORICAL	1,428,197	5.986%	85,485	5,354	90,839
FY 2020	ENVIRONMENT	HISTORICAL	12,129	5.778%	701	-	701
FY 2020	BPA PROGRAM	HISTORICAL	1,660,220	6.320%	104,926	-	104,926
FY 2020	BPA PROGRAM	NEW	173,552	3.160%	5,484	-	5,484
FY 2020	Float	HISTORICAL	-	-	-5,681	-	-5,681
Subtotal			**$3,274,098**	**-**	**$190,915**	**$5,354**	**$196,269**
FY 2021	BPA PROGRAM	HISTORICAL	1,287,347	5.944%	76,514	5,504	82,019
FY 2021	ENVIRONMENT	HISTORICAL	12,129	5.778%	701	-	701
FY 2021	BPA PROGRAM	HISTORICAL	1,833,772	6.320%	115,894	-	115,894
FY 2021	BPA PROGRAM	NEW	177,062	3.160%	5,595	-	5,595
FY 2021	Float	HISTORICAL	-	-	-5,656	-	-5,656
Subtotal			**$3,310,310**	**-**	**$193,049**	**$5,504**	**$198,553**
FY 2022	BPA PROGRAM	HISTORICAL	1,148,791	5.898%	67,758	1,010	68,767
FY 2022	ENVIRONMENT	HISTORICAL	12,129	5.778%	701	-	701
FY 2022	BPA PROGRAM	HISTORICAL	2,010,834	6.320%	127,085	3,127	130,212
FY 2022	BPA PROGRAM	NEW	180,503	3.160%	5,704	-	5,704
FY 2022	Float	HISTORICAL	-	-	-5,626	-	-5,626
Subtotal			**$3,352,257**	**-**	**$195,621**	**$4,137**	**$199,758**

Table 11-2: Interest Calculation Summary ($000s) (FY 2008)

Date	Project	TYPE	Principal	Rate	Interest	Premium	Total
FY 2023	BPA PROGRAM	HISTORICAL	1,097,164	5.894%	64,662	-	64,662
FY 2023	ENVIRONMENT	HISTORICAL	5,129	5.940%	305	-	305
FY 2023	BPA PROGRAM	HISTORICAL	2,112,620	6.320%	133,518	2,515	136,033
FY 2023	BPA PROGRAM	NEW	183,943	3.160%	5,813	-	5,813
FY 2023	Float	HISTORICAL	-	-	-5,590	-	-5,590
Subtotal			**$3,398,856**	**-**	**$198,707**	**$2,515**	**$201,222**
FY 2024	BPA PROGRAM	HISTORICAL	1,032,164	5.907%	60,970	-	60,970
FY 2024	BPA PROGRAM	HISTORICAL	2,230,836	6.320%	140,989	1,859	142,848
FY 2024	BPA PROGRAM	NEW	187,246	3.160%	5,917	-	5,917
FY 2024	Float	HISTORICAL	-	-	-5,690	-	-5,690
Subtotal			**$3,450,246**	**-**	**$202,186**	**$1,859**	**$204,045**
FY 2025	BPA PROGRAM	HISTORICAL	942,164	5.925%	55,822	-	55,822
FY 2025	BPA PROGRAM	HISTORICAL	2,369,058	6.320%	149,724	1,569	151,294
FY 2025	BPA PROGRAM	NEW	190,220	3.160%	6,011	-	6,011
FY 2025	Float	HISTORICAL	-	-	-6,089	-	-6,089
Subtotal			**$3,501,442**	**-**	**$205,469**	**$1,569**	**$207,038**
FY 2026	BPA PROGRAM	HISTORICAL	830,910	5.948%	49,425	-	49,425
FY 2026	BPA PROGRAM	HISTORICAL	2,515,831	6.320%	159,000	5,292	164,292
FY 2026	BPA PROGRAM	NEW	192,822	3.160%	6,093	-	6,093
FY 2026	Float	HISTORICAL	-	-	-6,056	-	-6,056
Subtotal			**$3,539,563**	**-**	**$208,463**	**$5,292**	**$213,755**
FY 2027	BPA PROGRAM	HISTORICAL	830,910	5.948%	49,425	-	49,425
FY 2027	BPA PROGRAM	HISTORICAL	2,560,599	6.320%	161,830	5,207	167,037
FY 2027	BPA PROGRAM	NEW	195,063	3.160%	6,164	-	6,164
FY 2027	Float	HISTORICAL	-	-	-6,024	-	-6,024
Subtotal			**$3,586,572**	**-**	**$211,395**	**$5,207**	**$216,602**
FY 2028	BPA PROGRAM	HISTORICAL	830,910	5.948%	49,425	-	49,425
FY 2028	BPA PROGRAM	HISTORICAL	2,610,396	6.320%	164,977	1,185	166,162
FY 2028	BPA PROGRAM	NEW	196,971	3.160%	6,224	-	6,224
FY 2028	Float	HISTORICAL	-	-	-5,987	-	-5,987
Subtotal			**$3,638,277**	**-**	**$214,639**	**$1,185**	**$215,824**
FY 2029	BPA PROGRAM	HISTORICAL	718,610	5.986%	43,016	-	43,016
FY 2029	BPA PROGRAM	HISTORICAL	2,773,572	6.320%	175,290	4,764	180,054
FY 2029	BPA PROGRAM	NEW	198,398	3.160%	6,269	-	6,269
FY 2029	Float	HISTORICAL	-	-	-5,942	-	-5,942
Subtotal			**$3,690,580**	**-**	**$218,633**	**$4,764**	**$223,397**
FY 2030	BPA PROGRAM	HISTORICAL	718,610	5.986%	43,016	-	43,016
FY 2030	BPA PROGRAM	HISTORICAL	2,833,408	6.320%	179,071	4,627	183,699
FY 2030	BPA PROGRAM	NEW	199,491	3.160%	6,304	-	6,304
FY 2030	Float	HISTORICAL	-	-	-5,898	-	-5,898
Subtotal			**$3,751,509**	**-**	**$222,493**	**$4,627**	**$227,120**
FY 2031	BPA PROGRAM	HISTORICAL	718,610	5.986%	43,016	-	43,016
FY 2031	BPA PROGRAM	HISTORICAL	2,898,027	6.320%	183,155	936	184,091
FY 2031	BPA PROGRAM	NEW	200,228	3.160%	6,327	-	6,327
FY 2031	Float	HISTORICAL	-	-	-5,850	-	-5,850
Subtotal			**$3,816,865**	**-**	**$226,648**	**$936**	**$227,584**
FY 2032	BPA PROGRAM	HISTORICAL	612,010	5.983%	36,620	-	36,620
FY 2032	BPA PROGRAM	HISTORICAL	3,070,431	6.320%	194,051	4,117	198,168
FY 2032	BPA PROGRAM	NEW	200,720	3.160%	6,343	-	6,343
FY 2032	Float	HISTORICAL	-	-	-5,796	-	-5,796
Subtotal			**$3,883,161**	**-**	**$231,217**	**$4,117**	**$235,335**

Table 11-2: Interest Calculation Summary ($000s) (FY 2008)

Date	Project	TYPE	Principal	Rate	Interest	Premium	Total
FY 2033	BPA PROGRAM	HISTORICAL	612,010	5.983%	36,620	37	36,656
FY 2033	BPA PROGRAM	HISTORICAL	3,144,483	6.320%	198,731	1,135	199,866
FY 2033	BPA PROGRAM	NEW	200,953	3.160%	6,350	-	6,350
FY 2033	Float	HISTORICAL	-	-	-5,052	-	-5,052
Subtotal			**$3,957,446**	**-**	**$236,649**	**$1,172**	**$237,820**
FY 2034	BPA PROGRAM	HISTORICAL	552,446	6.028%	33,304	20	33,324
FY 2034	BPA PROGRAM	HISTORICAL	3,309,921	6.320%	209,187	-	209,187
FY 2034	BPA PROGRAM	NEW	200,750	3.160%	6,344	-	6,344
FY 2034	Float	HISTORICAL	-	-	-3,630	-	-3,630
Subtotal			**$4,063,117**	**-**	**$245,205**	**$20**	**$245,224**
FY 2035	BPA PROGRAM	HISTORICAL	521,355	6.056%	31,574	-	31,574
FY 2035	BPA PROGRAM	HISTORICAL	3,510,671	6.320%	221,874	-	221,874
FY 2035	BPA PROGRAM	NEW	200,456	3.160%	6,334	-	6,334
FY 2035	Float	HISTORICAL	-	-	-5,679	-	-5,679
Subtotal			**$4,232,482**	**-**	**$254,103**	**-**	**$254,103**
FY 2036	BPA PROGRAM	HISTORICAL	407,010	6.250%	25,437	-	25,437
FY 2036	BPA PROGRAM	HISTORICAL	3,711,127	6.320%	234,543	1,126	235,669
FY 2036	BPA PROGRAM	NEW	200,111	3.160%	6,324	-	6,324
FY 2036	Float	HISTORICAL	-	-	-5,601	-	-5,601
Subtotal			**$4,318,248**	**-**	**$260,703**	**$1,126**	**$261,829**
FY 2037	BPA PROGRAM	HISTORICAL	342,010	6.227%	21,297	-	21,297
FY 2037	BPA PROGRAM	HISTORICAL	3,869,666	6.320%	244,563	1,521	246,084
FY 2037	BPA PROGRAM	NEW	199,555	3.160%	6,306	-	6,306
FY 2037	Float	HISTORICAL	-	-	-5,530	-	-5,530
Subtotal			**$4,411,231**	**-**	**$266,635**	**$1,521**	**$268,157**
FY 2038	BPA PROGRAM	HISTORICAL	302,010	6.167%	18,625	-	18,625
FY 2038	BPA PROGRAM	HISTORICAL	4,009,036	6.320%	253,371	584	253,955
FY 2038	BPA PROGRAM	NEW	198,918	3.160%	6,286	-	6,286
FY 2038	Float	HISTORICAL	-	-	-5,456	-	-5,456
Subtotal			**$4,509,964**	**-**	**$272,825**	**$584**	**$273,409**
FY 2039	BPA PROGRAM	HISTORICAL	232,010	6.000%	13,921	54	13,975
FY 2039	BPA PROGRAM	HISTORICAL	4,183,091	6.320%	264,371	1,785	266,157
FY 2039	BPA PROGRAM	NEW	198,326	3.160%	6,267	-	6,267
FY 2039	Float	HISTORICAL	-	-	-5,380	-	-5,380
Subtotal			**$4,613,427**	**-**	**$279,179**	**$1,840**	**$281,019**
FY 2040	BPA PROGRAM	HISTORICAL	221,433	6.000%	13,286	280	13,566
FY 2040	BPA PROGRAM	HISTORICAL	4,304,807	6.320%	272,064	-	272,064
FY 2040	BPA PROGRAM	NEW	197,820	3.160%	6,251	-	6,251
FY 2040	Float	HISTORICAL	-	-	-5,295	-	-5,295
Subtotal			**$4,724,060**	**-**	**$286,305**	**$280**	**$286,585**
FY 2041	BPA PROGRAM	HISTORICAL	139,874	6.000%	8,392	127	8,519
FY 2041	BPA PROGRAM	HISTORICAL	4,502,627	6.320%	284,566	-	284,566
FY 2041	BPA PROGRAM	NEW	197,448	3.160%	6,239	-	6,239
FY 2041	Float	HISTORICAL	-	-	-5,204	-	-5,204
Subtotal			**$4,839,949**	**-**	**$293,994**	**$127**	**$294,120**
FY 2042	BPA PROGRAM	HISTORICAL	65,907	6.000%	3,954	-	3,954
FY 2042	BPA PROGRAM	HISTORICAL	4,700,075	6.320%	297,045	-	297,045
FY 2042	BPA PROGRAM	NEW	197,229	3.160%	6,232	-	6,232
FY 2042	Float	HISTORICAL	-	-	-5,108	-	-5,108
Subtotal			**$4,963,211**	**-**	**$302,124**	**-**	**$302,124**
FY 2043	BPA PROGRAM	HISTORICAL	4,897,304	6.320%	309,510	916	310,425
FY 2043	BPA PROGRAM	NEW	197,298	3.160%	6,235	-	6,235
FY 2043	Float	HISTORICAL	-	-	-5,006	-	-5,006
Subtotal			**$5,094,602**	**-**	**$310,738**	**$916**	**$311,654**
FY 2044	BPA PROGRAM	HISTORICAL	5,038,269	6.320%	318,419	770	319,188
FY 2044	Float	HISTORICAL	-	-	-4,885	-	-4,885
Subtotal			**$5,038,269**	**-**	**$313,533**	**$770**	**$314,303**

Table 11-2: Interest Calculation Summary ($000s) (FY 2008)

Date	Project	TYPE	Principal	Rate	Interest	Premium	Total
FY 2045	BPA PROGRAM	HISTORICAL	4,986,795	6.320%	315,165	791	315,956
FY 2045	Float	HISTORICAL	-	-	-4,924	-	-4,924
Subtotal			**$4,986,795**	**-**	**$310,242**	**$791**	**$311,032**
FY 2046	BPA PROGRAM	HISTORICAL	4,932,050	6.320%	311,706	737	312,442
FY 2046	Float	HISTORICAL	-	-	-4,965	-	-4,965
Subtotal			**$4,932,050**	**-**	**$306,741**	**$737**	**$307,478**
FY 2047	BPA PROGRAM	HISTORICAL	4,873,751	6.320%	308,021	714	308,735
FY 2047	Float	HISTORICAL	-	-	-5,008	-	-5,008
Subtotal			**$4,873,751**	**-**	**$303,013**	**$714**	**$303,727**
FY 2048	BPA PROGRAM	HISTORICAL	4,811,701	6.320%	304,100	715	304,815
FY 2048	Float	HISTORICAL	-	-	-5,055	-	-5,055
Subtotal			**$4,811,701**	**-**	**$299,045**	**$715**	**$299,760**
FY 2049	BPA PROGRAM	HISTORICAL	4,745,684	6.320%	299,927	635	300,562
FY 2049	Float	HISTORICAL	-	-	-5,104	-	-5,104
Subtotal			**$4,745,684**	**-**	**$294,823**	**$635**	**$295,458**
FY 2050	BPA PROGRAM	HISTORICAL	4,675,365	6.320%	295,483	657	296,140
FY 2050	Float	HISTORICAL	-	-	-5,157	-	-5,157
Subtotal			**$4,675,365**	**-**	**$290,327**	**$657**	**$290,983**
FY 2051	BPA PROGRAM	HISTORICAL	4,600,572	6.320%	290,756	575	291,331
FY 2051	Float	HISTORICAL	-	-	-5,212	-	-5,212
Subtotal			**$4,600,572**	**-**	**$285,544**	**$575**	**$286,119**
FY 2052	BPA PROGRAM	HISTORICAL	4,520,914	6.320%	285,722	559	286,281
FY 2052	Float	HISTORICAL	-	-	-5,272	-	-5,272
Subtotal			**$4,520,914**	**-**	**$280,450**	**$559**	**$281,009**
FY 2053	BPA PROGRAM	HISTORICAL	4,436,146	6.320%	280,364	489	280,853
FY 2053	Float	HISTORICAL	-	-	-5,335	-	-5,335
Subtotal			**$4,436,146**	**-**	**$275,029**	**$489**	**$275,518**
FY 2054	BPA PROGRAM	HISTORICAL	4,345,887	6.320%	274,660	464	275,124
FY 2054	Float	HISTORICAL	-	-	-5,403	-	-5,403
Subtotal			**$4,345,887**	**-**	**$269,257**	**$464**	**$269,721**
FY 2055	BPA PROGRAM	HISTORICAL	4,249,830	6.320%	268,589	369	268,959
FY 2055	Float	HISTORICAL	-	-	-5,475	-	-5,475
Subtotal			**$4,249,830**	**-**	**$263,115**	**$369**	**$263,484**
FY 2056	BPA PROGRAM	HISTORICAL	4,147,538	6.320%	262,124	369	262,493
FY 2056	Float	HISTORICAL	-	-	-5,551	-	-5,551
Subtotal			**$4,147,538**	**-**	**$256,573**	**$369**	**$256,942**
FY 2057	BPA PROGRAM	HISTORICAL	4,038,702	6.320%	255,246	258	255,504
FY 2057	Float	HISTORICAL	-	-	-5,632	-	-5,632
Subtotal			**$4,038,702**	**-**	**$249,614**	**$258**	**$249,872**
FY 2058	BPA PROGRAM	HISTORICAL	3,922,798	6.320%	247,921	223	248,144
FY 2058	Float	HISTORICAL	-	-	-5,719	-	-5,719
Subtotal			**$3,922,798**	**-**	**$242,202**	**$223**	**$242,425**

Table 11-2: Interest Calculation Summary ($000s) (FY 2008)

Date	Project	TYPE	Principal	Rate	Interest	Premium	Total
FY 2059	BPA PROGRAM	HISTORICAL	3,799,445	6.320%	240,125	171	240,296
FY 2059	Float	HISTORICAL	-	-	-5,811	-	-5,811
Subtotal			**$3,799,445**	**-**	**$234,314**	**$171**	**$234,485**
FY 2060	BPA PROGRAM	HISTORICAL	3,668,153	6.320%	231,827	80	231,907
FY 2060	Float	HISTORICAL	-	-	-5,909	-	-5,909
Subtotal			**$3,668,153**	**-**	**$225,918**	**$80**	**$225,998**
FY 2061	BPA PROGRAM	HISTORICAL	3,528,374	6.320%	222,993	0	222,993
FY 2061	Float	HISTORICAL	-	-	-6,014	-	-6,014
Subtotal			**$3,528,374**	**-**	**$216,979**	**$0**	**$216,980**
Grand Total			**$210,829,867**	**-**	**$12,712,650**	**$66,341**	**$12,778,991**

Table 11-3: Summary of Amortization ($000s) (FY 2008)

Project	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BONNEVILLE POWER ADMINISTRATION	93,657	30,662	31,907	52,262	53,953	137,713	45,784	990	52,135	42,622	25,276	21,367	30,102	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL APPROPRIATIONS	93,657	30,662	31,907	52,262	53,953	137,713	45,784	990	52,135	42,622	25,276	21,367	30,102	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA BORROWING	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA PROGRAM	76,643	137,119	108,480	84,932	115,000	-	-	59,050	-	-	-	-	128,056	140,849	138,556
ENVIRONMENT	-	-	20,000	30,000	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL BPA BORROWING	76,643	137,119	128,480	114,932	115,000	-	-	59,050	-	-	-	-	128,056	140,849	138,556

Table 11-3: Summary of Amortization ($000s) (FY 2008)

Project	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BONNEVILLE POWER ADMINISTRATION	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL APPROPRIATIONS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA BORROWING	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA PROGRAM	130,344	130,727	139,024	154,701	148,053	145,266	146,095	138,562	134,872	134,424	126,669	95,078	31,091	114,345
ENVIRONMENT	7,000	5,129	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL BPA BORROWING	137,344	135,856	139,024	154,701	148,053	145,266	146,095	138,562	134,872	134,424	126,669	95,078	31,091	114,345

Table 11-3: Summary of Amortization ($000s) (FY 2008)

Project	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BONNEVILLE POWER ADMINISTRATION	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL APPROPRIATIONS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA BORROWING	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA PROGRAM	106,572	100,185	94,863	87,187	81,559	73,967	65,907	56,333	51,474	54,745	58,299	62,050	66,017	70,319	74,794	79,658
ENVIRONMENT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL BPA BORROWING	106,572	100,185	94,863	87,187	81,559	73,967	65,907	56,333	51,474	54,745	58,299	62,050	66,017	70,319	74,794	79,658

Table 11-3: Summary of Amortization ($000s) (FY 2008)

Project	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	Total
	-	-	-	-	-	-	-	-	-	-	-
BONNEVILLE POWER ADMINISTRATION	-	-	-	-	-	-	-	-	-	-	618,429
	-	-	-	-	-	-	-	-	-	-	-
TOTAL APPROPRIATIONS	-	-	-	-	-	-	-	-	-	-	618,429
	-	-	-	-	-	-	-	-	-	-	-
BPA BORROWING	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
BPA PROGRAM	84,768	90,259	96,056	102,293	108,835	115,905	123,352	131,292	139,779	148,797	5,083,204
ENVIRONMENT	-	-	-	-	-	-	-	-	-	-	62,129
	-	-	-	-	-	-	-	-	-	-	-
TOTAL BPA BORROWING	84,768	90,259	96,056	102,293	108,835	115,905	123,352	131,292	139,779	148,797	5,145,333

Table 11-4: Application of Amortization ($000s) (FY 2028)

Date	Project	In Service	Due	Original Balance	Amount Available	Rate	Replace ment?	Rollover?	Amount Amortized
FY 2007	BONNEVILLE POWER ADMINISTRATION	1962	2007	19,597	19,597	6.980%	No	No	19,597
FY 2007	BONNEVILLE POWER ADMINISTRATION	1962	2007	4,877	4,877	6.980%	No	No	4,877
FY 2007	BPA PROGRAM	2004	2007	30,000	30,000	3.100%	No	No	30,000
FY 2007	BPA PROGRAM	2004	2007	46,643	46,643	2.500%	No	No	46,643
FY 2007	BONNEVILLE POWER ADMINISTRATION	1972	2017	29,326	20,056	7.290%	No	No	20,056
FY 2007	BONNEVILLE POWER ADMINISTRATION	1972	2017	21,170	8,364	7.290%	No	No	8,364
FY 2007	BONNEVILLE POWER ADMINISTRATION	1973	2018	21,656	21,656	7.280%	No	No	13,904
FY 2007	BONNEVILLE POWER ADMINISTRATION	1973	2018	16,368	16,368	7.280%	No	No	16,368
FY 2007	BONNEVILLE POWER ADMINISTRATION	1973	2018	10,491	10,491	7.280%	No	No	10,491
Subtotal		**-**	**-**	**$200,128**	**$178,052**	**-**	**No**	**No**	**$170,300**
FY 2008	BONNEVILLE POWER ADMINISTRATION	1963	2008	4,876	4,876	7.020%	No	No	4,876
FY 2008	BONNEVILLE POWER ADMINISTRATION	1963	2008	4,330	4,330	7.020%	No	No	4,330
FY 2008	BONNEVILLE POWER ADMINISTRATION	1963	2008	904	904	7.020%	No	No	904
FY 2008	BONNEVILLE POWER ADMINISTRATION	1963	2008	803	803	7.020%	No	No	803
FY 2008	BPA PROGRAM	1998	2008	75,300	75,300	6.000%	No	No	75,300
FY 2008	BPA PROGRAM	1998	2008	36,819	36,819	5.750%	No	No	36,819
FY 2008	BPA PROGRAM	2004	2008	25,000	25,000	3.800%	No	No	25,000
FY 2008	BONNEVILLE POWER ADMINISTRATION	1973	2018	33,788	33,788	7.280%	No	No	11,997
FY 2008	BONNEVILLE POWER ADMINISTRATION	1973	2018	21,656	7,752	7.280%	No	No	7,752
Subtotal		**-**	**-**	**$203,476**	**$189,572**	**-**	**No**	**No**	**$167,781**
FY 2009	BONNEVILLE POWER ADMINISTRATION	1964	2009	4,151	4,151	7.060%	No	No	4,151
FY 2009	BONNEVILLE POWER ADMINISTRATION	1964	2009	5,738	5,738	7.060%	No	No	5,738
FY 2009	BPA PROGRAM	1998	2009	72,700	72,700	6.000%	No	No	72,700
FY 2009	ENVIRONMENT	2006	2009	20,000	20,000	5.050%	No	No	20,000
FY 2009	BPA PROGRAM	2006	2009	20,000	20,000	5.050%	No	No	20,000
FY 2009	BPA PROGRAM	2005	2009	15,780	15,780	3.750%	No	No	15,780
FY 2009	BONNEVILLE POWER ADMINISTRATION	1970	2015	24,412	23,551	7.270%	No	No	227
FY 2009	BONNEVILLE POWER ADMINISTRATION	1973	2018	33,788	21,791	7.280%	No	No	21,791
Subtotal		**-**	**-**	**$196,569**	**$183,711**	**-**	**No**	**No**	**$160,387**
FY 2010	BONNEVILLE POWER ADMINISTRATION	1965	2010	3,706	3,706	7.090%	No	No	3,706
FY 2010	BONNEVILLE POWER ADMINISTRATION	1965	2010	7,248	7,248	7.090%	No	No	7,248
FY 2010	BONNEVILLE POWER ADMINISTRATION	1965	2010	5,202	5,202	7.090%	No	No	5,202
FY 2010	BONNEVILLE POWER ADMINISTRATION	1965	2010	10,171	10,171	7.090%	No	No	10,171
FY 2010	ENVIRONMENT	2001	2010	30,000	30,000	6.050%	No	No	30,000
FY 2010	BPA PROGRAM	2001	2010	59,932	59,932	6.050%	No	No	59,932
FY 2010	BPA PROGRAM	2006	2010	5,000	5,000	4.950%	No	No	5,000
FY 2010	BPA PROGRAM	2006	2010	20,000	20,000	4.950%	No	No	20,000
FY 2010	BONNEVILLE POWER ADMINISTRATION	1970	2015	7,995	7,995	7.270%	No	No	2,611
FY 2010	BONNEVILLE POWER ADMINISTRATION	1970	2015	24,412	23,324	7.270%	No	No	23,324
Subtotal		**-**	**-**	**$173,666**	**$172,578**	**-**	**No**	**No**	**$167,194**
FY 2011	BONNEVILLE POWER ADMINISTRATION	1966	2011	11,830	11,830	7.130%	No	No	11,830
FY 2011	BONNEVILLE POWER ADMINISTRATION	1966	2011	3,049	3,049	7.130%	No	No	3,049
FY 2011	BONNEVILLE POWER ADMINISTRATION	1966	2011	6,647	6,353	7.130%	No	No	6,353
FY 2011	BPA PROGRAM	1998	2011	40,000	40,000	6.200%	No	No	40,000
FY 2011	BPA PROGRAM	2001	2011	25,000	25,000	5.950%	No	No	25,000
FY 2011	BPA PROGRAM	2001	2011	50,000	50,000	5.750%	No	No	50,000
FY 2011	BONNEVILLE POWER ADMINISTRATION	1970	2015	64,977	64,977	7.270%	No	No	27,337
FY 2011	BONNEVILLE POWER ADMINISTRATION	1970	2015	7,995	5,384	7.270%	No	No	5,384
Subtotal		**-**	**-**	**$209,498**	**$206,593**	**-**	**No**	**No**	**$168,953**
FY 2012	BONNEVILLE POWER ADMINISTRATION	1967	2012	19,003	19,003	7.160%	No	No	19,003
FY 2012	BONNEVILLE POWER ADMINISTRATION	1967	2012	4,566	355	7.160%	No	No	355
FY 2012	BONNEVILLE POWER ADMINISTRATION	1970	2015	64,977	37,640	7.270%	No	No	37,640
FY 2012	BONNEVILLE POWER ADMINISTRATION	1974	2019	12,079	12,079	7.270%	No	No	12,079
FY 2012	BONNEVILLE POWER ADMINISTRATION	1974	2019	20,984	20,984	7.270%	No	No	20,984
FY 2012	BONNEVILLE POWER ADMINISTRATION	1974	2019	12,563	12,563	7.270%	No	No	12,563
FY 2012	BONNEVILLE POWER ADMINISTRATION	1974	2019	21,826	21,826	7.270%	No	No	21,826
FY 2012	BONNEVILLE POWER ADMINISTRATION	1975	2020	17,158	17,158	7.250%	No	No	1,521
FY 2012	BONNEVILLE POWER ADMINISTRATION	1975	2020	11,742	11,742	7.250%	No	No	11,742
Subtotal		**-**	**-**	**$184,898**	**$153,350**	**-**	**No**	**No**	**$137,713**

Table 11-4: Application of Amortization ($000s) (FY 2028)

Date	Project	In Service	Due	Original Balance	Amount Available	Rate	Replacement?	Rollover?	Amount Amortized
FY 2013	BONNEVILLE POWER ADMINISTRATION	1968	2013	41,070	18,250	7.200%	No	No	18,250
FY 2013	BONNEVILLE POWER ADMINISTRATION	1969	2014	42,237	19,198	7.230%	No	No	18,208
FY 2013	BONNEVILLE POWER ADMINISTRATION	1975	2020	17,158	15,637	7.250%	No	No	9,326
Subtotal		-	-	**$100,465**	**$53,085**	-	**No**	**No**	**$45,784**
FY 2014	BONNEVILLE POWER ADMINISTRATION	1969	2014	42,237	990	7.230%	No	No	990
FY 2014	BPA PROGRAM	1999	2014	59,050	59,050	5.900%	No	No	59,050
Subtotal		-	-	**$101,287**	**$60,040**	-	**No**	**No**	**$60,040**
FY 2015	BONNEVILLE POWER ADMINISTRATION	1975	2020	32,026	32,026	7.250%	No	No	23,907
FY 2015	BONNEVILLE POWER ADMINISTRATION	1975	2020	21,916	21,916	7.250%	No	No	21,916
FY 2015	BONNEVILLE POWER ADMINISTRATION	1975	2020	17,158	6,311	7.250%	No	No	6,311
Subtotal		-	-	**$71,100**	**$60,253**	-	**No**	**No**	**$52,135**
FY 2016	BONNEVILLE POWER ADMINISTRATION	1975	2020	32,026	8,119	7.250%	No	No	8,119
FY 2016	BONNEVILLE POWER ADMINISTRATION	1976	2021	61,025	61,025	7.230%	No	No	32,291
FY 2016	BONNEVILLE POWER ADMINISTRATION	1976	2021	2,212	2,212	7.230%	No	No	2,212
Subtotal		-	-	**$95,263**	**$71,356**	-	**No**	**No**	**$42,622**
FY 2017	BONNEVILLE POWER ADMINISTRATION	1976	2021	61,025	28,734	7.230%	No	No	25,276
Subtotal		-	-	**$61,025**	**$28,734**	-	**No**	**No**	**$25,276**
FY 2018	BONNEVILLE POWER ADMINISTRATION	1976	2021	61,025	3,458	7.230%	No	No	3,458
FY 2018	BONNEVILLE POWER ADMINISTRATION	1977	2022	33,702	33,702	7.210%	No	No	12,928
FY 2018	BONNEVILLE POWER ADMINISTRATION	1977	2022	4,981	4,981	7.210%	No	No	4,981
Subtotal		-	-	**$99,708**	**$42,141**	-	**No**	**No**	**$21,367**
FY 2019	BONNEVILLE POWER ADMINISTRATION	1977	2022	3,948	3,948	7.210%	No	No	3,948
FY 2019	BONNEVILLE POWER ADMINISTRATION	1977	2022	5,380	5,380	7.210%	No	No	5,380
FY 2019	BONNEVILLE POWER ADMINISTRATION	1977	2022	33,702	20,774	7.210%	No	No	20,774
FY 2019	BPA PROGRAM	1998	2028	50,000	50,000	6.650%	No	No	29,156
FY 2019	BPA PROGRAM	1998	2032	98,900	98,900	6.700%	No	No	98,900
Subtotal		-	-	**$191,930**	**$179,002**	-	**No**	**No**	**$158,158**
FY 2020	BONNEVILLE POWER ADMINISTRATION	1975	2020	32,026	0	7.250%	No	No	0
FY 2020	BONNEVILLE POWER ADMINISTRATION	1975	2020	17,158	-0	7.250%	No	No	-0
FY 2020	BPA PROGRAM	1998	2028	50,000	20,844	6.650%	No	No	20,844
FY 2020	BPA PROGRAM	2008	2043	285,189	285,189	6.320%	No	No	120,006
Subtotal		-	-	**$384,373**	**$306,033**	-	**No**	**No**	**$140,849**
FY 2021	BONNEVILLE POWER ADMINISTRATION	1976	2021	61,025	-0	7.230%	No	No	-0
FY 2021	BPA PROGRAM	2008	2043	285,189	165,183	6.320%	No	No	138,556
Subtotal		-	-	**$346,214**	**$165,183**	-	**No**	**No**	**$138,556**
FY 2022	ENVIRONMENT	2007	2022	7,000	7,000	5.660%	No	No	7,000
FY 2022	BPA PROGRAM	2003	2022	25,000	25,000	5.650%	No	Yes	25,000
FY 2022	BPA PROGRAM	2008	2043	285,189	26,627	6.320%	No	No	26,627
FY 2022	BPA PROGRAM	2009	2044	131,758	131,758	6.320%	Yes	No	78,717
Subtotal		-	-	**$448,947**	**$190,385**	-	**Yes**	**Yes**	**$137,344**
FY 2023	ENVIRONMENT	2008	2023	5,129	5,129	5.940%	No	No	5,129
FY 2023	BPA PROGRAM	2004	2023	65,000	65,000	5.680%	No	Yes	65,000
FY 2023	BPA PROGRAM	2009	2044	131,758	53,041	6.320%	Yes	No	53,041
FY 2023	BPA PROGRAM	2010	2045	135,676	135,676	6.320%	Yes	No	12,686
Subtotal		-	-	**$337,563**	**$258,846**	-	**Yes**	**Yes**	**$135,856**
FY 2024	BPA PROGRAM	2003	2024	40,000	40,000	5.720%	No	Yes	40,000
FY 2024	BPA PROGRAM	2004	2024	50,000	50,000	5.720%	No	Yes	50,000
FY 2024	BPA PROGRAM	2010	2045	135,676	122,990	6.320%	Yes	No	49,024
Subtotal		-	-	**$225,676**	**$212,990**	-	**Yes**	**Yes**	**$139,024**
FY 2025	BPA PROGRAM	1997	2025	111,254	111,254	5.750%	No	Yes	111,254
FY 2025	BPA PROGRAM	2010	2045	135,676	73,966	6.320%	Yes	No	43,447
Subtotal		-	-	**$246,930**	**$185,220**	-	**Yes**	**Yes**	**$154,701**

Table 11-4: Application of Amortization ($000s) (FY 2028)

Date	Project	In Service	Due	Original Balance	Amount Available	Rate	Replacement?	Rollover?	Amount Amortized
FY 2026	BPA PROGRAM	2010	2045	135,676	30,519	6.320%	Yes	No	30,519
FY 2026	BPA PROGRAM	2011	2046	139,414	139,414	6.320%	Yes	No	117,535
Subtotal		-	-	**$275,090**	**$169,933**	-	**Yes**	**No**	**$148,053**
FY 2027	BPA PROGRAM	2011	2046	139,414	21,879	6.320%	Yes	No	21,879
FY 2027	BPA PROGRAM	2012	2047	143,127	143,127	6.320%	Yes	No	123,387
Subtotal		-	-	**$282,541**	**$165,006**	-	**Yes**	**No**	**$145,266**
FY 2028	BPA PROGRAM	1998	2028	112,300	112,300	5.850%	No	No	112,300
FY 2028	BPA PROGRAM	2012	2047	143,127	19,740	6.320%	Yes	No	19,740
FY 2028	BPA PROGRAM	2013	2048	146,922	146,922	6.320%	Yes	No	14,055
Subtotal		-	-	**$402,349**	**$278,962**	-	**Yes**	**No**	**$146,095**
FY 2029	BPA PROGRAM	2013	2048	146,922	132,867	6.320%	Yes	No	132,867
FY 2029	BPA PROGRAM	2014	2049	150,857	150,857	6.320%	Yes	No	5,695
Subtotal		-	-	**$297,779**	**$283,724**	-	**Yes**	**No**	**$138,562**
FY 2030	BPA PROGRAM	2014	2049	150,857	145,162	6.320%	Yes	No	134,872
Subtotal		-	-	**$150,857**	**$145,162**	-	**Yes**	**No**	**$134,872**
FY 2031	BPA PROGRAM	1998	2031	106,600	106,600	6.000%	No	Yes	106,600
FY 2031	BPA PROGRAM	2014	2049	150,857	10,290	6.320%	Yes	No	10,290
FY 2031	BPA PROGRAM	2015	2050	154,791	154,791	6.320%	Yes	No	17,534
Subtotal		-	-	**$412,248**	**$271,681**	-	**Yes**	**Yes**	**$134,424**
FY 2032	BPA PROGRAM	2015	2050	154,791	137,257	6.320%	Yes	No	126,669
Subtotal		-	-	**$154,791**	**$137,257**	-	**Yes**	**No**	**$126,669**
FY 2033	BPA PROGRAM	2003	2033	40,000	40,000	5.550%	No	No	40,000
FY 2033	BPA PROGRAM	2004	2034	40,000	40,000	5.600%	No	No	19,564
FY 2033	BPA PROGRAM	2015	2050	154,791	10,589	6.320%	Yes	No	10,589
FY 2033	BPA PROGRAM	2016	2051	158,743	158,743	6.320%	Yes	No	24,926
Subtotal		-	-	**$393,534**	**$249,332**	-	**Yes**	**No**	**$95,078**
FY 2034	BPA PROGRAM	2004	2034	40,000	20,436	5.600%	No	No	20,436
FY 2034	BPA PROGRAM	2005	2035	40,000	40,000	5.500%	No	No	10,655
Subtotal		-	-	**$80,000**	**$60,436**	-	**No**	**No**	**$31,091**
FY 2035	BPA PROGRAM	2005	2035	40,000	29,345	5.500%	No	No	29,345
FY 2035	BPA PROGRAM	2005	2035	40,000	40,000	5.400%	No	No	40,000
FY 2035	BPA PROGRAM	2005	2035	45,000	45,000	5.250%	No	No	45,000
Subtotal		-	-	**$125,000**	**$114,345**	-	**No**	**No**	**$114,345**
FY 2036	BPA PROGRAM	2004	2036	65,000	65,000	6.370%	No	Yes	65,000
FY 2036	BPA PROGRAM	2016	2051	158,743	133,817	6.320%	Yes	No	41,572
Subtotal		-	-	**$223,743**	**$198,817**	-	**Yes**	**Yes**	**$106,572**
FY 2037	BPA PROGRAM	2005	2037	40,000	40,000	6.680%	No	Yes	40,000
FY 2037	BPA PROGRAM	2016	2051	158,743	92,245	6.320%	Yes	No	60,185
Subtotal		-	-	**$198,743**	**$132,245**	-	**Yes**	**Yes**	**$100,185**
FY 2038	BPA PROGRAM	2006	2038	70,000	70,000	6.720%	No	Yes	70,000
FY 2038	BPA PROGRAM	2016	2051	158,743	32,060	6.320%	Yes	No	24,863
Subtotal		-	-	**$228,743**	**$102,060**	-	**Yes**	**Yes**	**$94,863**
FY 2039	BPA PROGRAM	2007	2042	232,010	232,010	6.000%	No	No	10,577
FY 2039	BPA PROGRAM	2016	2051	158,743	7,197	6.320%	Yes	No	7,197
FY 2039	BPA PROGRAM	2017	2052	162,655	162,655	6.320%	Yes	No	69,413
Subtotal		-	-	**$553,408**	**$401,862**	-	**Yes**	**No**	**$87,187**
FY 2040	BPA PROGRAM	2007	2042	232,010	221,433	6.000%	No	No	81,559
Subtotal		-	-	**$232,010**	**$221,433**	-	**No**	**No**	**$81,559**
FY 2041	BPA PROGRAM	2007	2042	232,010	139,874	6.000%	No	No	73,967
Subtotal		-	-	**$232,010**	**$139,874**	-	**No**	**No**	**$73,967**

Table 11-4: Application of Amortization ($000s) (FY 2028)

Date	Project	In Service	Due	Original Balance	Amount Available	Rate	Replacement?	Rollover?	Amount Amortized
FY 2042	BPA PROGRAM	2007	2042	232,010	65,907	6.000%	No	No	65,907
Subtotal		-	-	**$232,010**	**$65,907**	-	**No**	**No**	**$65,907**
FY 2043	BPA PROGRAM	2008	2043	285,189	-0	6.320%	No	No	-0
FY 2043	BPA PROGRAM	2017	2052	162,655	93,242	6.320%	Yes	No	56,333
Subtotal		-	-	**$447,844**	**$93,242**	-	**Yes**	**No**	**$56,333**
FY 2044	BPA PROGRAM	2017	2052	162,655	36,909	6.320%	Yes	No	36,909
FY 2044	BPA PROGRAM	2018	2053	166,326	166,326	6.320%	Yes	No	14,565
Subtotal		-	-	**$328,981**	**$203,235**	-	**Yes**	**No**	**$51,474**
FY 2045	BPA PROGRAM	2010	2045	135,676	-0	6.320%	Yes	No	-0
FY 2045	BPA PROGRAM	2018	2053	166,326	151,761	6.320%	Yes	No	54,745
Subtotal		-	-	**$302,002**	**$151,761**	-	**Yes**	**No**	**$54,745**
FY 2046	BPA PROGRAM	2018	2053	166,326	97,016	6.320%	Yes	No	58,299
Subtotal		-	-	**$166,326**	**$97,016**	-	**Yes**	**No**	**$58,299**
FY 2047	BPA PROGRAM	2012	2047	143,127	0	6.320%	Yes	No	0
FY 2047	BPA PROGRAM	2018	2053	166,326	38,717	6.320%	Yes	No	38,717
FY 2047	BPA PROGRAM	2019	2054	169,951	169,951	6.320%	Yes	No	23,333
Subtotal		-	-	**$479,404**	**$208,668**	-	**Yes**	**No**	**$62,050**
FY 2048	BPA PROGRAM	2019	2054	169,951	146,618	6.320%	Yes	No	66,017
Subtotal		-	-	**$169,951**	**$146,618**	-	**Yes**	**No**	**$66,017**
FY 2049	BPA PROGRAM	2014	2049	150,857	-0	6.320%	Yes	No	-0
FY 2049	BPA PROGRAM	2019	2054	169,951	80,601	6.320%	Yes	No	70,319
Subtotal		-	-	**$320,808**	**$80,601**	-	**Yes**	**No**	**$70,319**
FY 2050	BPA PROGRAM	2015	2050	154,791	-0	6.320%	Yes	No	-0
FY 2050	BPA PROGRAM	2019	2054	169,951	10,282	6.320%	Yes	No	10,282
FY 2050	BPA PROGRAM	2020	2055	173,552	173,552	6.320%	Yes	No	64,511
Subtotal		-	-	**$498,294**	**$183,834**	-	**Yes**	**No**	**$74,794**
FY 2051	BPA PROGRAM	2016	2051	158,743	-0	6.320%	Yes	No	-0
FY 2051	BPA PROGRAM	2020	2055	173,552	109,041	6.320%	Yes	No	79,658
Subtotal		-	-	**$332,295**	**$109,041**	-	**Yes**	**No**	**$79,658**
FY 2052	BPA PROGRAM	2020	2055	173,552	29,383	6.320%	Yes	No	29,383
FY 2052	BPA PROGRAM	2021	2056	177,062	177,062	6.320%	Yes	No	55,385
Subtotal		-	-	**$350,614**	**$206,445**	-	**Yes**	**No**	**$84,768**
FY 2053	BPA PROGRAM	2021	2056	177,062	121,677	6.320%	Yes	No	90,259
Subtotal		-	-	**$177,062**	**$121,677**	-	**Yes**	**No**	**$90,259**
FY 2054	BPA PROGRAM	2019	2054	169,951	-0	6.320%	Yes	No	-0
FY 2054	BPA PROGRAM	2021	2056	177,062	31,418	6.320%	Yes	No	31,418
FY 2054	BPA PROGRAM	2022	2057	180,503	180,503	6.320%	Yes	No	64,639
Subtotal		-	-	**$527,516**	**$211,921**	-	**Yes**	**No**	**$96,056**
FY 2055	BPA PROGRAM	2022	2057	180,503	115,864	6.320%	Yes	No	102,293
Subtotal		-	-	**$180,503**	**$115,864**	-	**Yes**	**No**	**$102,293**
FY 2056	BPA PROGRAM	2021	2056	177,062	-0	6.320%	Yes	No	-0
FY 2056	BPA PROGRAM	2022	2057	180,503	13,572	6.320%	Yes	No	13,572
FY 2056	BPA PROGRAM	2023	2058	183,943	183,943	6.320%	Yes	No	95,264
Subtotal		-	-	**$541,508**	**$197,515**	-	**Yes**	**No**	**$108,835**
FY 2057	BPA PROGRAM	2022	2057	180,503	0	6.320%	Yes	No	0
FY 2057	BPA PROGRAM	2023	2058	183,943	88,679	6.320%	Yes	No	88,679
FY 2057	BPA PROGRAM	2024	2059	187,246	187,246	6.320%	Yes	No	27,225
Subtotal		-	-	**$551,692**	**$275,925**	-	**Yes**	**No**	**$115,905**
FY 2058	BPA PROGRAM	2024	2059	187,246	160,021	6.320%	Yes	No	123,352
Subtotal		-	-	**$187,246**	**$160,021**	-	**Yes**	**No**	**$123,352**

Table 11-4: Application of Amortization ($000s) (FY 2028)

Date	Project	In Service	Due	Original Balance	Amount Available	Rate	Replacement?	Rollover?	Amount Amortized
FY 2059	BPA PROGRAM	2024	2059	187,246	36,668	6.320%	Yes	No	36,668
FY 2059	BPA PROGRAM	2025	2060	190,220	190,220	6.320%	Yes	No	94,624
Subtotal		**-**	**-**	**$377,466**	**$226,888**	**-**	**Yes**	**No**	**$131,292**
FY 2060	BPA PROGRAM	2025	2060	190,220	95,596	6.320%	Yes	No	95,596
FY 2060	BPA PROGRAM	2026	2061	192,822	192,822	6.320%	Yes	No	44,183
Subtotal		**-**	**-**	**$383,042**	**$288,418**	**-**	**Yes**	**No**	**$139,779**
FY 2061	BPA PROGRAM	2026	2061	192,822	148,639	6.320%	Yes	No	148,639
FY 2061	BPA PROGRAM	2027	2062	195,063	195,063	6.320%	Yes	No	159
Subtotal		**-**	**-**	**$387,885**	**$343,702**	**-**	**Yes**	**No**	**$148,797**
Grand Total		**-**	**-**	**$15,064,011**	**$9,457,550**	**-**	**Yes**	**Yes**	**$5,763,762**

Table 11-5: Summary of Interest ($000s) (FY 2009)

Project	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
BONNEVILLE POWER														
ADMINISTRATION	44,665	37,918	35,714	32,521	28,078	23,491	12,812	8,803	8,031	3,559	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL APPROPRIATIONS	44,665	37,918	35,714	32,521	28,078	23,491	12,812	8,803	8,031	3,559	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA BORROWING	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA PROGRAM	91,935	109,523	121,776	131,039	135,486	138,205	148,016	158,081	164,919	175,499	186,139	194,947	204,262	204,968
ENVIRONMENT	3,023	3,374	3,696	2,855	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040
PREMIUMS	-	-	-	-	-	-	-	-	-	92	1,005	829	7,049	6,774
(LESS INTEREST INCOME)	-6,119	-6,162	-6,365	-6,407	-6,377	-5,583	-3,327	-3,682	-3,562	-3,362	-3,003	-3,010	-6,345	-5,993
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL BPA BORROWING	88,839	106,734	119,107	127,487	130,149	133,662	145,729	155,439	162,398	173,269	185,182	193,806	206,006	206,789
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS	133,505	144,651	154,821	160,008	158,227	157,153	158,541	164,243	170,429	176,827	185,182	193,806	206,006	206,789

Table 11-5: Summary of Interest ($000s) (FY 2009)

Project	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
BONNEVILLE POWER ADMINISTRATION	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL APPROPRIATIONS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA BORROWING	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA PROGRAM	206,952	209,296	212,633	216,525	220,615	223,675	226,411	229,445	233,409	237,085	241,052	245,714	250,282	257,385
ENVIRONMENT	1,040	1,040	644	340	-	-	-	-	-	-	-	-	-	-
PREMIUMS	6,700	5,155	3,364	2,279	2,221	6,562	6,227	0	5,876	5,702	1,467	5,134	2,380	2
(LESS INTEREST INCOME)	-5,970	-5,943	-5,908	-6,008	-6,406	-6,372	-6,341	-6,307	-6,261	-6,219	-6,173	-6,117	-5,375	-3,953
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL BPA BORROWING	208,723	209,548	210,734	213,136	216,430	223,865	226,296	223,138	233,024	236,568	236,347	244,731	247,288	253,435
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS	208,723	209,548	210,734	213,136	216,430	223,865	226,296	223,138	233,024	236,568	236,347	244,731	247,288	253,435

Table 11-5: Summary of Interest ($000s) (FY 2009)

Project	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049
BONNEVILLE POWER															
ADMINISTRATION	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL APPROPRIATIONS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA BORROWING	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA PROGRAM	268,608	275,435	281,430	287,748	294,267	301,476	309,343	317,704	326,563	335,776	338,832	335,586	332,120	328,417	324,467
ENVIRONMENT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PREMIUMS	-	1,478	756	305	699	334	140	-	-	925	834	792	741	760	723
(LESS INTEREST INCOME)	-5,999	-5,917	-5,844	-5,768	-5,689	-5,602	-5,508	-5,407	-5,301	-5,192	-5,065	-5,103	-5,144	-5,188	-5,234
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL BPA BORROWING	262,609	270,996	276,342	282,285	289,277	296,208	303,976	312,297	321,262	331,509	334,602	331,276	327,716	323,989	319,956
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS	262,609	270,996	276,342	282,285	289,277	296,208	303,976	312,297	321,262	331,509	334,602	331,276	327,716	323,989	319,956

Table 11-5: Summary of Interest ($000s) (FY 2009)

Project	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	Total
BONNEVILLE POWER													
ADMINISTRATION	-	-	-	-	-	-	-	-	-	-	-	-	235,590
	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL APPROPRIATIONS	-	-	-	-	-	-	-	-	-	-	-	-	235,590
	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA BORROWING	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA PROGRAM	320,250	315,745	310,940	305,806	300,327	294,475	288,228	281,558	274,436	266,830	258,713	250,044	13,500,398
ENVIRONMENT	-	-	-	-	-	-	-	-	-	-	-	-	26,417
PREMIUMS	644	684	587	567	502	453	381	340	217	225	107	1	82,012
(LESS INTEREST INCOME)	-5,284	-5,338	-5,394	-5,455	-5,520	-5,589	-5,663	-5,742	-5,826	-5,916	-6,012	-6,115	-302,465
	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL BPA BORROWING	315,609	311,091	306,132	300,918	295,308	289,339	282,947	276,155	268,828	261,139	252,808	243,930	13,306,362
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS	315,609	311,091	306,132	300,918	295,308	289,339	282,947	276,155	268,828	261,139	252,808	243,930	13,541,952

Table 11-6: Interest Calculation Summary ($000s) (FY 2009)

Date	Project	TYPE	Principal	Rate	Interest	Premium	Total
FY 2007	BONNEVILLE POWER ADMINISTRATION	HISTORICAL	618,429	7.222%	44,665	-	44,665
FY 2007	BPA PROGRAM	HISTORICAL	1,620,278	5.244%	84,975	-	84,975
FY 2007	BPA PROGRAM	NEW	232,010	3.000%	6,960	-	6,960
FY 2007	ENVIRONMENT	HISTORICAL	50,000	5.650%	2,825	-	2,825
FY 2007	ENVIRONMENT	NEW	7,000	2.830%	198	-	198
FY 2007	Float	HISTORICAL	-	-	-6,119	-	-6,119
Subtotal			**$2,527,717**	**-**	**$133,505**	**-**	**$133,505**
FY 2008	BONNEVILLE POWER ADMINISTRATION	HISTORICAL	524,772	7.226%	37,918	-	37,918
FY 2008	BPA PROGRAM	HISTORICAL	1,775,645	5.661%	100,511	-	100,511
FY 2008	BPA PROGRAM	NEW	285,189	3.160%	9,012	-	9,012
FY 2008	ENVIRONMENT	HISTORICAL	57,000	5.651%	3,221	-	3,221
FY 2008	ENVIRONMENT	NEW	5,129	2.970%	152	-	152
FY 2008	Float	HISTORICAL	-	-	-6,162	-	-6,162
Subtotal			**$2,647,735**	**-**	**$144,651**	**-**	**$144,651**
FY 2009	BONNEVILLE POWER ADMINISTRATION	HISTORICAL	494,110	7.228%	35,714	-	35,714
FY 2009	BPA PROGRAM	HISTORICAL	1,923,715	5.883%	113,173	-	113,173
FY 2009	BPA PROGRAM	NEW	259,531	3.315%	8,603	-	8,603
FY 2009	ENVIRONMENT	HISTORICAL	62,129	5.675%	3,526	-	3,526
FY 2009	ENVIRONMENT	NEW	5,451	3.115%	170	-	170
FY 2009	Float	HISTORICAL	-	-	-6,365	-	-6,365
Subtotal			**$2,744,936**	**-**	**$154,821**	**-**	**$154,821**
FY 2010	BONNEVILLE POWER ADMINISTRATION	HISTORICAL	449,931	7.228%	32,521	-	32,521
FY 2010	BPA PROGRAM	HISTORICAL	2,074,766	6.095%	126,447	-	126,447
FY 2010	ENVIRONMENT	HISTORICAL	47,580	6.001%	2,855	-	2,855
FY 2010	BPA PROGRAM	NEW	138,518	3.315%	4,592	-	4,592
FY 2010	Float	HISTORICAL	-	-	-6,407	-	-6,407
Subtotal			**$2,710,795**	**-**	**$160,008**	**-**	**$160,008**
FY 2011	BONNEVILLE POWER ADMINISTRATION	HISTORICAL	388,175	7.233%	28,078	-	28,078
FY 2011	BPA PROGRAM	HISTORICAL	1,989,834	6.110%	121,583	-	121,583
FY 2011	ENVIRONMENT	HISTORICAL	17,580	5.918%	1,040	-	1,040
FY 2011	BPA PROGRAM	HISTORICAL	138,518	6.630%	9,184	-	9,184
FY 2011	BPA PROGRAM	NEW	142,344	3.315%	4,719	-	4,719
FY 2011	Float	HISTORICAL	-	-	-6,377	-	-6,377
Subtotal			**$2,676,451**	**-**	**$158,227**	**-**	**$158,227**
FY 2012	BONNEVILLE POWER ADMINISTRATION	HISTORICAL	324,662	7.235%	23,491	-	23,491
FY 2012	BPA PROGRAM	HISTORICAL	1,874,834	6.120%	114,741	-	114,741
FY 2012	ENVIRONMENT	HISTORICAL	17,580	5.918%	1,040	-	1,040
FY 2012	BPA PROGRAM	HISTORICAL	280,862	6.630%	18,621	-	18,621
FY 2012	BPA PROGRAM	NEW	146,082	3.315%	4,843	-	4,843
FY 2012	Float	HISTORICAL	-	-	-5,583	-	-5,583
Subtotal			**$2,644,020**	**-**	**$157,153**	**-**	**$157,153**
FY 2013	BONNEVILLE POWER ADMINISTRATION	HISTORICAL	177,334	7.225%	12,812	-	12,812
FY 2013	BPA PROGRAM	HISTORICAL	1,874,834	6.120%	114,741	-	114,741
FY 2013	ENVIRONMENT	HISTORICAL	17,580	5.918%	1,040	-	1,040
FY 2013	BPA PROGRAM	HISTORICAL	426,944	6.630%	28,306	-	28,306
FY 2013	BPA PROGRAM	NEW	149,873	3.315%	4,968	-	4,968
FY 2013	Float	HISTORICAL	-	-	-3,327	-	-3,327
Subtotal			**$2,646,565**	**-**	**$158,541**	**-**	**$158,541**

Table 11-6: Interest Calculation Summary ($000s) (FY 2009)

Date	Project	TYPE	Principal	Rate	Interest	Premium	Total
FY 2014	BONNEVILLE POWER ADMINISTRATION	HISTORICAL	121,896	7.222%	8,803	-	8,803
FY 2014	BPA PROGRAM	HISTORICAL	1,874,834	6.120%	114,741	-	114,741
FY 2014	ENVIRONMENT	HISTORICAL	17,580	5.918%	1,040	-	1,040
FY 2014	BPA PROGRAM	HISTORICAL	576,817	6.630%	38,243	-	38,243
FY 2014	BPA PROGRAM	NEW	153,759	3.315%	5,097	-	5,097
FY 2014	Float	HISTORICAL	-	-	-3,682	-	-3,682
Subtotal			**$2,744,886**	**-**	**$164,243**	**-**	**$164,243**
FY 2015	BONNEVILLE POWER ADMINISTRATION	HISTORICAL	111,210	7.221%	8,031	-	8,031
FY 2015	BPA PROGRAM	HISTORICAL	1,815,784	6.127%	111,257	-	111,257
FY 2015	ENVIRONMENT	HISTORICAL	17,580	5.918%	1,040	-	1,040
FY 2015	BPA PROGRAM	HISTORICAL	730,576	6.630%	48,437	-	48,437
FY 2015	BPA PROGRAM	NEW	157,625	3.315%	5,225	-	5,225
FY 2015	Float	HISTORICAL	-	-	-3,562	-	-3,562
Subtotal			**$2,832,775**	**-**	**$170,429**	**-**	**$170,429**
FY 2016	BONNEVILLE POWER ADMINISTRATION	HISTORICAL	49,352	7.211%	3,559	-	3,559
FY 2016	BPA PROGRAM	HISTORICAL	1,815,784	6.127%	111,257	92	111,349
FY 2016	ENVIRONMENT	HISTORICAL	17,580	5.918%	1,040	-	1,040
FY 2016	BPA PROGRAM	HISTORICAL	888,201	6.630%	58,888	-	58,888
FY 2016	BPA PROGRAM	NEW	161,504	3.315%	5,354	-	5,354
FY 2016	Float	HISTORICAL	-	-	-3,362	-	-3,362
Subtotal			**$2,932,421**	**-**	**$176,735**	**$92**	**$176,827**
FY 2017	BPA PROGRAM	HISTORICAL	1,812,869	6.126%	111,062	1,005	112,067
FY 2017	ENVIRONMENT	HISTORICAL	17,580	5.918%	1,040	-	1,040
FY 2017	BPA PROGRAM	HISTORICAL	1,049,705	6.630%	69,595	-	69,595
FY 2017	BPA PROGRAM	NEW	165,366	3.315%	5,482	-	5,482
FY 2017	Float	HISTORICAL	-	-	-3,003	-	-3,003
Subtotal			**$3,045,520**	**-**	**$184,177**	**$1,005**	**$185,182**
FY 2018	BPA PROGRAM	HISTORICAL	1,778,872	6.115%	108,784	829	109,613
FY 2018	ENVIRONMENT	HISTORICAL	17,580	5.918%	1,040	-	1,040
FY 2018	BPA PROGRAM	HISTORICAL	1,215,071	6.630%	80,559	-	80,559
FY 2018	BPA PROGRAM	NEW	169,032	3.315%	5,603	-	5,603
FY 2018	Float	HISTORICAL	-	-	-3,010	-	-3,010
Subtotal			**$3,180,555**	**-**	**$192,977**	**$829**	**$193,806**
FY 2019	BPA PROGRAM	HISTORICAL	1,748,828	6.105%	106,771	7,049	113,820
FY 2019	ENVIRONMENT	HISTORICAL	17,580	5.918%	1,040	-	1,040
FY 2019	BPA PROGRAM	HISTORICAL	1,384,103	6.630%	91,766	-	91,766
FY 2019	BPA PROGRAM	NEW	172,691	3.315%	5,725	-	5,725
FY 2019	Float	HISTORICAL	-	-	-6,345	-	-6,345
Subtotal			**$3,323,202**	**-**	**$198,957**	**$7,049**	**$206,006**
FY 2020	BPA PROGRAM	HISTORICAL	1,585,313	6.050%	95,908	5,817	101,725
FY 2020	ENVIRONMENT	HISTORICAL	17,580	5.918%	1,040	-	1,040
FY 2020	BPA PROGRAM	HISTORICAL	1,556,794	6.630%	103,215	956	104,172
FY 2020	BPA PROGRAM	NEW	176,324	3.315%	5,845	-	5,845
FY 2020	Float	HISTORICAL	-	-	-5,993	-	-5,993
Subtotal			**$3,336,011**	**-**	**$200,016**	**$6,774**	**$206,789**
FY 2021	BPA PROGRAM	HISTORICAL	1,457,353	5.999%	87,424	-	87,424
FY 2021	ENVIRONMENT	HISTORICAL	17,580	5.918%	1,040	-	1,040
FY 2021	BPA PROGRAM	HISTORICAL	1,712,925	6.630%	113,567	6,700	120,267
FY 2021	BPA PROGRAM	NEW	179,835	3.315%	5,962	-	5,962
FY 2021	Float	HISTORICAL	-	-	-5,970	-	-5,970
Subtotal			**$3,367,693**	**-**	**$202,023**	**$6,700**	**$208,723**

Table 11-6: Interest Calculation Summary ($000s) (FY 2009)

Date	Project	TYPE	Principal	Rate	Interest	Premium	Total
FY 2022	BPA PROGRAM	HISTORICAL	1,457,353	5.999%	87,424	-	87,424
FY 2022	ENVIRONMENT	HISTORICAL	17,580	5.918%	1,040	-	1,040
FY 2022	BPA PROGRAM	HISTORICAL	1,746,549	6.630%	115,796	5,155	120,951
FY 2022	BPA PROGRAM	NEW	183,289	3.315%	6,076	-	6,076
FY 2022	Float	HISTORICAL	-	-	-5,943	-	-5,943
Subtotal			**$3,404,771**	**-**	**$204,394**	**$5,155**	**$209,548**
FY 2023	BPA PROGRAM	HISTORICAL	1,432,353	6.005%	86,011	-	86,011
FY 2023	ENVIRONMENT	HISTORICAL	10,580	6.089%	644	-	644
FY 2023	BPA PROGRAM	HISTORICAL	1,816,458	6.630%	120,431	3,364	123,795
FY 2023	BPA PROGRAM	NEW	186,755	3.315%	6,191	-	6,191
FY 2023	Float	HISTORICAL	-	-	-5,908	-	-5,908
Subtotal			**$3,446,146**	**-**	**$207,370**	**$3,364**	**$210,734**
FY 2024	BPA PROGRAM	HISTORICAL	1,367,353	6.020%	82,319	-	82,319
FY 2024	ENVIRONMENT	HISTORICAL	5,451	6.230%	340	-	340
FY 2024	BPA PROGRAM	HISTORICAL	1,929,171	6.630%	127,904	2,279	130,183
FY 2024	BPA PROGRAM	NEW	190,108	3.315%	6,302	-	6,302
FY 2024	Float	HISTORICAL	-	-	-6,008	-	-6,008
Subtotal			**$3,492,083**	**-**	**$210,857**	**$2,279**	**$213,136**
FY 2025	BPA PROGRAM	HISTORICAL	1,277,353	6.042%	77,171	-	77,171
FY 2025	BPA PROGRAM	HISTORICAL	2,066,969	6.630%	137,040	2,221	139,261
FY 2025	BPA PROGRAM	NEW	193,171	3.315%	6,404	-	6,404
FY 2025	Float	HISTORICAL	-	-	-6,406	-	-6,406
Subtotal			**$3,537,493**	**-**	**$214,209**	**$2,221**	**$216,430**
FY 2026	BPA PROGRAM	HISTORICAL	1,166,099	6.069%	70,774	-	70,774
FY 2026	BPA PROGRAM	HISTORICAL	2,208,257	6.630%	146,407	6,562	152,969
FY 2026	BPA PROGRAM	NEW	195,875	3.315%	6,493	-	6,493
FY 2026	Float	HISTORICAL	-	-	-6,372	-	-6,372
Subtotal			**$3,570,231**	**-**	**$217,303**	**$6,562**	**$223,865**
FY 2027	BPA PROGRAM	HISTORICAL	1,166,099	6.069%	70,774	13	70,787
FY 2027	BPA PROGRAM	HISTORICAL	2,248,360	6.630%	149,066	6,214	155,281
FY 2027	BPA PROGRAM	NEW	198,203	3.315%	6,570	-	6,570
FY 2027	Float	HISTORICAL	-	-	-6,341	-	-6,341
Subtotal			**$3,612,662**	**-**	**$220,070**	**$6,227**	**$226,296**
FY 2028	BPA PROGRAM	HISTORICAL	1,160,407	6.066%	70,396	-	70,396
FY 2028	BPA PROGRAM	HISTORICAL	2,298,853	6.630%	152,414	0	152,414
FY 2028	BPA PROGRAM	NEW	200,172	3.315%	6,636	-	6,636
FY 2028	Float	HISTORICAL	-	-	-6,307	-	-6,307
Subtotal			**$3,659,433**	**-**	**$223,138**	**$0**	**$223,138**
FY 2029	BPA PROGRAM	HISTORICAL	1,003,799	6.081%	61,040	-	61,040
FY 2029	BPA PROGRAM	HISTORICAL	2,499,024	6.630%	165,685	5,876	171,562
FY 2029	BPA PROGRAM	NEW	201,644	3.315%	6,685	-	6,685
FY 2029	Float	HISTORICAL	-	-	-6,261	-	-6,261
Subtotal			**$3,704,467**	**-**	**$227,148**	**$5,876**	**$233,024**
FY 2030	BPA PROGRAM	HISTORICAL	1,003,799	6.081%	61,040	-	61,040
FY 2030	BPA PROGRAM	HISTORICAL	2,553,902	6.630%	169,324	5,702	175,026
FY 2030	BPA PROGRAM	NEW	202,753	3.315%	6,721	-	6,721
FY 2030	Float	HISTORICAL	-	-	-6,219	-	-6,219
Subtotal			**$3,760,454**	**-**	**$230,866**	**$5,702**	**$236,568**

Table 11-6: Interest Calculation Summary ($000s) (FY 2009)

Date	Project	TYPE	Principal	Rate	Interest	Premium	Total
FY 2031	BPA PROGRAM	HISTORICAL	1,003,799	6.081%	61,040	-	61,040
FY 2031	BPA PROGRAM	HISTORICAL	2,613,401	6.630%	173,269	1,467	174,736
FY 2031	BPA PROGRAM	NEW	203,445	3.315%	6,744	-	6,744
FY 2031	Float	HISTORICAL	-	-	-6,173	-	-6,173
Subtotal			**$3,820,645**	**-**	**$234,880**	**$1,467**	**$236,347**
FY 2032	BPA PROGRAM	HISTORICAL	897,199	6.090%	54,644	-	54,644
FY 2032	BPA PROGRAM	HISTORICAL	2,779,956	6.630%	184,311	5,134	189,445
FY 2032	BPA PROGRAM	NEW	203,905	3.315%	6,759	-	6,759
FY 2032	Float	HISTORICAL	-	-	-6,117	-	-6,117
Subtotal			**$3,881,060**	**-**	**$239,597**	**$5,134**	**$244,731**
FY 2033	BPA PROGRAM	HISTORICAL	897,199	6.090%	54,644	1	54,645
FY 2033	BPA PROGRAM	HISTORICAL	2,848,762	6.630%	188,873	2,379	191,252
FY 2033	BPA PROGRAM	NEW	204,093	3.315%	6,766	-	6,766
FY 2033	Float	HISTORICAL	-	-	-5,375	-	-5,375
Subtotal			**$3,950,054**	**-**	**$244,907**	**$2,380**	**$247,288**
FY 2034	BPA PROGRAM	HISTORICAL	856,564	6.116%	52,388	2	52,390
FY 2034	BPA PROGRAM	HISTORICAL	2,990,053	6.630%	198,241	-	198,241
FY 2034	BPA PROGRAM	NEW	203,814	3.315%	6,756	-	6,756
FY 2034	Float	HISTORICAL	-	-	-3,953	-	-3,953
Subtotal			**$4,050,431**	**-**	**$253,432**	**$2**	**$253,435**
FY 2035	BPA PROGRAM	HISTORICAL	815,859	6.142%	50,110	-	50,110
FY 2035	BPA PROGRAM	HISTORICAL	3,193,867	6.630%	211,753	-	211,753
FY 2035	BPA PROGRAM	NEW	203,451	3.315%	6,744	-	6,744
FY 2035	Float	HISTORICAL	-	-	-5,999	-	-5,999
Subtotal			**$4,213,178**	**-**	**$262,609**	**-**	**$262,609**
FY 2036	BPA PROGRAM	HISTORICAL	692,199	6.279%	43,461	90	43,551
FY 2036	BPA PROGRAM	HISTORICAL	3,397,318	6.630%	225,242	1,387	226,629
FY 2036	BPA PROGRAM	NEW	203,064	3.315%	6,732	-	6,732
FY 2036	Float	HISTORICAL	-	-	-5,917	-	-5,917
Subtotal			**$4,292,581**	**-**	**$269,518**	**$1,478**	**$270,996**
FY 2037	BPA PROGRAM	HISTORICAL	620,053	6.269%	38,869	756	39,625
FY 2037	BPA PROGRAM	HISTORICAL	3,557,305	6.630%	235,849	-	235,849
FY 2037	BPA PROGRAM	NEW	202,476	3.315%	6,712	-	6,712
FY 2037	Float	HISTORICAL	-	-	-5,844	-	-5,844
Subtotal			**$4,379,834**	**-**	**$275,586**	**$756**	**$276,342**
FY 2038	BPA PROGRAM	HISTORICAL	510,239	6.229%	31,785	305	32,090
FY 2038	BPA PROGRAM	HISTORICAL	3,759,781	6.630%	249,273	-	249,273
FY 2038	BPA PROGRAM	NEW	201,802	3.315%	6,690	-	6,690
FY 2038	Float	HISTORICAL	-	-	-5,768	-	-5,768
Subtotal			**$4,471,821**	**-**	**$281,980**	**$305**	**$282,285**
FY 2039	BPA PROGRAM	HISTORICAL	406,441	6.137%	24,945	699	25,643
FY 2039	BPA PROGRAM	HISTORICAL	3,961,583	6.630%	262,653	-	262,653
FY 2039	BPA PROGRAM	NEW	201,196	3.315%	6,670	-	6,670
FY 2039	Float	HISTORICAL	-	-	-5,689	-	-5,689
Subtotal			**$4,569,219**	**-**	**$288,578**	**$699**	**$289,277**
FY 2040	BPA PROGRAM	HISTORICAL	309,704	6.080%	18,831	334	19,165
FY 2040	BPA PROGRAM	HISTORICAL	4,162,779	6.630%	275,992	-	275,992
FY 2040	BPA PROGRAM	NEW	200,683	3.315%	6,653	-	6,653
FY 2040	Float	HISTORICAL	-	-	-5,602	-	-5,602
Subtotal			**$4,673,165**	**-**	**$295,874**	**$334**	**$296,208**

Table 11-6: Interest Calculation Summary ($000s) (FY 2009)

Date	Project	TYPE	Principal	Rate	Interest	Premium	Total
FY 2041	BPA PROGRAM	HISTORICAL	219,962	6.094%	13,404	140	13,545
FY 2041	BPA PROGRAM	HISTORICAL	4,363,462	6.630%	289,297	-	289,297
FY 2041	BPA PROGRAM	NEW	200,342	3.315%	6,641	-	6,641
FY 2041	Float	HISTORICAL	-	-	-5,508	-	-5,508
Subtotal			**$4,783,766**	**-**	**$303,835**	**$140**	**$303,976**
FY 2042	BPA PROGRAM	HISTORICAL	138,049	6.150%	8,489	-	8,489
FY 2042	BPA PROGRAM	HISTORICAL	4,563,804	6.630%	302,580	-	302,580
FY 2042	BPA PROGRAM	NEW	200,136	3.315%	6,635	-	6,635
FY 2042	Float	HISTORICAL	-	-	-5,407	-	-5,407
Subtotal			**$4,901,989**	**-**	**$312,297**	**-**	**$312,297**
FY 2043	BPA PROGRAM	HISTORICAL	64,515	6.320%	4,077	-	4,077
FY 2043	BPA PROGRAM	HISTORICAL	4,763,940	6.630%	315,849	-	315,849
FY 2043	BPA PROGRAM	NEW	200,208	3.315%	6,637	-	6,637
FY 2043	Float	HISTORICAL	-	-	-5,301	-	-5,301
Subtotal			**$5,028,662**	**-**	**$321,262**	**-**	**$321,262**
FY 2044	BPA PROGRAM	HISTORICAL	4,964,147	6.630%	329,123	925	330,048
FY 2044	BPA PROGRAM	NEW	200,682	3.315%	6,653	-	6,653
FY 2044	Float	HISTORICAL	-	-	-5,192	-	-5,192
Subtotal			**$5,164,829**	**-**	**$330,584**	**$925**	**$331,509**
FY 2045	BPA PROGRAM	HISTORICAL	5,110,594	6.630%	338,832	834	339,666
FY 2045	Float	HISTORICAL	-	-	-5,065	-	-5,065
Subtotal			**$5,110,594**	**-**	**$333,768**	**$834**	**$334,602**
FY 2046	BPA PROGRAM	HISTORICAL	5,061,633	6.630%	335,586	792	336,379
FY 2046	Float	HISTORICAL	-	-	-5,103	-	-5,103
Subtotal			**$5,061,633**	**-**	**$330,483**	**$792**	**$331,276**
FY 2047	BPA PROGRAM	HISTORICAL	5,009,345	6.630%	332,120	741	332,860
FY 2047	Float	HISTORICAL	-	-	-5,144	-	-5,144
Subtotal			**$5,009,345**	**-**	**$326,976**	**$741**	**$327,716**
FY 2048	BPA PROGRAM	HISTORICAL	4,953,499	6.630%	328,417	760	329,176
FY 2048	Float	HISTORICAL	-	-	-5,188	-	-5,188
Subtotal			**$4,953,499**	**-**	**$323,229**	**$760**	**$323,989**
FY 2049	BPA PROGRAM	HISTORICAL	4,893,924	6.630%	324,467	723	325,190
FY 2049	Float	HISTORICAL	-	-	-5,234	-	-5,234
Subtotal			**$4,893,924**	**-**	**$319,233**	**$723**	**$319,956**
FY 2050	BPA PROGRAM	HISTORICAL	4,830,317	6.630%	320,250	644	320,894
FY 2050	Float	HISTORICAL	-	-	-5,284	-	-5,284
Subtotal			**$4,830,317**	**-**	**$314,966**	**$644**	**$315,609**
FY 2051	BPA PROGRAM	HISTORICAL	4,762,363	6.630%	315,745	684	316,429
FY 2051	Float	HISTORICAL	-	-	-5,338	-	-5,338
Subtotal			**$4,762,363**	**-**	**$310,407**	**$684**	**$311,091**
FY 2052	BPA PROGRAM	HISTORICAL	4,689,891	6.630%	310,940	587	311,526
FY 2052	Float	HISTORICAL	-	-	-5,394	-	-5,394
Subtotal			**$4,689,891**	**-**	**$305,545**	**$587**	**$306,132**
FY 2053	BPA PROGRAM	HISTORICAL	4,612,460	6.630%	305,806	567	306,373
FY 2053	Float	HISTORICAL	-	-	-5,455	-	-5,455
Subtotal			**$4,612,460**	**-**	**$300,351**	**$567**	**$300,918**

Table 11-6: Interest Calculation Summary ($000s) (FY 2009)

Date	Project	TYPE	Principal	Rate	Interest	Premium	Total
FY 2054	BPA PROGRAM	HISTORICAL	4,529,816	6.630%	300,327	502	300,828
FY 2054	Float	HISTORICAL	-	-	-5,520	-	-5,520
Subtotal			**$4,529,816**	**-**	**$294,807**	**$502**	**$295,308**
FY 2055	BPA PROGRAM	HISTORICAL	4,441,561	6.630%	294,475	453	294,928
FY 2055	Float	HISTORICAL	-	-	-5,589	-	-5,589
Subtotal			**$4,441,561**	**-**	**$288,886**	**$453**	**$289,339**
FY 2056	BPA PROGRAM	HISTORICAL	4,347,337	6.630%	288,228	381	288,610
FY 2056	Float	HISTORICAL	-	-	-5,663	-	-5,663
Subtotal			**$4,347,337**	**-**	**$282,565**	**$381**	**$282,947**
FY 2057	BPA PROGRAM	HISTORICAL	4,246,721	6.630%	281,558	340	281,897
FY 2057	Float	HISTORICAL	-	-	-5,742	-	-5,742
Subtotal			**$4,246,721**	**-**	**$275,816**	**$340**	**$276,155**
FY 2058	BPA PROGRAM	HISTORICAL	4,139,313	6.630%	274,436	217	274,654
FY 2058	Float	HISTORICAL	-	-	-5,826	-	-5,826
Subtotal			**$4,139,313**	**-**	**$268,610**	**$217**	**$268,828**
FY 2059	BPA PROGRAM	HISTORICAL	4,024,578	6.630%	266,830	225	267,055
FY 2059	Float	HISTORICAL	-	-	-5,916	-	-5,916
Subtotal			**$4,024,578**	**-**	**$260,913**	**$225**	**$261,139**
FY 2060	BPA PROGRAM	HISTORICAL	3,902,154	6.630%	258,713	107	258,820
FY 2060	Float	HISTORICAL	-	-	-6,012	-	-6,012
Subtotal			**$3,902,154**	**-**	**$252,701**	**$107**	**$252,808**
FY 2061	BPA PROGRAM	HISTORICAL	3,771,399	6.630%	250,044	1	250,044
FY 2061	Float	HISTORICAL	-	-	-6,115	-	-6,115
Subtotal			**$3,771,399**	**-**	**$243,929**	**$1**	**$243,930**
Grand Total			**$215,057,164**	**-**	**$13,459,940**	**$82,012**	**$13,541,952**

Table 11-7: Summary of Amortization ($000s) (FY 2009)

Project	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
BONNEVILLE POWER															
ADMINISTRATION	93,657	30,662	44,178	61,756	63,513	147,328	55,438	10,686	61,858	49,352	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL APPROPRIATIONS	93,657	30,662	44,178	61,756	63,513	147,328	55,438	10,686	61,858	49,352	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA BORROWING	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA PROGRAM	76,643	137,119	108,480	84,932	115,000	-	-	59,050	-	2,915	33,996	30,044	163,515	148,153	146,211
ENVIRONMENT	-	-	20,000	30,000	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL BPA BORROWING	76,643	137,119	128,480	114,932	115,000	-	-	59,050	-	2,915	33,996	30,044	163,515	148,153	146,211

Table 11-7: Summary of Amortization ($000s) (FY 2009)

Project	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
BONNEVILLE POWER ADMINISTRATION	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL APPROPRIATIONS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA BORROWING	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA PROGRAM	138,380	139,043	142,309	163,137	155,772	153,402	156,610	146,765	143,254	143,490	135,099	103,437	40,705	123,660
ENVIRONMENT	7,000	5,129	5,451	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL BPA BORROWING	145,380	144,172	147,760	163,137	155,772	153,402	156,610	146,765	143,254	143,490	135,099	103,437	40,705	123,660

Table 11-7: Summary of Amortization ($000s) (FY 2009)

Project	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
BONNEVILLE POWER ADMINISTRATION	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL APPROPRIATIONS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA BORROWING	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA PROGRAM	115,224	109,815	103,798	96,737	89,742	81,913	73,534	64,515	54,235	48,961	52,287	55,847	59,574	63,607	67,954
ENVIRONMENT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL BPA BORROWING	115,224	109,815	103,798	96,737	89,742	81,913	73,534	64,515	54,235	48,961	52,287	55,847	59,574	63,607	67,954

Table 11-7: Summary of Amortization ($000s) (FY 2009)

Project	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	Total
BONNEVILLE POWER												
ADMINISTRATION	-	-	-	-	-	-	-	-	-	-	-	618,429
	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL APPROPRIATIONS	-	-	-	-	-	-	-	-	-	-	-	618,429
	-	-	-	-	-	-	-	-	-	-	-	-
BPA BORROWING	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
BPA PROGRAM	72,472	77,431	82,645	88,255	94,224	100,616	107,408	114,735	122,424	130,755	139,633	5,259,462
ENVIRONMENT	-	-	-	-	-	-	-	-	-	-	-	67,580
	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL BPA BORROWING	72,472	77,431	82,645	88,255	94,224	100,616	107,408	114,735	122,424	130,755	139,633	5,327,042

Table 11-8: Application of Amortization ($000s) (FY 2009)

Date	Project	In Service	Due	Original Balance	Amount Available	Rate	Replace ment?	Rollover?	Amount Amortized
FY 2007	BONNEVILLE POWER ADMINISTRATION	1962	2007	19,597	19,597	6.980%	No	No	19,597
FY 2007	BONNEVILLE POWER ADMINISTRATION	1962	2007	4,877	4,877	6.980%	No	No	4,877
FY 2007	BPA PROGRAM	2004	2007	30,000	30,000	3.100%	No	No	30,000
FY 2007	BPA PROGRAM	2004	2007	46,643	46,643	2.500%	No	No	46,643
FY 2007	BONNEVILLE POWER ADMINISTRATION	1972	2017	29,326	20,056	7.290%	No	No	20,056
FY 2007	BONNEVILLE POWER ADMINISTRATION	1972	2017	21,170	8,364	7.290%	No	No	8,364
FY 2007	BONNEVILLE POWER ADMINISTRATION	1973	2018	21,656	21,656	7.280%	No	No	13,904
FY 2007	BONNEVILLE POWER ADMINISTRATION	1973	2018	16,368	16,368	7.280%	No	No	16,368
FY 2007	BONNEVILLE POWER ADMINISTRATION	1973	2018	10,491	10,491	7.280%	No	No	10,491
Subtotal		**-**	**-**	**$200,128**	**$178,052**	**-**	**No**	**No**	**$170,300**
FY 2008	BONNEVILLE POWER ADMINISTRATION	1963	2008	4,876	4,876	7.020%	No	No	4,876
FY 2008	BONNEVILLE POWER ADMINISTRATION	1963	2008	4,330	4,330	7.020%	No	No	4,330
FY 2008	BONNEVILLE POWER ADMINISTRATION	1963	2008	904	904	7.020%	No	No	904
FY 2008	BONNEVILLE POWER ADMINISTRATION	1963	2008	803	803	7.020%	No	No	803
FY 2008	BPA PROGRAM	1998	2008	75,300	75,300	6.000%	No	No	75,300
FY 2008	BPA PROGRAM	1998	2008	36,819	36,819	5.750%	No	No	36,819
FY 2008	BPA PROGRAM	2004	2008	25,000	25,000	3.800%	No	No	25,000
FY 2008	BONNEVILLE POWER ADMINISTRATION	1973	2018	33,788	33,788	7.280%	No	No	11,997
FY 2008	BONNEVILLE POWER ADMINISTRATION	1973	2018	21,656	7,752	7.280%	No	No	7,752
Subtotal		**-**	**-**	**$203,476**	**$189,572**	**-**	**No**	**No**	**$167,781**
FY 2009	BONNEVILLE POWER ADMINISTRATION	1964	2009	4,151	4,151	7.060%	No	No	4,151
FY 2009	BONNEVILLE POWER ADMINISTRATION	1964	2009	5,738	5,738	7.060%	No	No	5,738
FY 2009	BPA PROGRAM	1998	2009	72,700	72,700	6.000%	No	No	72,700
FY 2009	ENVIRONMENT	2006	2009	20,000	20,000	5.050%	No	No	20,000
FY 2009	BPA PROGRAM	2006	2009	20,000	20,000	5.050%	No	No	20,000
FY 2009	BPA PROGRAM	2005	2009	15,780	15,780	3.750%	No	No	15,780
FY 2009	BONNEVILLE POWER ADMINISTRATION	1970	2015	24,412	23,551	7.270%	No	No	12,499
FY 2009	BONNEVILLE POWER ADMINISTRATION	1973	2018	33,788	21,791	7.280%	No	No	21,791
Subtotal		**-**	**-**	**$196,569**	**$183,711**	**-**	**No**	**No**	**$172,658**
FY 2010	BONNEVILLE POWER ADMINISTRATION	1965	2010	3,706	3,706	7.090%	No	No	3,706
FY 2010	BONNEVILLE POWER ADMINISTRATION	1965	2010	7,248	7,248	7.090%	No	No	7,248
FY 2010	BONNEVILLE POWER ADMINISTRATION	1965	2010	5,202	5,202	7.090%	No	No	5,202
FY 2010	BONNEVILLE POWER ADMINISTRATION	1965	2010	10,171	10,171	7.090%	No	No	10,171
FY 2010	ENVIRONMENT	2001	2010	30,000	30,000	6.050%	No	No	30,000
FY 2010	BPA PROGRAM	2001	2010	59,932	59,932	6.050%	No	No	59,932
FY 2010	BPA PROGRAM	2006	2010	5,000	5,000	4.950%	No	No	5,000
FY 2010	BPA PROGRAM	2006	2010	20,000	20,000	4.950%	No	No	20,000
FY 2010	BONNEVILLE POWER ADMINISTRATION	1970	2015	64,977	64,977	7.270%	No	No	16,382
FY 2010	BONNEVILLE POWER ADMINISTRATION	1970	2015	7,995	7,995	7.270%	No	No	7,995
FY 2010	BONNEVILLE POWER ADMINISTRATION	1970	2015	24,412	11,052	7.270%	No	No	11,052
Subtotal		**-**	**-**	**$238,643**	**$225,283**	**-**	**No**	**No**	**$176,688**
FY 2011	BONNEVILLE POWER ADMINISTRATION	1966	2011	11,830	11,830	7.130%	No	No	11,830
FY 2011	BONNEVILLE POWER ADMINISTRATION	1966	2011	3,049	3,049	7.130%	No	No	3,049
FY 2011	BONNEVILLE POWER ADMINISTRATION	1966	2011	6,647	6,353	7.130%	No	No	6,353
FY 2011	BPA PROGRAM	1998	2011	40,000	40,000	6.200%	No	No	40,000
FY 2011	BPA PROGRAM	2001	2011	25,000	25,000	5.950%	No	No	25,000
FY 2011	BPA PROGRAM	2001	2011	50,000	50,000	5.750%	No	No	50,000
FY 2011	BONNEVILLE POWER ADMINISTRATION	1970	2015	64,977	48,595	7.270%	No	No	42,281
Subtotal		**-**	**-**	**$201,503**	**$184,827**	**-**	**No**	**No**	**$178,513**

Table 11-8: Application of Amortization ($000s) (FY 2009)

Date	Project	In Service	Due	Original Balance	Amount Available	Rate	Replacement?	Rollover?	Amount Amortized
FY 2012	BONNEVILLE POWER ADMINISTRATION	1967	2012	19,003	19,003	7.160%	No	No	19,003
FY 2012	BONNEVILLE POWER ADMINISTRATION	1967	2012	4,566	355	7.160%	No	No	355
FY 2012	BONNEVILLE POWER ADMINISTRATION	1970	2015	64,977	6,314	7.270%	No	No	6,314
FY 2012	BONNEVILLE POWER ADMINISTRATION	1974	2019	12,079	12,079	7.270%	No	No	12,079
FY 2012	BONNEVILLE POWER ADMINISTRATION	1974	2019	20,984	20,984	7.270%	No	No	20,984
FY 2012	BONNEVILLE POWER ADMINISTRATION	1974	2019	12,563	12,563	7.270%	No	No	12,563
FY 2012	BONNEVILLE POWER ADMINISTRATION	1974	2019	21,826	21,826	7.270%	No	No	21,826
FY 2012	BONNEVILLE POWER ADMINISTRATION	1975	2020	32,026	32,026	7.250%	No	No	3,388
FY 2012	BONNEVILLE POWER ADMINISTRATION	1975	2020	21,916	21,916	7.250%	No	No	21,916
FY 2012	BONNEVILLE POWER ADMINISTRATION	1975	2020	17,158	17,158	7.250%	No	No	17,158
FY 2012	BONNEVILLE POWER ADMINISTRATION	1975	2020	11,742	11,742	7.250%	No	No	11,742
Subtotal		**-**	**-**	**$238,840**	**$175,966**	**-**	**No**	**No**	**$147,328**
FY 2013	BONNEVILLE POWER ADMINISTRATION	1968	2013	41,070	18,250	7.200%	No	No	18,250
FY 2013	BONNEVILLE POWER ADMINISTRATION	1969	2014	42,237	19,198	7.230%	No	No	8,550
FY 2013	BONNEVILLE POWER ADMINISTRATION	1975	2020	32,026	28,638	7.250%	No	No	28,638
Subtotal		**-**	**-**	**$115,333**	**$66,086**	**-**	**No**	**No**	**$55,438**
FY 2014	BONNEVILLE POWER ADMINISTRATION	1969	2014	42,237	10,648	7.230%	No	No	10,648
FY 2014	BPA PROGRAM	1999	2014	59,050	59,050	5.900%	No	No	59,050
FY 2014	BONNEVILLE POWER ADMINISTRATION	1976	2021	2,212	2,212	7.230%	No	No	38
Subtotal		**-**	**-**	**$103,499**	**$71,910**	**-**	**No**	**No**	**$69,736**
FY 2015	BONNEVILLE POWER ADMINISTRATION	1976	2021	61,025	61,025	7.230%	No	No	59,684
FY 2015	BONNEVILLE POWER ADMINISTRATION	1976	2021	2,212	2,174	7.230%	No	No	2,174
Subtotal		**-**	**-**	**$63,237**	**$63,199**	**-**	**No**	**No**	**$61,858**
FY 2016	BONNEVILLE POWER ADMINISTRATION	1976	2021	61,025	1,341	7.230%	No	No	1,341
FY 2016	BONNEVILLE POWER ADMINISTRATION	1977	2022	3,948	3,948	7.210%	No	No	3,948
FY 2016	BONNEVILLE POWER ADMINISTRATION	1977	2022	5,380	5,380	7.210%	No	No	5,380
FY 2016	BONNEVILLE POWER ADMINISTRATION	1977	2022	33,702	33,702	7.210%	No	No	33,702
FY 2016	BONNEVILLE POWER ADMINISTRATION	1977	2022	4,981	4,981	7.210%	No	No	4,981
FY 2016	BPA PROGRAM	1998	2032	98,900	98,900	6.700%	No	No	2,915
Subtotal		**-**	**-**	**$207,936**	**$148,252**	**-**	**No**	**No**	**$52,267**
FY 2017	BPA PROGRAM	1998	2032	98,900	95,985	6.700%	No	No	33,996
Subtotal		**-**	**-**	**$98,900**	**$95,985**	**-**	**No**	**No**	**$33,996**
FY 2018	BPA PROGRAM	1998	2032	98,900	61,988	6.700%	No	No	30,044
Subtotal		**-**	**-**	**$98,900**	**$61,988**	**-**	**No**	**No**	**$30,044**
FY 2019	BPA PROGRAM	1998	2032	98,900	31,944	6.700%	No	No	31,944
FY 2019	BPA PROGRAM	2009	2044	259,531	259,531	6.630%	No	No	131,571
Subtotal		**-**	**-**	**$358,431**	**$291,475**	**-**	**No**	**No**	**$163,515**
FY 2020	BPA PROGRAM	2009	2044	259,531	127,960	6.630%	No	No	127,960
FY 2020	BPA PROGRAM	2010	2045	138,518	138,518	6.630%	Yes	No	20,193
Subtotal		**-**	**-**	**$398,049**	**$266,478**	**-**	**Yes**	**No**	**$148,153**
FY 2021	BONNEVILLE POWER ADMINISTRATION	1976	2021	61,025	0	7.230%	No	No	0
FY 2021	BPA PROGRAM	2010	2045	138,518	118,325	6.630%	Yes	No	118,325
FY 2021	BPA PROGRAM	2011	2046	142,344	142,344	6.630%	Yes	No	27,886
Subtotal		**-**	**-**	**$341,887**	**$260,669**	**-**	**Yes**	**No**	**$146,211**
FY 2022	ENVIRONMENT	2007	2022	7,000	7,000	5.660%	No	No	7,000
FY 2022	BPA PROGRAM	2003	2022	25,000	25,000	5.650%	No	Yes	25,000
FY 2022	BPA PROGRAM	2011	2046	142,344	114,458	6.630%	Yes	No	113,380
Subtotal		**-**	**-**	**$174,344**	**$146,458**	**-**	**Yes**	**Yes**	**$145,380**
FY 2023	ENVIRONMENT	2008	2023	5,129	5,129	5.940%	No	No	5,129
FY 2023	BPA PROGRAM	2004	2023	65,000	65,000	5.680%	No	Yes	65,000
FY 2023	BPA PROGRAM	2011	2046	142,344	1,078	6.630%	Yes	No	1,078
FY 2023	BPA PROGRAM	2012	2047	146,082	146,082	6.630%	Yes	No	72,964
Subtotal		**-**	**-**	**$358,555**	**$217,289**	**-**	**Yes**	**Yes**	**$144,172**
FY 2024	ENVIRONMENT	2009	2024	5,451	5,451	6.230%	No	No	5,451
FY 2024	BPA PROGRAM	2003	2024	40,000	40,000	5.720%	No	Yes	40,000
FY 2024	BPA PROGRAM	2004	2024	50,000	50,000	5.720%	No	Yes	50,000
FY 2024	BPA PROGRAM	2012	2047	146,082	73,118	6.630%	Yes	No	52,309
Subtotal		**-**	**-**	**$241,533**	**$168,569**	**-**	**Yes**	**Yes**	**$147,760**

Table 11-8: Application of Amortization ($000s) (FY 2009)

Date	Project	In Service	Due	Original Balance	Amount Available	Rate	Replace ment?	Rollover?	Amount Amortized
FY 2025	BPA PROGRAM	1997	2025	111,254	111,254	5.750%	No	Yes	111,254
FY 2025	BPA PROGRAM	2012	2047	146,082	20,808	6.630%	Yes	No	20,808
FY 2025	BPA PROGRAM	2013	2048	149,873	149,873	6.630%	Yes	No	31,075
Subtotal		**-**	**-**	**$407,209**	**$281,935**	**-**	**Yes**	**Yes**	**$163,137**
FY 2026	BPA PROGRAM	2013	2048	149,873	118,798	6.630%	Yes	No	118,798
FY 2026	BPA PROGRAM	2014	2049	153,759	153,759	6.630%	Yes	No	36,974
Subtotal		**-**	**-**	**$303,632**	**$272,557**	**-**	**Yes**	**No**	**$155,772**
FY 2027	BPA PROGRAM	1998	2028	50,000	50,000	6.650%	No	No	5,692
FY 2027	BPA PROGRAM	2014	2049	153,759	116,785	6.630%	Yes	No	116,785
FY 2027	BPA PROGRAM	2015	2050	157,625	157,625	6.630%	Yes	No	30,925
Subtotal		**-**	**-**	**$361,384**	**$324,410**	**-**	**Yes**	**No**	**$153,402**
FY 2028	BPA PROGRAM	1998	2028	50,000	44,308	6.650%	No	No	44,308
FY 2028	BPA PROGRAM	1998	2028	112,300	112,300	5.850%	No	No	112,300
FY 2028	BPA PROGRAM	2015	2050	157,625	126,700	6.630%	Yes	No	2
Subtotal		**-**	**-**	**$319,925**	**$283,309**	**-**	**Yes**	**No**	**$156,610**
FY 2029	BPA PROGRAM	2015	2050	157,625	126,699	6.630%	Yes	No	126,699
FY 2029	BPA PROGRAM	2016	2051	161,504	161,504	6.630%	Yes	No	20,067
Subtotal		**-**	**-**	**$319,129**	**$288,203**	**-**	**Yes**	**No**	**$146,765**
FY 2030	BPA PROGRAM	2016	2051	161,504	141,437	6.630%	Yes	No	141,437
FY 2030	BPA PROGRAM	2017	2052	165,366	165,366	6.630%	Yes	No	1,817
Subtotal		**-**	**-**	**$326,870**	**$306,803**	**-**	**Yes**	**No**	**$143,254**
FY 2031	BPA PROGRAM	1998	2031	106,600	106,600	6.000%	No	Yes	106,600
FY 2031	BPA PROGRAM	2017	2052	165,366	163,549	6.630%	Yes	No	36,890
Subtotal		**-**	**-**	**$271,966**	**$270,149**	**-**	**Yes**	**Yes**	**$143,490**
FY 2032	BPA PROGRAM	2017	2052	165,366	126,659	6.630%	Yes	No	126,659
FY 2032	BPA PROGRAM	2018	2053	169,032	169,032	6.630%	Yes	No	8,440
Subtotal		**-**	**-**	**$334,398**	**$295,691**	**-**	**Yes**	**No**	**$135,099**
FY 2033	BPA PROGRAM	2003	2033	40,000	40,000	5.550%	No	No	40,000
FY 2033	BPA PROGRAM	2004	2034	40,000	40,000	5.600%	No	No	635
FY 2033	BPA PROGRAM	2018	2053	169,032	160,592	6.630%	Yes	No	62,802
Subtotal		**-**	**-**	**$249,032**	**$240,592**	**-**	**Yes**	**No**	**$103,437**
FY 2034	BPA PROGRAM	2004	2034	40,000	39,365	5.600%	No	No	39,365
FY 2034	BPA PROGRAM	2005	2035	40,000	40,000	5.500%	No	No	1,340
FY 2034	BPA PROGRAM	2018	2053	169,032	97,790	6.630%	Yes	No	0
Subtotal		**-**	**-**	**$249,032**	**$177,155**	**-**	**Yes**	**No**	**$40,705**

Table 11-8: Application of Amortization ($000s) (FY 2009)

Date	Project	In Service	Due	Original Balance	Amount Available	Rate	Replacement?	Rollover?	Amount Amortized
FY 2035	BPA PROGRAM	2005	2035	40,000	38,660	5.500%	No	No	38,660
FY 2035	BPA PROGRAM	2005	2035	40,000	40,000	5.400%	No	No	40,000
FY 2035	BPA PROGRAM	2005	2035	45,000	45,000	5.250%	No	No	45,000
Subtotal		-	-	**$125,000**	**$123,660**	-	**No**	**No**	**$123,660**
FY 2036	BPA PROGRAM	2004	2036	65,000	65,000	6.370%	No	Yes	65,000
FY 2036	BPA PROGRAM	2008	2043	285,189	285,189	6.320%	No	No	7,146
FY 2036	BPA PROGRAM	2018	2053	169,032	97,790	6.630%	Yes	No	43,078
Subtotal		-	-	**$519,221**	**$447,979**	-	**Yes**	**Yes**	**$115,224**
FY 2037	BPA PROGRAM	2005	2037	40,000	40,000	6.680%	No	Yes	40,000
FY 2037	BPA PROGRAM	2008	2043	285,189	278,043	6.320%	No	No	69,815
Subtotal		-	-	**$325,189**	**$318,043**	-	**No**	**Yes**	**$109,815**
FY 2038	BPA PROGRAM	2006	2038	70,000	70,000	6.720%	No	Yes	70,000
FY 2038	BPA PROGRAM	2008	2043	285,189	208,229	6.320%	No	No	33,798
Subtotal		-	-	**$355,189**	**$278,229**	-	**No**	**Yes**	**$103,798**
FY 2039	BPA PROGRAM	2008	2043	285,189	174,431	6.320%	No	No	96,737
Subtotal		-	-	**$285,189**	**$174,431**	-	**No**	**No**	**$96,737**
FY 2040	BPA PROGRAM	2007	2042	232,010	232,010	6.000%	No	No	76,563
FY 2040	BPA PROGRAM	2008	2043	285,189	77,694	6.320%	No	No	13,179
Subtotal		-	-	**$517,199**	**$309,704**	-	**No**	**No**	**$89,742**
FY 2041	BPA PROGRAM	2007	2042	232,010	155,447	6.000%	No	No	81,913
Subtotal		-	-	**$232,010**	**$155,447**	-	**No**	**No**	**$81,913**
FY 2042	BPA PROGRAM	2007	2042	232,010	73,534	6.000%	No	No	73,534
Subtotal		-	-	**$232,010**	**$73,534**	-	**No**	**No**	**$73,534**
FY 2043	BPA PROGRAM	2008	2043	285,189	64,515	6.320%	No	No	64,515
Subtotal		-	-	**$285,189**	**$64,515**	-	**No**	**No**	**$64,515**
FY 2044	BPA PROGRAM	2018	2053	169,032	54,713	6.630%	Yes	No	54,235
Subtotal		-	-	**$169,032**	**$54,713**	-	**Yes**	**No**	**$54,235**
FY 2045	BPA PROGRAM	2018	2053	169,032	477	6.630%	Yes	No	477
FY 2045	BPA PROGRAM	2019	2054	172,691	172,691	6.630%	Yes	No	48,484
Subtotal		-	-	**$341,723**	**$173,168**	-	**Yes**	**No**	**$48,961**
FY 2046	BPA PROGRAM	2011	2046	142,344	-0	6.630%	Yes	No	-0
FY 2046	BPA PROGRAM	2019	2054	172,691	124,207	6.630%	Yes	No	52,287
Subtotal		-	-	**$315,035**	**$124,207**	-	**Yes**	**No**	**$52,287**
FY 2047	BPA PROGRAM	2012	2047	146,082	0	6.630%	Yes	No	0
FY 2047	BPA PROGRAM	2019	2054	172,691	71,919	6.630%	Yes	No	55,847
Subtotal		-	-	**$318,773**	**$71,919**	-	**Yes**	**No**	**$55,847**
FY 2048	BPA PROGRAM	2019	2054	172,691	16,073	6.630%	Yes	No	16,073
FY 2048	BPA PROGRAM	2020	2055	176,324	176,324	6.630%	Yes	No	43,502
Subtotal		-	-	**$349,015**	**$192,397**	-	**Yes**	**No**	**$59,574**
FY 2049	BPA PROGRAM	2014	2049	153,759	-0	6.630%	Yes	No	-0
FY 2049	BPA PROGRAM	2020	2055	176,324	132,822	6.630%	Yes	No	63,607
Subtotal		-	-	**$330,083**	**$132,822**	-	**Yes**	**No**	**$63,607**
FY 2050	BPA PROGRAM	2020	2055	176,324	69,215	6.630%	Yes	No	67,954
Subtotal		-	-	**$176,324**	**$69,215**	-	**Yes**	**No**	**$67,954**
FY 2051	BPA PROGRAM	2020	2055	176,324	1,261	6.630%	Yes	No	1,261
FY 2051	BPA PROGRAM	2021	2056	179,835	179,835	6.630%	Yes	No	71,211
Subtotal		-	-	**$356,159**	**$181,096**	-	**Yes**	**No**	**$72,472**
FY 2052	BPA PROGRAM	2017	2052	165,366	0	6.630%	Yes	No	0
FY 2052	BPA PROGRAM	2021	2056	179,835	108,624	6.630%	Yes	No	77,431
Subtotal		-	-	**$345,201**	**$108,624**	-	**Yes**	**No**	**$77,431**
FY 2053	BPA PROGRAM	2018	2053	169,032	0	6.630%	Yes	No	0
FY 2053	BPA PROGRAM	2021	2056	179,835	31,193	6.630%	Yes	No	31,193
FY 2053	BPA PROGRAM	2022	2057	183,289	183,289	6.630%	Yes	No	51,451
Subtotal		-	-	**$532,156**	**$214,482**	-	**Yes**	**No**	**$82,645**

Table 11-8: Application of Amortization ($000s) (FY 2009)

Date	Project	In Service	Due	Original Balance	Amount Available	Rate	Replacement?	Rollover?	Amount Amortized
FY 2054	BPA PROGRAM	2019	2054	172,691	0	6.630%	Yes	No	0
FY 2054	BPA PROGRAM	2022	2057	183,289	131,838	6.630%	Yes	No	88,255
Subtotal		**-**	**-**	**$355,980**	**$131,838**	**-**	**Yes**	**No**	**$88,255**
FY 2055	BPA PROGRAM	2020	2055	176,324	-0	6.630%	Yes	No	-0
FY 2055	BPA PROGRAM	2022	2057	183,289	43,583	6.630%	Yes	No	43,583
FY 2055	BPA PROGRAM	2023	2058	186,755	186,755	6.630%	Yes	No	50,641
Subtotal		**-**	**-**	**$546,368**	**$230,338**	**-**	**Yes**	**No**	**$94,224**
FY 2056	BPA PROGRAM	2021	2056	179,835	-0	6.630%	Yes	No	-0
FY 2056	BPA PROGRAM	2023	2058	186,755	136,114	6.630%	Yes	No	100,616
Subtotal		**-**	**-**	**$366,590**	**$136,114**	**-**	**Yes**	**No**	**$100,616**
FY 2057	BPA PROGRAM	2023	2058	186,755	35,498	6.630%	Yes	No	35,498
FY 2057	BPA PROGRAM	2024	2059	190,108	190,108	6.630%	Yes	No	71,910
Subtotal		**-**	**-**	**$376,863**	**$225,606**	**-**	**Yes**	**No**	**$107,408**
FY 2058	BPA PROGRAM	2023	2058	186,755	-0	6.630%	Yes	No	-0
FY 2058	BPA PROGRAM	2024	2059	190,108	118,198	6.630%	Yes	No	114,735
Subtotal		**-**	**-**	**$376,863**	**$118,198**	**-**	**Yes**	**No**	**$114,735**
FY 2059	BPA PROGRAM	2024	2059	190,108	3,463	6.630%	Yes	No	3,463
FY 2059	BPA PROGRAM	2025	2060	193,171	193,171	6.630%	Yes	No	118,961
Subtotal		**-**	**-**	**$383,279**	**$196,634**	**-**	**Yes**	**No**	**$122,424**
FY 2060	BPA PROGRAM	2025	2060	193,171	74,210	6.630%	Yes	No	74,210
FY 2060	BPA PROGRAM	2026	2061	195,875	195,875	6.630%	Yes	No	56,545
Subtotal		**-**	**-**	**$389,046**	**$270,085**	**-**	**Yes**	**No**	**$130,755**
FY 2061	BPA PROGRAM	2026	2061	195,875	139,330	6.630%	Yes	No	139,330
FY 2061	BPA PROGRAM	2027	2062	198,203	198,203	6.630%	Yes	No	303
Subtotal		**-**	**-**	**$394,078**	**$337,533**	**-**	**Yes**	**No**	**$139,633**
Grand Total		**-**	**-**	**$16,281,104**	**$10,651,106**	**-**	**Yes**	**Yes**	**$5,945,471**

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CHAPTER 12

REPAYMENT THEORY OF OPERATION

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1. Introduction

The BPA is required to collect revenues sufficient to meet BPA's annual transmission expenses and cover the long-term obligations of the Federal Columbia River transmission system (FCRTS).

The Repayment Program is used to determine whether a given set of annual revenues is sufficient to meet a given set of annual expenses and cover a given set of long-term obligations when applied in accordance with the requirements of Department of Energy (DOE) Order RA 6120.2. The Program is also used to determine by the minimum factor future revenues can be multiplied by to obtain a new set of revenues which will be sufficient to recover amortization costs.

The revenues and the expenses of the cost evaluation year will be assigned to all future years. This will have the effect of assigning the net operating revenue of the cost evaluation year to all future years. This has the effect of levelizing the long-term obligations over all future years.

2. Repayment Program Logic

The diagrams on the following pages show the flow of logic in BPA's repayment program. The first diagram shows the logic of the binary search used to locate minimum sufficient revenues. A necessary part of this search is the test for sufficiency. The logic of the test for sufficiency is shown on the remaining two diagrams.

The equations which are referred to are:

Revenue Equation: Net revenues of each year are expended on interest and payments on the principles.

Investment equation: The payments on each investment are less than or equal to the principle of that investment (and equal to the principle of that investment after the investment is due).

Predictor equation: For each future year the accumulated revenues less the accumulated interest less the accumulated investments due is equal to the accumulated payments on high interest rate investments which are not due.

3. Bond Rollover Feature

Since the 2004 Transmission Rate Case, BPA has incorporated a new data manipulation feature associated with the repayment program. This does not change any methodology of the model. It allows the user to assume that short-term bond(s) associated with assets with average service lives considerably longer than the bond maturity date are refinanced on the original maturity date, and recognizes replacement bonds with new maturity dates and corresponding interest rates. This feature reflects BPA's practice of rolling over a bond when it comes due if funds are not available to pay it at that time or if market conditions justify refinancing such bonds within the allowable repayment period of the associated assets. Reflecting this practice in the model allows a more realistic calculation of interest expense.

CHART 2

REPAYMENT PROGRAM
(TEST FOR SUFFICIENCY)

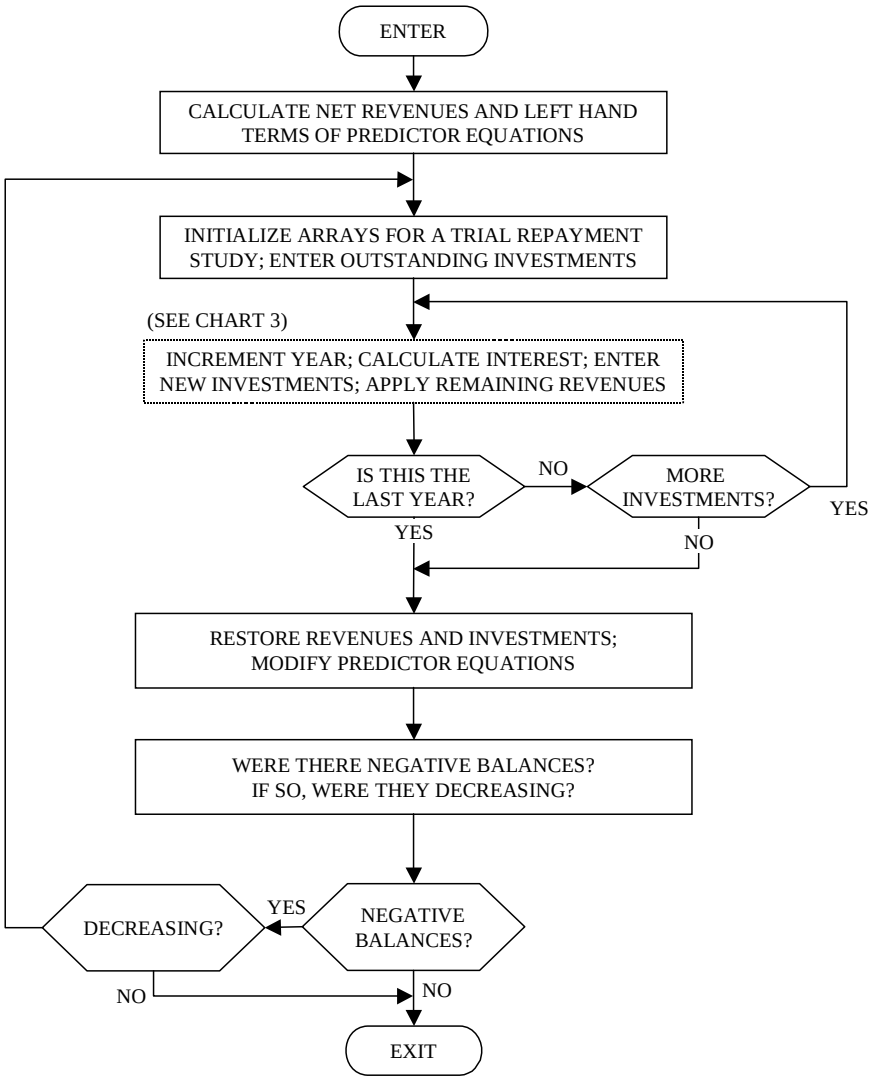
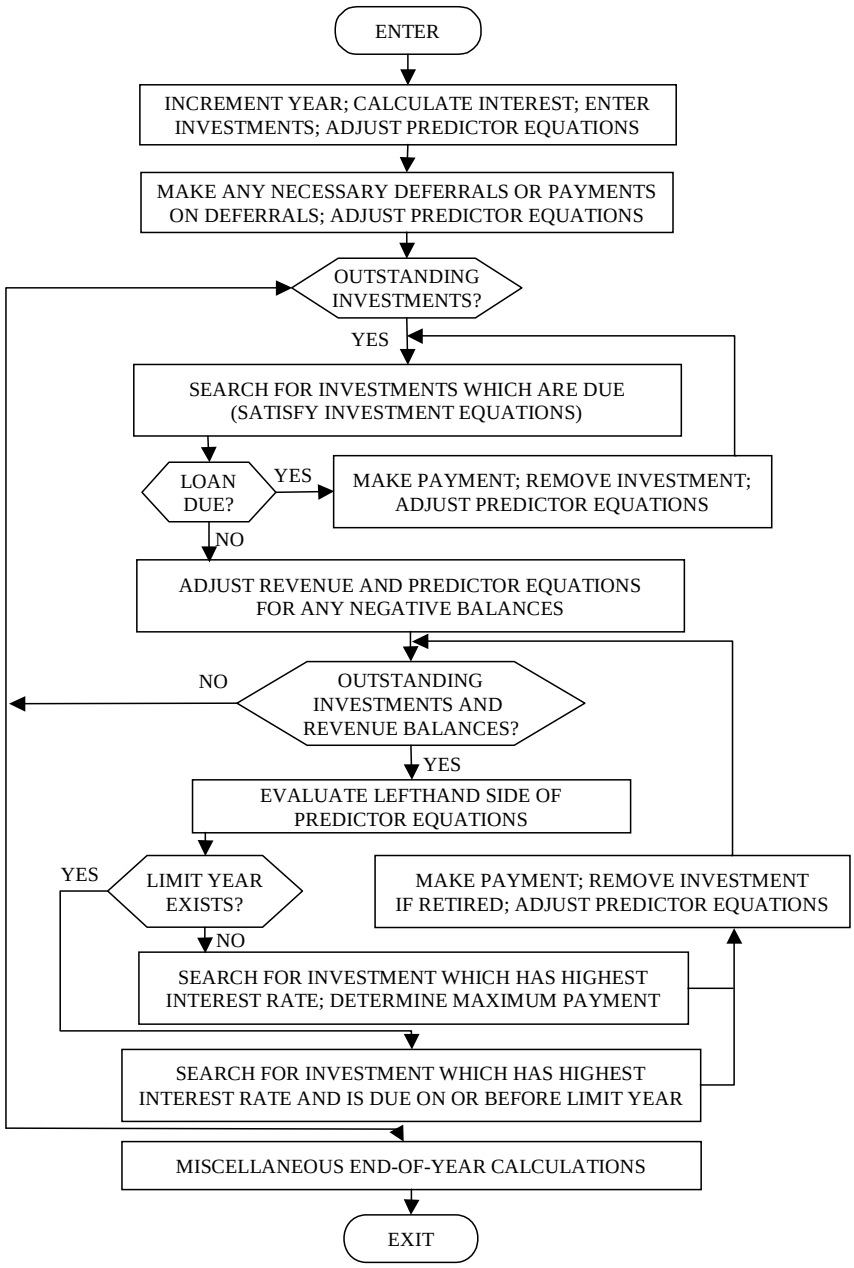


CHART 3

REPAYMENT PROGRAM
(APPLICATION OF REVENUES)



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CHAPTER 13

SALES AND REVENUE FORECAST

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Table 13-1: Transmission Sales Forecast, FY 2007 - FY 2009 (Megawatts)

		(A)	(B)	(C)
	Rate Schedule	**FY 2007**	**FY 2008**	**FY 2009**
	Network			
1	Formula Power Transmission (FPT.1,3)	2,466	1,984	1,985
2	Integration of Resources (IR)	4,334	4,034	4,034
3	Network (NT) Base	5,505	5,794	5,874
4	Long-term Point to Point (PTP)			
5	Executed Agreements	16,451	15,394	14,211
6	Conversions from FPT	160	642	643
7	Conversions from IR	100	400	400
8	PTP Roll Overs	20	1,185	2,231
9	Extensions of Commencement of Service	-363	-896	-512
10	Q-Sales	75	720	995
11	Subtotal Long-term PTP	16,442	17,446	17,968
12	PTP Short Term	991	729	793
13	**Subtotal Network**	**29,738**	**29,987**	**30,654**
	Southern Intertie			
	Long-term Intertie South (IS)			
14	Executed Agreements	5,196	4,822	3,429
15	Roll Overs	20	282	1,290
16	Q-Sales	0	301	451
17	Subtotal Long-term IS	5,216	5,404	5,170
18	IS Short Term	211	211	211
19	**Subtotal Intertie**	**5,427**	**5,616**	**5,381**
20	NT Load Shaping	5,777	6,042	6,122
21	Utility Delivery Charge	196	147	144
22	Montana Intertie	16	16	16
	Sales Receiving Transmission Credits			
23	Long-Term PTP	504	1,442	1,743
24	NT/NT_LS	0	50	113
25	Long-Term IS	0	301	451

Table 13-2: Transmission Revenues, Current Rates FY 2007 - FY 2009 ($000s)

		(A) FY 2007	(B) FY 2008	(C) FY 2009
	Long-Term			
	Network			
1	Formula Power Transmission, one yr rate	28,648	27,776	27,773
2	Formula Power Transmission, three yr rate	5,005	1,233	1,251
3	Integration of Resources	78,217	72,806	72,806
4	Point to Point	228,195	254,567	262,188
5	Network Integration Transmission, Base Charge	80,326	84,546	85,713
6	Network Integration Transmission, Load Shaping	25,442	26,609	26,961
	Interties			
7	Intertie South	74,784	78,538	75,127
8	Montana Intertie	236	236	236
	Short-Term			
9	Network	21,965	16,293	17,739
10	PSW Intertie	4,070	4,207	4,207
	Delivery			
11	Utility	2,207	1,970	1,928
12	Industry	1,804	1,804	1,804
	Ancillary			
13	Scheduling Control & Dispatch	68,270	96,318	97,977
14	Generation Supplied Reactive	28,680	6,800	6,670
15	Operating Reserves	26,397	26,397	26,397
16	Regulation and Frequency Response	12,948	14,582	14,821
17	Generation and Load Imbalances	0	0	0
	Revenue Credits			
18	Amort NonFedParticpation, AC Intertie	3,065	3,065	3,065
19	Annual Cost Rate	1,400	1,400	1,432
20	Direct Corp and Bureau	954	954	954
21	Fiber	8,446	9,208	9,975
22	Generation Integration Costs	8,454	6,813	6,822
23	Land Leases, Other Revenue	2,192	2,192	2,192
24	Operation and Maintenance Services	957	957	1,189
25	Power Factor Penalty	4,570	4,570	4,570
26	Remedial Action Scheme	51	51	51
27	Reservation Fees	529	529	529
28	Townsend Garrison Transmission	9,796	9,796	9,796
29	Unauthorized Increase Charge	0	0	0
30	Use of Facilities	7,500	7,500	7,500
31	Wireless Personal Communications	4,248	4,388	4,528
32	**Subtotal Network**	**467,798**	**483,830**	**494,432**
33	**Subtotal Interties**	**79,091**	**82,981**	**79,570**
34	**Subtotal Delivery**	**4,011**	**3,773**	**3,731**
35	**Subtotal Ancillary**	**136,295**	**144,097**	**145,865**
36	**Subtotal Revenue Credits**	**52,164**	**51,424**	**52,604**
37	**Total TBL**	**739,359**	**766,106**	**776,203**

Table 13-3: Transmission Revenues, Proposed Rates FY 2008 - FY 2009
($000s)

		(A) FY2008	(B) FY2009
	Long-Term		
	Network		
1	Formula Power Transmission, one yr rate	27,776	27,773
2	Formula Power Transmission, three yr rate	1,358	1,378
3	Integration of Resources	72,385	72,385
4	Point to Point	271,733	279,868
5	Network Integration Transmission, Base Charge	90,247	91,492
6	Network Integration Transmission, Load Shaping	26,609	26,961
	Interties		
7	Intertie South	83,856	80,214
8	Montana Intertie	252	252
	Short-Term		
9	Network	17,424	18,971
10	PSW Intertie	4,504	4,504
	Delivery		
11	Utility	1,970	1,928
12	Industry	1,804	1,804
	Ancillary		
13	Scheduling Control & Dispatch	73,343	74,427
14	Generation Supplied Reactive	39	39
15	Operating Reserves	26,397	26,397
16	Regulation and Frequency Response	14,582	14,821
17	Generation and Load Imbalances	0	0
	Revenue Credits		
18	Amort NonFedParticpation, AC Intertie	3,065	3,065
19	Annual Cost Rate	1,400	1,432
20	Direct Corp and Bureau	954	954
21	Fiber	9,208	9,975
22	Generation Integration Costs	6,813	6,822
23	Land Leases, Other Revenue	2,192	2,192
24	Operation and Maintenance Services	957	1,189
25	Power Factor Penalty	4,570	4,570
26	Remedial Action Scheme	51	51
27	Reservation Fees	529	529
28	Townsend Garrison Transmission	9,796	9,796
29	Unauthorized Increase Charge	0	0
30	Use of Facilities	7,500	7,500
31	Wireless Personal Communications	4,388	4,528
32	**Subtotal Network**	**507,533**	**518,829**
33	**Subtotal Intertie**	**88,612**	**84,970**
34	**Subtotal Delivery**	**3,773**	**3,731**
35	**Subtotal Ancillary**	**114,360**	**115,684**
36	**Subtotal Revenue Credits**	**51,424**	**52,604**
37	**Total TBL**	**765,703**	**775,819**

Table 13-4: LGIA Transmission Credits and Interest at Current Rates
($000s)

	Generation Project	FY 2007 Transmission Credits Repaid	FY 2007 Interest Expense	FY 2008 Transmission Credits	FY 2008 Interest Expense	FY 2009 Transmission Credits	FY 2009 Interest Expense
1	Generation Project A	$ -	$ -	$ 1,094	$ 3	$ 1,094	$ -
2	Generation Project B	2,262	856	2,262	750	2,262	643
3	Generation Project C	2,431	601	4,171	385	3,075	116
4	Generation Project D	3,404	275	3,320	38	3,075	-
5	Generation Project E	-	-	3,648	1,057	4,378	1,229
6	Generation Project F	-	-	3,283	1,313	4,195	1,294
7	Generation Project G	-	-	1,273	1,966	2,835	2,723
8	Generation Project H	-	-	905	445	905	464
9	Generation Project I	-	-	-	-	3,040	2,229
10	Generation Project J	243	-	2,918	279	2,918	72
11	Non-LGIA Project	-	-	4,369	1,968	6,554	3,250
12	ANNUAL TOTALS	$ 8,339	$ 1,732	$ 27,244	$ 8,203	$ 34,332	$ 12,021

Table 13-5: LGIA Transmission Credits and Interest at Proposed Rates
($000s)

	Generation Project	FY 2007 Transmission Credits Repaid	FY 2007 Interest Expense	FY 2008 Transmission Credits	FY 2008 Interest Expense	FY 2009 Transmission Credits	FY 2009 Interest Expense
1	Generation Project A	$ -	$ -	$ 1,168	$ 3	$ 1,168	$ -
2	Generation Project B	2,262	856	2,414	744	2,414	624
3	Generation Project C	2,431	601	4,452	375	3,283	87
4	Generation Project D	3,404	275	3,544	36	3,283	-
5	Generation Project E	-	-	3,894	1,049	4,673	1,197
6	Generation Project F	-	-	3,505	1,305	4,478	1,265
7	Generation Project G	-	-	1,344	1,964	2,993	2,711
8	Generation Project H	-	-	966	443	966	457
9	Generation Project I	-	-	-	-	3,245	2,223
10	Generation Project J	243	-	3,115	272	3,115	56
11	Non-LGIA Project	-	-	4,665	1,961	6,998	3,208
12	ANNUAL TOTALS	$ 8,339	$ 1,732	$ 29,067	$ 8,151	$ 36,615	$ 11,829

Table 13-6: FERC Interest Rate Assumptions

Fiscal Year	Assumed Annual Rate
2007	7.75%
2008	7.81%
2009	8.00%

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CHAPTER 14

DEBT OPTIMIZATION DEMONSTRATION

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1. Background

In FY 2001 BPA began carrying out the Debt Optimization (DO) Program in conjunction with Energy Northwest (EN) as a means for BPA to replenish its Treasury borrowing authority. The basic mechanism of the DO program is that, shortly before the principal of qualifying outstanding EN debt reaches its final maturity (due date) it is repaid with the proceeds of new EN debt that has a final maturity at a later date. The cash that otherwise would have been used to pay the principal of the refunded EN debt is used to repay an equivalent amount of Federal obligations, thereby restoring Treasury borrowing authority or providing opportunities for future restoration of borrowing authority for the agency.

To expand the capability to restore Treasury borrowing authority, BPA instituted the Debt Service Reassignment (DSR) concept, whereby cash flows generated through DO are used to repay transmission-related Treasury obligations. Under the DSR concept, the transmission function is responsible for the recovery of any and all relevant costs associated with the swap of EN debt service for Federal obligations associated with transmission, and BPA's generation function is held harmless. For BPA's Power Services (PS), it is as if the refinancing transactions related to DSR never took place. That is, power rates were set to recover the maturing EN principal payment as it came due, and actual power revenues were available to do so. Therefore, PS's obligation to recover the maturing EN principal has been satisfied -- the generation function no longer has the repayment obligation for that portion of the debt service associated with refinanced EN debt assigned to transmission through DSR, and recovery of the associated debt service is no longer reflected in the costs of BPA's generation function. *See* Homenick et al., TR-06-E-BPA-05, Section 2C for a full description of DO and DSR.

2. DO Demonstration and Slice Settlement Agreement

BPA has committed to manage the DO program in a manner such that rates are no higher with DO than they would be in the absence of DO. BPA complies with this commitment by conducting annual DO analysis that involves running two 20-year repayment studies for both transmission and generation, as follows: 1) a base repayment study that includes all debt management activities completed up through the prior year, and 2) a repayment study that includes the above plus new DO and DSR projections for the current and upcoming fiscal years. BPA demonstrates achievement of the "rates no higher" commitment when the comparison of the two studies shows that the combined levelized Federal and non-Federal debt service in the repayment study that includes DO is equal to or lower than the debt service in the repayment study that does not include DO.

As part of the Slice Settlement Agreement MOU, BPA agreed to make the above demonstration annually (known as the Transmission Rate DO Program Demonstration in the -2008 Transmission Rate Case Settlement Agreement) to customers in the late fall/ early winter period and that, for purposes of the 2008 Transmission Rate Case, the Initial Proposal would include this demonstration, among other things. This demonstration is contained in the tables described below.

3. The Demonstration Tables

Table 14-1 is the comparison of the results of the two repayment studies. Column B is the total levelized debt service calculated in the transmission base repayment study. Column C is the total

levelized debt service calculated in the transmission debt optimization repayment study. It matches Column B of Table 14-4. Column D shows the difference between columns B and C.

Table 14-2 summarizes the results of the transmission base repayment study. This study incorporates all debt management transactions made on behalf of transmission through September 30, 2006, plus the DSR that resulted from the 2006 DO EN refinancing allocated to transmission. It does not include projections of future DO actions. The study shows what the combined levelized debt service levels would be if no additional DO transactions occurred. Column B is the total levelized Federal and non Federal debt service. Column C is non-Federal debt service. Column D is gross Federal interest expense calculated in the repayment study. Column E is Federal principal amortization. Column F is the revenue surplus. Table 14-3 shows the projected Federal investments used in the twenty-year study.

Table 14-4 contains the results of the transmission debt optimization repayment study. This study incorporates all elements from the base study noted above, plus the DO/DSR projections for the current and upcoming fiscal years. Incorporating future DO/DSR into this study is the only difference between this and the base study. The columns are laid out in the same manner as Table 14-2, Summary of Base Repayment Study. Table 14-5 shows the projected Federal investments used in the twenty-year study, which matches the projections shown in Table 14-3. Table 14-6 shows the projected third-party net debt service associated with the projected DO bonds. The par amount of the projected bonds and the issuance year are shown in the bottom half of the table. The resulting net debt service stream is in the top half of the table.

Table 14-1: Comparison of Transmission Repayment Studies

($000s) (FY 2026)

(A)	(B)	(C)	(D)
Date	**Base Total Debt Service**	**Debt Optimization Total Debt Service**	**Delta**
09/30/2007	353,381	348,608	(4,773)
09/30/2008	365,777	357,894	(7,883)
09/30/2009	383,563	375,009	(8,554)
09/30/2010	400,580	391,663	(8,917)
09/30/2011	414,242	405,667	(8,575)
09/30/2012	430,144	428,301	(1,843)
09/30/2013	449,210	452,481	3,271
09/30/2014	467,689	466,272	(1,417)
09/30/2015	484,958	483,537	(1,421)
09/30/2016	507,864	506,447	(1,417)
09/30/2017	526,032	524,618	(1,414)
09/30/2018	538,381	536,965	(1,416)
09/30/2019	550,531	549,147	(1,384)
09/30/2020	563,103	561,753	(1,350)
09/30/2021	576,795	574,908	(1,887)
09/30/2022	590,622	589,289	(1,333)
09/30/2023	606,322	604,992	(1,330)
09/30/2024	621,399	624,039	2,640
09/30/2025	638,082	636,478	(1,604)
09/30/2026	655,398	653,799	(1,599)
			(52,206)

Bonneville Power Administration
Transmission Repayment Study
October 1, 2006 to September 30, 2026 (2006HY)
Transmission Base Study 12.20.06

Table 14-2: Summary of Repayment Study($000s) (FY 2026)

(A)	(B)	(C)	(D)	(E)	(F)
Date	**Total Debt Service**	**3rd Party Debt Service**	**Federal Gross Interest**	**Federal Amortization**	**Rev. Surplus**
09/30/2007	353,381	49,576	133,505	170,300	-
09/30/2008	365,777	53,344	144,651	167,781	0
09/30/2009	383,563	56,084	154,821	172,658	-
09/30/2010	400,580	48,282	164,965	187,333	-
09/30/2011	414,242	48,306	172,722	193,214	0
09/30/2012	430,144	80,629	181,300	168,216	0
09/30/2013	449,210	171,196	194,190	83,824	-
09/30/2014	467,689	151,264	212,337	104,088	0
09/30/2015	484,958	153,024	236,536	95,398	-
09/30/2016	507,864	156,283	259,308	92,272	-
09/30/2017	526,032	166,270	282,597	77,165	0
09/30/2018	538,381	161,672	302,726	73,984	-
09/30/2019	550,531	16,078	324,809	209,644	-
09/30/2020	563,103	30,734	333,752	198,618	-
09/30/2021	576,795	30,822	345,257	200,717	-
09/30/2022	590,622	30,912	356,434	203,276	-
09/30/2023	606,322	31,013	369,401	205,908	0
09/30/2024	621,399	25,103	385,383	210,913	-
09/30/2025	638,082	6,509	401,564	230,010	-
09/30/2026	655,398	6,511	424,823	224,063	0
09/30/2027	655,398	2,649	434,105	218,644	0
09/30/2028	655,398	2,753	427,631	225,014	-
09/30/2029	655,398	2,926	438,544	213,928	-
09/30/2030	655,398	3,025	440,027	212,346	-
09/30/2031	655,398	3,261	436,174	215,963	0
09/30/2032	655,398	3,593	438,199	213,607	0
09/30/2033	655,398	32,793	441,026	181,579	-
09/30/2034	655,398	89,660	442,664	123,074	-
09/30/2035	655,398	(2,320)	447,340	210,378	-
09/30/2036	655,398	(2,161)	451,649	205,910	-
09/30/2037	655,398	(1,993)	453,026	204,365	-
09/30/2038	655,398	(1,795)	451,997	205,196	-
09/30/2039	655,398	(1,747)	454,607	202,538	-
09/30/2040	655,398	(1,702)	451,439	205,661	-
09/30/2041	655,398	(1,669)	448,887	208,180	-
09/30/2042	655,398	(1,638)	448,620	208,414	-
09/30/2043	655,398	(1,627)	450,828	206,196	-
09/30/2044	655,398	(1,674)	452,849	204,221	-
09/30/2045	655,398	(1,718)	454,847	202,269	-
09/30/2046	655,398	(1,806)	458,271	198,933	-
09/30/2047	655,398	(1,901)	460,712	196,587	-
09/30/2048	655,398	(2,056)	463,814	193,640	-
09/30/2049	655,398	(2,274)	467,565	190,107	-
09/30/2050	655,398	(2,302)	472,257	185,441	-
09/30/2051	655,398	(2,335)	477,310	180,420	-
09/30/2052	655,398	(2,370)	483,430	174,331	-
09/30/2053	655,398	(2,410)	490,105	167,693	0
09/30/2054	655,398	(2,454)	499,795	158,057	-
09/30/2055	655,398	(2,500)	508,496	149,402	-
09/30/2056	655,398	(2,553)	518,218	139,733	-
09/30/2057	655,398	(2,609)	529,375	128,632	-
09/30/2058	655,398	(2,666)	541,798	116,266	-
09/30/2059	655,398	(2,725)	555,515	102,608	-
09/30/2060	655,398	(2,784)	570,725	87,457	-
09/30/2061	655,398	(2,846)	587,552	70,692	0
Total	**33,063,003**	**1,555,633**	**21,930,478**	**9,576,863**	**0**

Table 14-3: Projected Federal Investments ($000s) (FY 2026)

Project	Original Principal	Current Principal	Interest Rate	Due Date	Replace ment?	In Service Date	Month	Rollover Date	Rollover Rate
BPA PROGRAM	232,010	232,010	6.000%	2042	No	2007	3	-	-
BPA PROGRAM	285,189	285,189	6.320%	2043	No	2008	3	-	-
BPA PROGRAM	259,531	259,531	6.630%	2044	No	2009	3	-	-
BPA PROGRAM	282,845	282,845	6.850%	2045	No	2010	3	-	-
BPA PROGRAM	277,667	277,667	6.900%	2046	No	2011	3	-	-
BPA PROGRAM	301,552	301,552	6.900%	2047	No	2012	3	-	-
BPA PROGRAM	354,076	354,076	6.900%	2048	No	2013	3	-	-
BPA PROGRAM	350,445	350,445	6.900%	2049	No	2014	3	-	-
BPA PROGRAM	375,823	375,823	6.900%	2050	No	2015	3	-	-
BPA PROGRAM	465,446	465,446	6.900%	2051	No	2016	3	-	-
BPA PROGRAM	405,352	405,352	6.900%	2052	No	2017	3	-	-
BPA PROGRAM	329,582	329,582	6.900%	2053	No	2018	3	-	-
BPA PROGRAM	327,100	327,100	6.910%	2054	No	2019	3	-	-
BPA PROGRAM	349,000	349,000	6.910%	2055	No	2020	3	-	-
BPA PROGRAM	365,800	365,800	6.910%	2056	No	2021	3	-	-
BPA PROGRAM	391,000	391,000	6.910%	2057	No	2022	3	-	-
BPA PROGRAM	418,000	418,000	6.910%	2058	No	2023	3	-	-
BPA PROGRAM	418,000	418,000	6.910%	2059	No	2024	3	-	-
BPA PROGRAM	446,475	446,475	6.910%	2060	No	2025	3	-	-
BPA PROGRAM	459,869	459,869	6.910%	2061	No	2026	3	-	-
ENVIRONMENT	7,000	7,000	5.660%	2022	No	2007	3	-	-
ENVIRONMENT	5,129	5,129	5.940%	2023	No	2008	3	-	-
ENVIRONMENT	5,451	5,451	6.230%	2024	No	2009	3	-	-
ENVIRONMENT	8,000	8,000	6.450%	2025	No	2010	3	-	-
ENVIRONMENT	9,000	9,000	6.500%	2026	No	2011	3	-	-
ENVIRONMENT	8,000	8,000	6.500%	2027	No	2012	3	-	-
ENVIRONMENT	7,765	7,765	6.500%	2028	No	2013	3	-	-
ENVIRONMENT	7,922	7,922	6.500%	2029	No	2014	3	-	-
ENVIRONMENT	8,082	8,082	6.500%	2030	No	2015	3	-	-
ENVIRONMENT	8,246	8,246	6.500%	2031	No	2016	3	-	-
ENVIRONMENT	8,412	8,412	6.500%	2032	No	2017	3	-	-
ENVIRONMENT	8,582	8,582	6.500%	2033	No	2018	3	-	-
ENVIRONMENT	10,200	10,200	6.500%	2034	No	2019	3	-	-
ENVIRONMENT	10,900	10,900	6.500%	2035	No	2020	3	-	-
ENVIRONMENT	11,700	11,700	6.500%	2036	No	2021	3	-	-
ENVIRONMENT	12,500	12,500	6.500%	2037	No	2022	3	-	-
ENVIRONMENT	13,400	13,400	6.500%	2038	No	2023	3	-	-
ENVIRONMENT	13,905	13,905	6.500%	2039	No	2024	3	-	-
ENVIRONMENT	14,322	14,322	6.500%	2040	No	2025	3	-	-
ENVIRONMENT	14,752	14,752	6.500%	2041	No	2026	3	-	-
	$7,288,030								

Table 14-4: Summary of Repayment Study ($000s) (FY 2026)

(A)	(B)	(C)	(D)	(E)	(F)
Date	**Total Debt Service**	**3rd Party Debt Service**	**Federal Gross Interest**	**Federal Amortization**	**Rev. Surplus**
09/30/2007	348,608	(152,224)	128,732	372,100	-
09/30/2008	357,894	(47,607)	127,720	277,781	-
09/30/2009	375,009	45,224	132,127	197,658	-
09/30/2010	391,663	58,612	140,718	192,333	-
09/30/2011	405,667	58,885	148,568	198,214	-
09/30/2012	428,301	86,425	163,660	178,216	-
09/30/2013	452,481	225,825	173,357	53,299	-
09/30/2014	466,272	236,021	194,139	36,112	0.01
09/30/2015	483,537	234,734	217,330	31,472	0.01
09/30/2016	506,447	225,196	244,570	36,680	-
09/30/2017	524,618	229,043	271,829	23,746	0.01
09/30/2018	536,965	224,969	295,576	16,420	-
09/30/2019	549,147	16,078	323,050	210,019	-
09/30/2020	561,753	30,734	332,145	198,875	-
09/30/2021	574,908	30,822	339,904	204,182	-
09/30/2022	589,289	30,912	353,155	205,222	-
09/30/2023	604,992	31,013	368,341	205,639	0.01
09/30/2024	624,039	25,103	386,961	211,976	-
09/30/2025	636,478	6,509	400,237	229,732	-
09/30/2026	653,799	6,511	423,592	223,696	0.02
09/30/2027	653,799	2,649	432,852	218,298	0.01
09/30/2028	653,799	2,753	429,036	222,010	-
09/30/2029	653,799	2,926	434,371	216,502	-
09/30/2030	653,799	3,025	438,933	211,841	-
09/30/2031	653,799	3,261	435,057	215,481	0.01
09/30/2032	653,799	3,593	441,795	208,411	0.01
09/30/2033	653,799	32,793	440,292	180,714	-
09/30/2034	653,799	89,660	441,785	122,354	-
09/30/2035	653,799	(2,320)	446,510	209,609	-
09/30/2036	653,799	(2,161)	450,879	205,081	-
09/30/2037	653,799	(1,993)	454,191	201,601	-
09/30/2038	653,799	(1,795)	454,161	201,433	-
09/30/2039	653,799	(1,747)	450,400	205,146	-
09/30/2040	653,799	(1,702)	450,218	205,283	-
09/30/2041	653,799	(1,669)	449,484	205,984	-
09/30/2042	653,799	(1,638)	447,539	207,898	-
09/30/2043	653,799	(1,627)	449,691	205,732	-
09/30/2044	653,799	(1,674)	451,739	203,732	-
09/30/2045	653,799	(1,718)	453,665	201,848	-
09/30/2046	653,799	(1,806)	457,223	198,382	-
09/30/2047	653,799	(1,901)	459,713	195,987	-
09/30/2048	653,799	(2,056)	462,847	193,008	-
09/30/2049	653,799	(2,274)	466,651	189,420	-
09/30/2050	653,799	(2,302)	471,384	184,714	-
09/30/2051	653,799	(2,335)	476,489	179,639	-
09/30/2052	653,799	(2,370)	482,667	173,493	-
09/30/2053	653,799	(2,410)	489,399	166,805	0.02
09/30/2054	653,799	(2,454)	499,158	157,095	-
09/30/2055	653,799	(2,500)	507,908	148,391	-
09/30/2056	653,799	(2,553)	517,703	138,649	-
09/30/2057	653,799	(2,609)	528,948	127,460	-
09/30/2058	653,799	(2,666)	541,442	115,023	-
09/30/2059	653,799	(2,725)	555,248	101,276	-
09/30/2060	653,799	(2,784)	570,553	86,030	-
09/30/2061	653,799	(2,846)	587,483	69,162	0.01
Total	**32,954,832**	**1,684,808**	**21,693,124**	**9,576,867**	**$0.12**

Table 14-5: Projected Federal Investments ($000s) (FY 2026)

Project	Original Principal	Current Principal	Interest Rate	Due Date	Replace ment?	In Service Date	Month	Rollover Date	Rollover Rate
BPA PROGRAM	232,010	232,010	6.000%	2042	No	2007	3	-	-
BPA PROGRAM	285,189	285,189	6.320%	2043	No	2008	3	-	-
BPA PROGRAM	259,531	259,531	6.630%	2044	No	2009	3	-	-
BPA PROGRAM	282,845	282,845	6.850%	2045	No	2010	3	-	-
BPA PROGRAM	277,667	277,667	6.900%	2046	No	2011	3	-	-
BPA PROGRAM	301,552	301,552	6.900%	2047	No	2012	3	-	-
BPA PROGRAM	354,076	354,076	6.900%	2048	No	2013	3	-	-
BPA PROGRAM	350,445	350,445	6.900%	2049	No	2014	3	-	-
BPA PROGRAM	375,823	375,823	6.900%	2050	No	2015	3	-	-
BPA PROGRAM	465,446	465,446	6.900%	2051	No	2016	3	-	-
BPA PROGRAM	405,352	405,352	6.900%	2052	No	2017	3	-	-
BPA PROGRAM	329,582	329,582	6.900%	2053	No	2018	3	-	-
BPA PROGRAM	327,100	327,100	6.910%	2054	No	2019	3	-	-
BPA PROGRAM	349,000	349,000	6.910%	2055	No	2020	3	-	-
BPA PROGRAM	365,800	365,800	6.910%	2056	No	2021	3	-	-
BPA PROGRAM	391,000	391,000	6.910%	2057	No	2022	3	-	-
BPA PROGRAM	418,000	418,000	6.910%	2058	No	2023	3	-	-
BPA PROGRAM	418,000	418,000	6.910%	2059	No	2024	3	-	-
BPA PROGRAM	446,475	446,475	6.910%	2060	No	2025	3	-	-
BPA PROGRAM	459,869	459,869	6.910%	2061	No	2026	3	-	-
ENVIRONMENT	7,000	7,000	5.660%	2022	No	2007	3	-	-
ENVIRONMENT	5,129	5,129	5.940%	2023	No	2008	3	-	-
ENVIRONMENT	5,451	5,451	6.230%	2024	No	2009	3	-	-
ENVIRONMENT	8,000	8,000	6.450%	2025	No	2010	3	-	-
ENVIRONMENT	9,000	9,000	6.500%	2026	No	2011	3	-	-
ENVIRONMENT	8,000	8,000	6.500%	2027	No	2012	3	-	-
ENVIRONMENT	7,765	7,765	6.500%	2028	No	2013	3	-	-
ENVIRONMENT	7,922	7,922	6.500%	2029	No	2014	3	-	-
ENVIRONMENT	8,082	8,082	6.500%	2030	No	2015	3	-	-
ENVIRONMENT	8,246	8,246	6.500%	2031	No	2016	3	-	-
ENVIRONMENT	8,412	8,412	6.500%	2032	No	2017	3	-	-
ENVIRONMENT	8,582	8,582	6.500%	2033	No	2018	3	-	-
ENVIRONMENT	10,200	10,200	6.500%	2034	No	2019	3	-	-
ENVIRONMENT	10,900	10,900	6.500%	2035	No	2020	3	-	-
ENVIRONMENT	11,700	11,700	6.500%	2036	No	2021	3	-	-
ENVIRONMENT	12,500	12,500	6.500%	2037	No	2022	3	-	-
ENVIRONMENT	13,400	13,400	6.500%	2038	No	2023	3	-	-
ENVIRONMENT	13,905	13,905	6.500%	2039	No	2024	3	-	-
ENVIRONMENT	14,322	14,322	6.500%	2040	No	2025	3	-	-
ENVIRONMENT	14,752	14,752	6.500%	2041	No	2026	3	-	-
	$7,288,030								

Table 14-6: Third-Party Projections

Total Net Debt Service -- GAAP BASIS

Fiscal Year	Principal	Interest	Net New D/S
2006	-	-	-
2007	-	-	-
2008	-	9,048,631	9,048,631
2009	-	14,139,631	14,139,631
2010	-	15,330,631	15,330,631
2011	-	15,579,131	15,579,131
2012	-	15,796,131	15,796,131
2013	38,400,000	16,229,131	54,629,131
2014	70,166,000	14,591,121	84,757,121
2015	70,166,000	11,544,533	81,710,533
2016	60,500,000	8,412,729	68,912,729
2017	57,168,000	5,605,579	62,773,579
2018	60,400,000	2,897,050	63,297,050
-	**356,800,000**	**129,174,297**	**485,974,297**

Par Amounts Of Selected Issues

NET2007-DUE13-18	201,800,000
NET2008-DUE13-18	110,000,000
NET2009-DUE13-18	25,000,000
NET2010-DUE13-18	5,000,000
NET2011-DUE13-18	5,000,000
NET2012-DUE13-18	10,000,000
TOTAL	**356,800,000**