Bonneville Power Administration's

Power Function Review

Depreciation and Amortization, Federal Net Interest, Non-Federal Debt Service, and Related Debt Management Actions

Technical Workshop

March 1, 2005

BPA's Financial Disclosure Information

1. All FY 05-09 information was released externally in February 2005 and may not be found verbatim in Agency Financial Information releases but is provided for discussion or exploratory purposes only as projections of program activity levels, etc.

2. All FY 97-04 information was released externally in February 2005 and is consistent with audited actuals that contain Agency Financial Information.

3. The FY 05-09 net interest expense information is a derived estimate for presentation purposes and may not be found in Agency Financial Information releases but is provided for discussion or exploratory purposes only as *projections of program activity levels, etc.* Such information should be used only for the purpose for which it was provided and should not be recommunicated by the recipient without the foregoing qualification.

NOTE: When referring to "actuals" for the 2002-2006 rate period, it is a combination of actual results for FY 02-04 and the current forecasts for FY 05-06.

Workshop Objectives and Agenda

- Putting Today's Discussion in Perspective
- Provide an overview of the current forecast of:
  - Depreciation and Amortization
  - Federal Net Interest
  - Non-Federal Debt Service
- Provide an overview of BPA's efforts to manage its long-term liabilities as a single portfolio
- Describe the effects of debt management actions
  - Debt Optimization
  - Energy Northwest (EN) Debt Service Reserve Fund Free-ups
  - Refinancings for Savings
  - Debt Service Reassignment (DSR)
- Questions and discussion relevant to these topics, including an additional handout on potential opportunities

Putting Today's Discussion in Perspective

The costs associated with Depreciation & Amortization, Federal Net Interest Expense and Non-Federal Debt Service are big drivers of rate levels, representing about 40% of PBL's total expenses. Why are these costs at this level?

- They are primarily driven by broad-based business line decisions and policies related to capital investment levels.
- Corporate Finance responds to these capital program decisions and the associated timing parameters by developing the optimal and most efficient debt management actions leading to the lowest costs overall.
- The actual costs (through FY 2004) in this package are the aggregate result of past decisions.

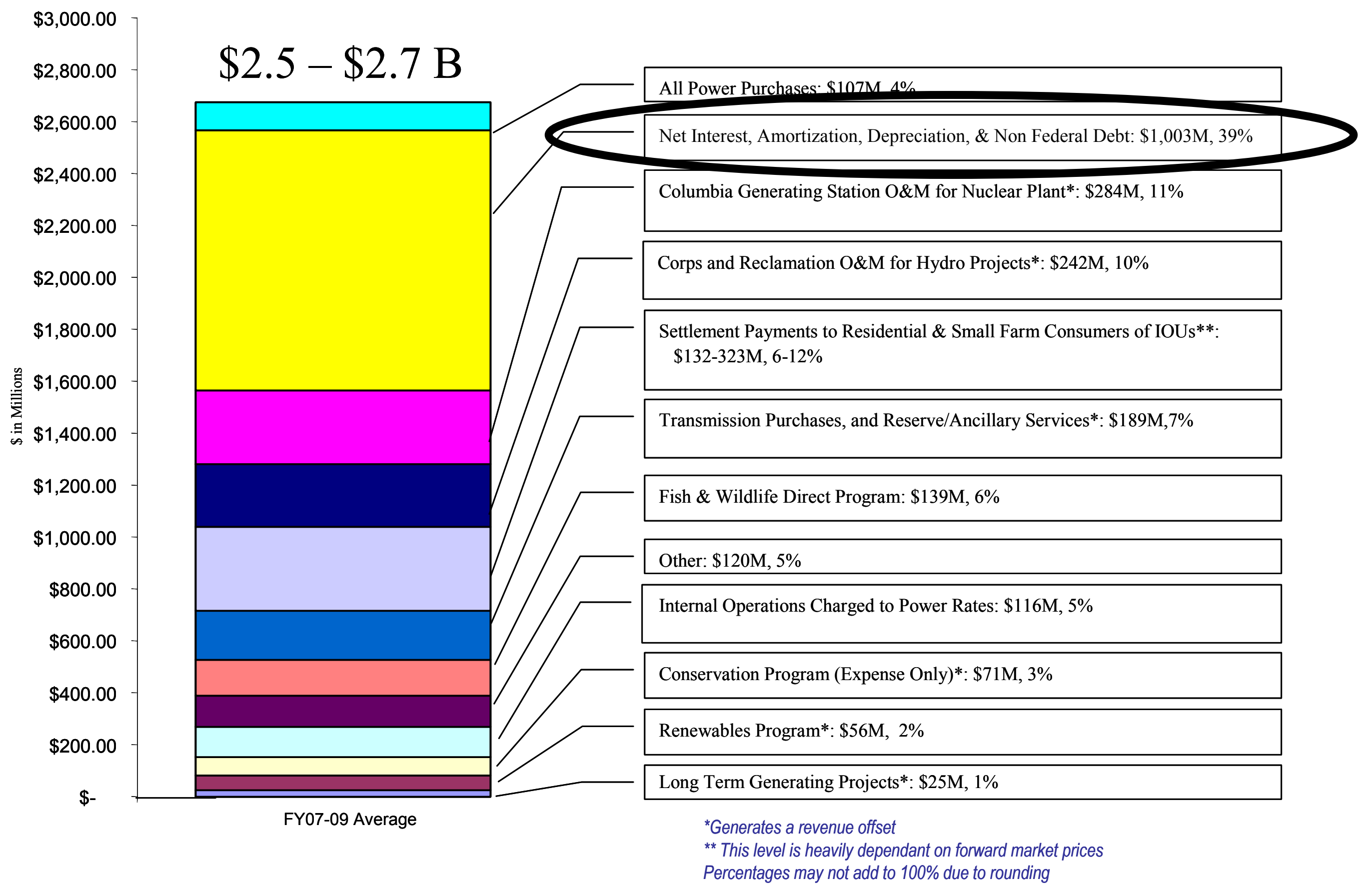
The forecasted costs in this package reflect the result of past decisions, forecasts of future spending levels, existing policies, and assumptions about other decisions.

Capital spending levels are **not** within the scope of today's presentation. The appropriate forum in which to discuss these issues is at each program PFR session. All but four of these sessions (Transmission Acquisition, Conservation, Renewables, and Internal Costs) are to be held at future dates.

Debt management actions already taken **are** within the scope of today's session.

Net Interest, Amortization, Depreciation, & Non Federal Debt

- The Net Interest, Amortization, Depreciation & Non-Federal Debt costs are included in the revenue requirement of the PBL rate structure. These costs are largely a direct result of actions taken in program level decisions about capital spending.



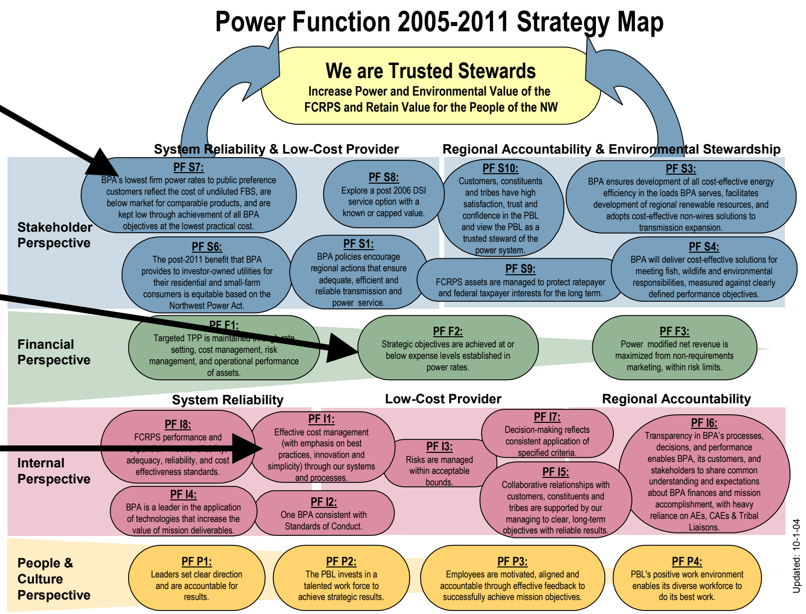
Note: See BPA's Financial Disclosure Information Page

Power Function Review Net Interest, Amortization, Depreciation & Non Federal Debt Support of PBL Balanced Scorecard

PF S7: BPA's lowest firm power rates to public preference customers reflect the cost of undiluted FBS, are below market for comparable products, and are kept low through achievement of all BPA objectives at the lowest practical cost.

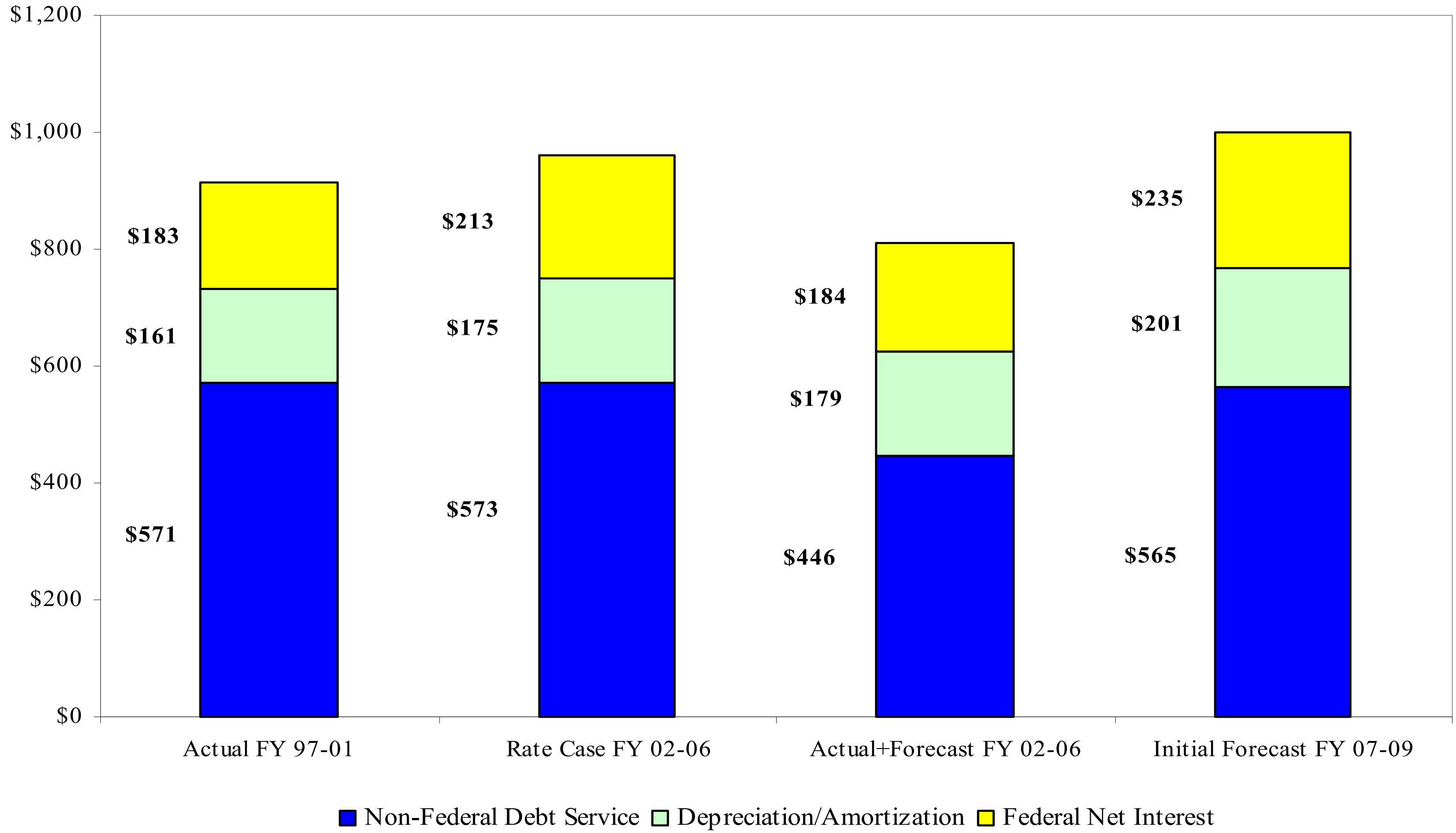
PF F2: Strategic objectives are achieved at or below expense levels established in power rates.

PF I1: Effective cost management (with emphasis on best practices, innovation and simplicity) through our systems and processes.



Average Expense Levels for Non-Federal Debt Service, Depreciation & Amortization, and Federal Net Interest

($ millions)



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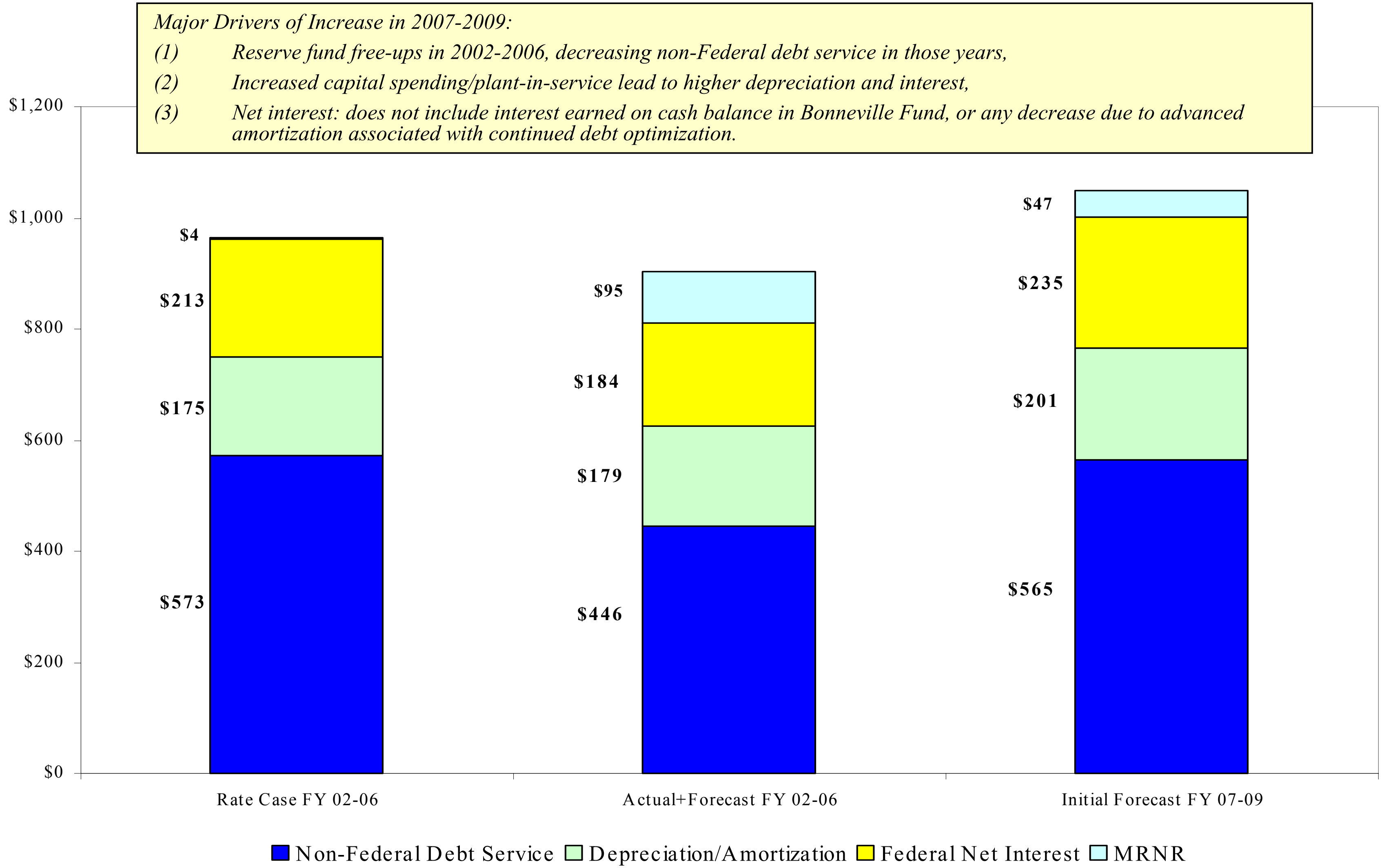
Average Expense Levels Including Minimum Required Net Revenue

($ millions)



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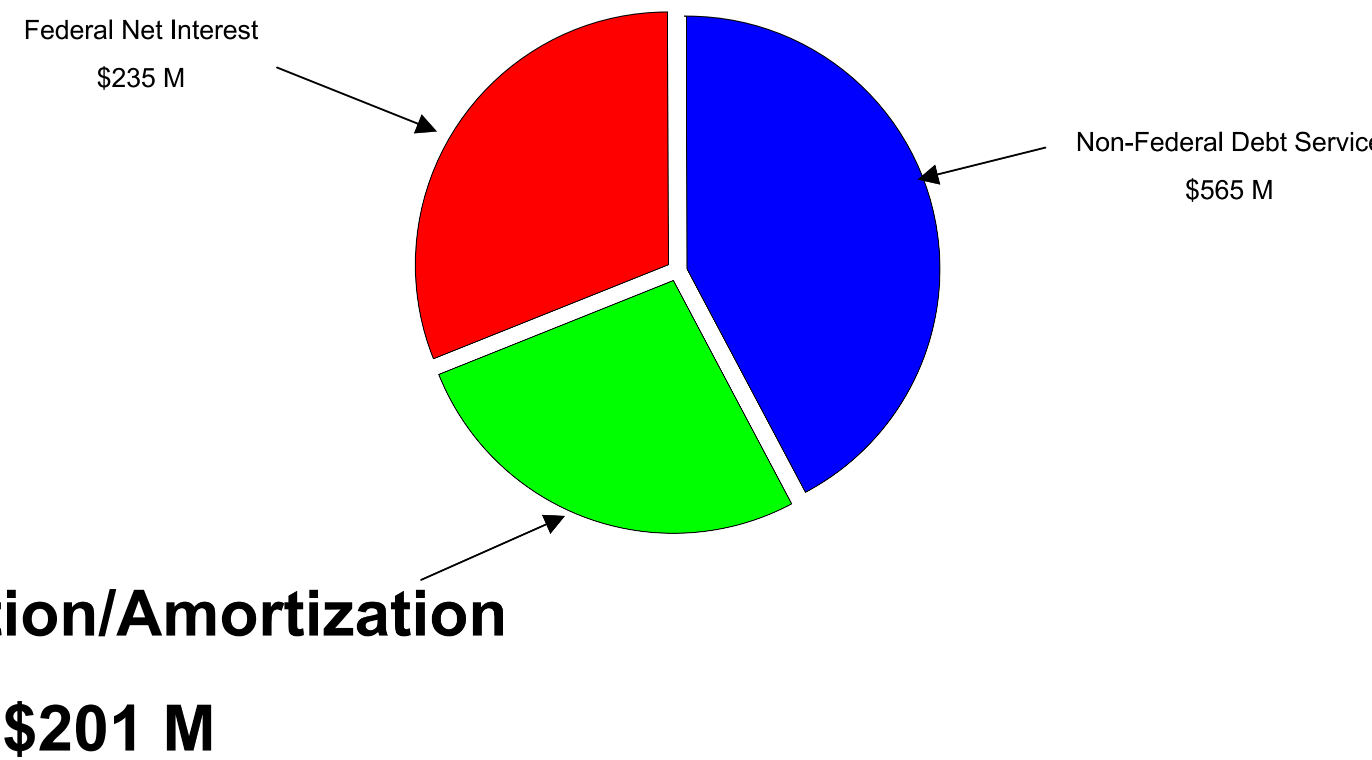
Depreciation & Amortization

Average Annual Expenses for FY 07-09



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What are these programs?

Actually, these "programs" are really categories of expenses derived from several programs.

1. **Depreciation & Amortization**: These categories consist of the annual expenses associated with FCRPS plant-in-service and intangible assets, respectively.

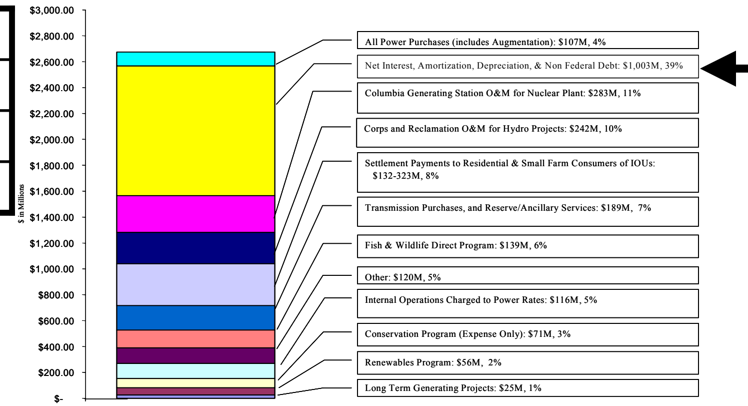
2. **Federal Net Interest Expense**: This category consists of the interest on outstanding bonds and appropriations, an interest credit, amortization of capitalized call premiums, the capitalization adjustment, and the allowance for funds used during construction.

3. **Non-Federal Debt Service**: This category consists of third party debt service or payment costs associated with capitalized contracts and other long-term, fixed contractual obligations. Debt service costs on the Energy Northwest projects (WNP-1, Columbia Generating Station, and WNP-3) make up the majority of these costs.

FY07-09 Power Expenses

Federal Net Interest, Depreciation & Amortization

	FY97-01 Average	FY02-06 Average	FY07-09 Average
Program Level	$344M	$363M	$437M
Increase/Decrease		$19M	$74M
% increase		6%	20%



Program:

- This program is driven by BPA's strategic direction related to our financial objectives: ensure sustainable access to capital, ensure cost recovery over time, and maintain adequate cash flow for liquidity and Treasury payment.
- *Program components of $437M/year annual expense for FY07-09:*
  - 55% Net Interest – Comprised of interest on bonds & appropriations netted against interest credit from the Bonneville Fund
  - 26% Depreciation – The depreciation of revenue producing assets and ongoing infrastructure investments through BPA direct funding for hydro projects, and appropriated investment for fish mitigation program at hydro projects managed by the Corps of Engineers
  - 19% Amortization – The depreciation of non-revenue producing assets such as conservation and direct fish and wildlife capital investments (non-appropriated)

Risks:

- Rising interest rates, affecting the cost of future Treasury borrowing
- Changes in the plant in service schedule of the Columbia River Fish Mitigation project by the Corps of Engineers
- Reduced cash balance, decreasing interest credit

Opportunities for Reductions:

- Continued aggressive debt management to reduce interest costs
- Continuation of the Debt Optimization Program
- Lower interest rates
- Increased cash balance, increasing interest credit

Drivers of Change:

- Debt Optimization increased repayment of Federal debt ("Advance amortization") in the same amounts as non-Federal principal payments decreased (2002-2005)
- Decreased Federal interest expense due to advance amortization (2002-2009)
- Increased capital investment
- Change in projected interest income due to change in cash balance

Note: Depreciation and amortization are direct results of the level of capital investment, so will increase or decrease based on investment levels. Net interest has several components, and is influenced by other factors in addition to capital investment levels.

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Drivers of Change, FY 07-09

- CRFM plant-in-service schedule, which previously was heavily weighted to a 2001 in-service date, has been more spread out over the 2003 – 2014 period.
- Consistent on-going levels of annual capital expenditures for Fish & Wildlife, Conservation Augmentation, Direct Funding and Capital Equipment programs
- Appropriated capital other than CRFM is not forecasted (FY04 = $68m)
- Legacy conservation amortization has been declining as investments are fully amortized

Plant-in-Service and Intangible Asset Investments, actual data and current forecasts:

	($ thousands)	2002	2003	2004	2005	2006	2007	2008	2009
1	ConAug	25,344	25,458	16,876	32,500	29,000	32,000	32,000	32,000
2	F&W	6,102	11,156	5,849	36,000	36,000	36,000	36,000	36,000
3	Capital Equipment (incl. Corp)	14,320	41,000	12,923	17,900	18,000	18,000	18,000	18,000
4	COE/USBR:								
5	Direct Funding	36,472	47,489	67,041	153,671	112,394	172,910	69,958	83,594
6	CRFM	8,797	68,435	75,880	17,000	182,000	100,200	113,400	147,400
7	Other Appropriations	5,130	6,791	53,000	0	0	0	0	0
8	Total COE/USBR	50,399	122,715	195,921	170,671	294,394	273,110	183,358	230,994

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Depreciation & Amortization

	FY97-01 Average	FY02-06 Average	FY07-09 Average
Depreciation/Amortization	$161.4 M	$178.2 M	$201.3 M
Increase/Decrease		$16.8 M	$23.1 M
% increase		10%	13%

- Depreciation and amortization are the annual expenses associated with FCRPS plant-in-service and intangible assets, respectively. These non-cash expenses are the systematic distribution of the original cost of the assets over their estimated useful lives.
- The primary driver for these expenses is the level of capital investment.

Program Components of $201M/year average annual expense for FY07-09:

52% COE/USBR – investment in power portion of hydro projects, including Columbia River Fish Mitigation (CRFM) and Lower Snake hatcheries

7% PBL - investment in capital equipment (IT and furniture), including share of Corporate

11% F&W - investment in BPA's Fish and Wildlife direct program

15% Legacy Conservation – investments in BPA's original conservation capital program, 1982-1999

15% ConAug – investments in BPA 's conservation capital program during Subscription contract period, 2002-2011

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FY 07–09 Forecast: Risks & Opportunities

Depreciation/Amortization Forecast

	($ in thousands)				
1	Depreciation	**2007**	**2008**	**2009**	**Average Service Life**
2	PBL Capital Equipment	16,702	12,660	13,231	IT=5 years, Furniture=20 years
3	Corps/Bureau	100,498	104,671	106,834	75 years
4	Total Depreciation	117,200	117,331	120,065	
5	Amortization				
6	F&W	20,751	22,227	23,316	15 years
7	Conservation (Legacy)	33,049	29,843	27,283	20 years
8	ConAug	21,900	30,027	40,999	Subscription Contracts (2002-2011)
9	Total Amortization	75,700	82,097	91,598	
10	Total Depreciation/Amortizati	192,900	199,428	211,663	

FY 07 – 09 Risks & Opportunities:

- Since depreciation and amortization are direct results of the level of capital investment, they will increase or decrease based on capital investment decisions.
- Uncertainty surrounding CRFM plant-in-service schedule (FY04 Construction Work in Progress (CWIP) at $529 M)

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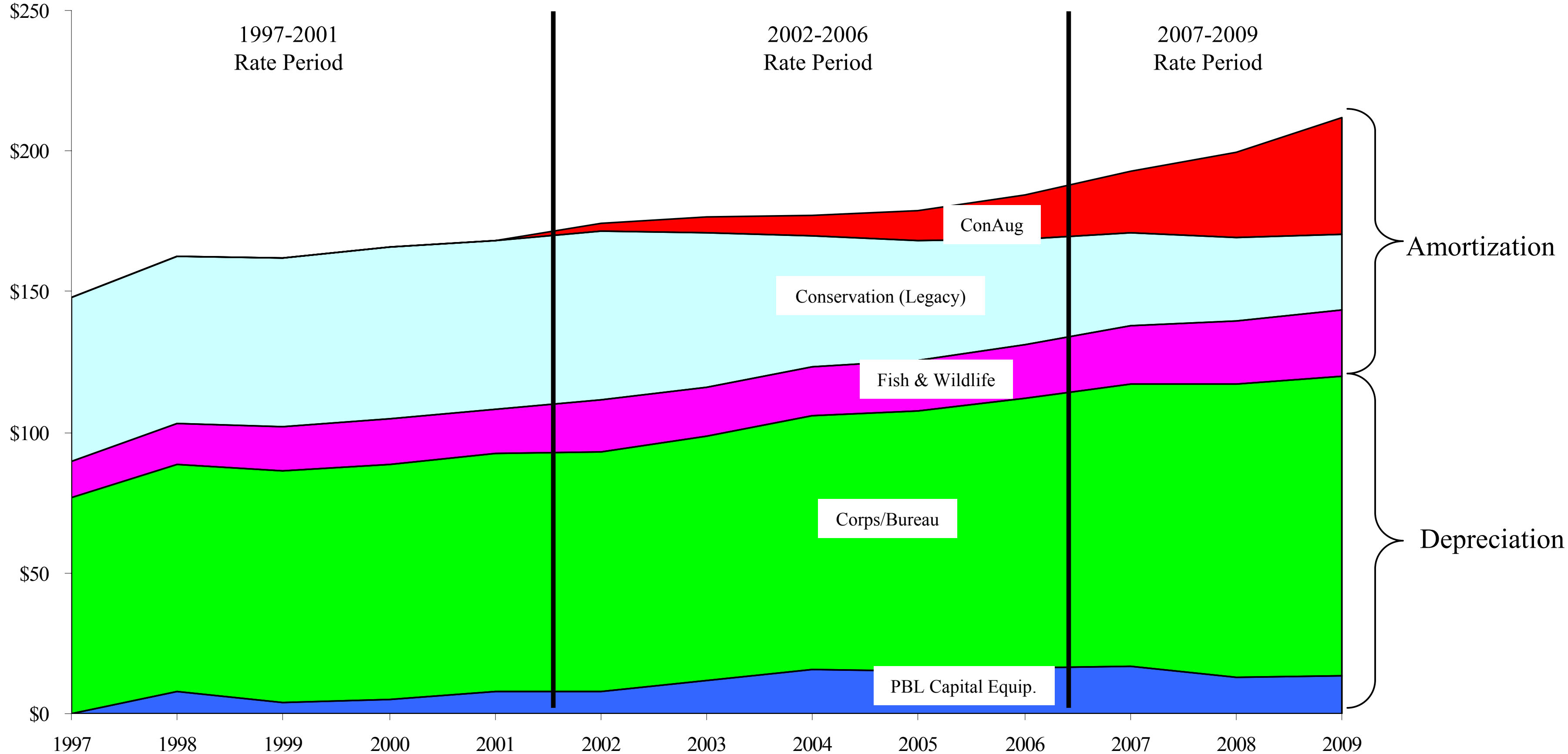
Trends of Depreciation & Amortization

($ millions)



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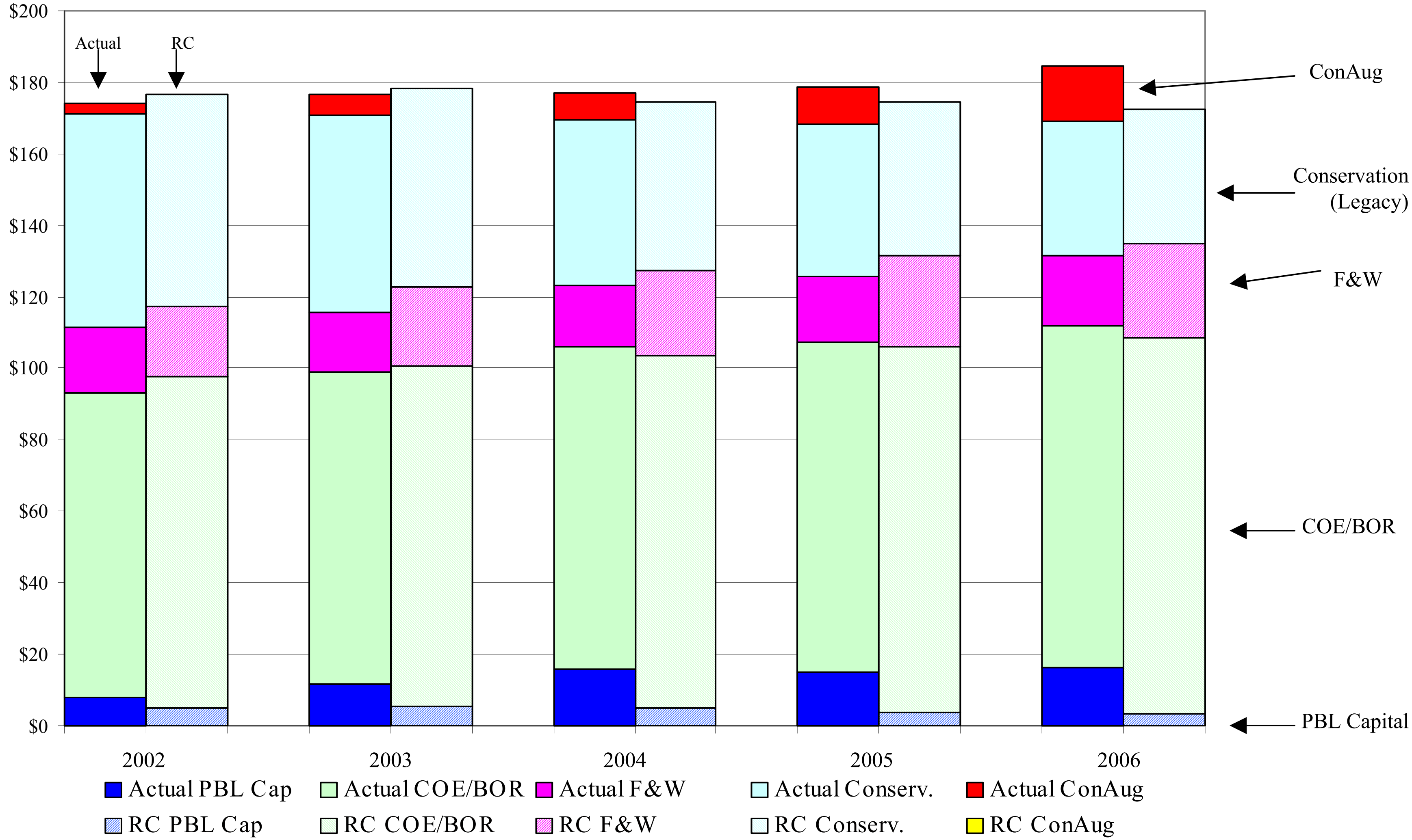
Comparison of FY2002-06 Actual & Forecast Depreciation/Amortization Expense to 2002 Rate Case

($ millions)



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Minimum Required Net Revenues

As necessary, revenue requirements include a component, minimum required net revenues, to ensure coverage of annual cash requirements. It is calculated as the amount by which BPA's payments to Treasury for amortization and irrigation assistance exceed the total of non-cash expenses and revenues.

Forecasted Minimum Required Net Revenues, 2007 - 2009
($ thousands)

		2007	2008	2009
1	**Non-Cash Items:**			
2	Depreciation	117,200	117,331	120,065
3	Amortization	75,700	82,097	91,598
4	Amortization of Capitalized Bond Premiums	613	613	185
5	Capitalization Adjustment	(45,937)	(45,937)	(45,937)
6	Accrual Revenues	(5,179)	(5,179)	(5,179)
7	Total Non-Cash Items	142,397	148,925	160,732
8	**Cash Requirements:**			
9	Repayment of Long-Term Debt	83,357	132,481	117,700
10	Repayment of Capital Appropriations	109,141	63,500	78,100
11	Irrigation Assistance	0	2,950	6,590
12	Total Cash Requirements	192,498	198,931	202,390
13	**Minimum Required Net Revenues**	**50,101**	**50,006**	**41,658**

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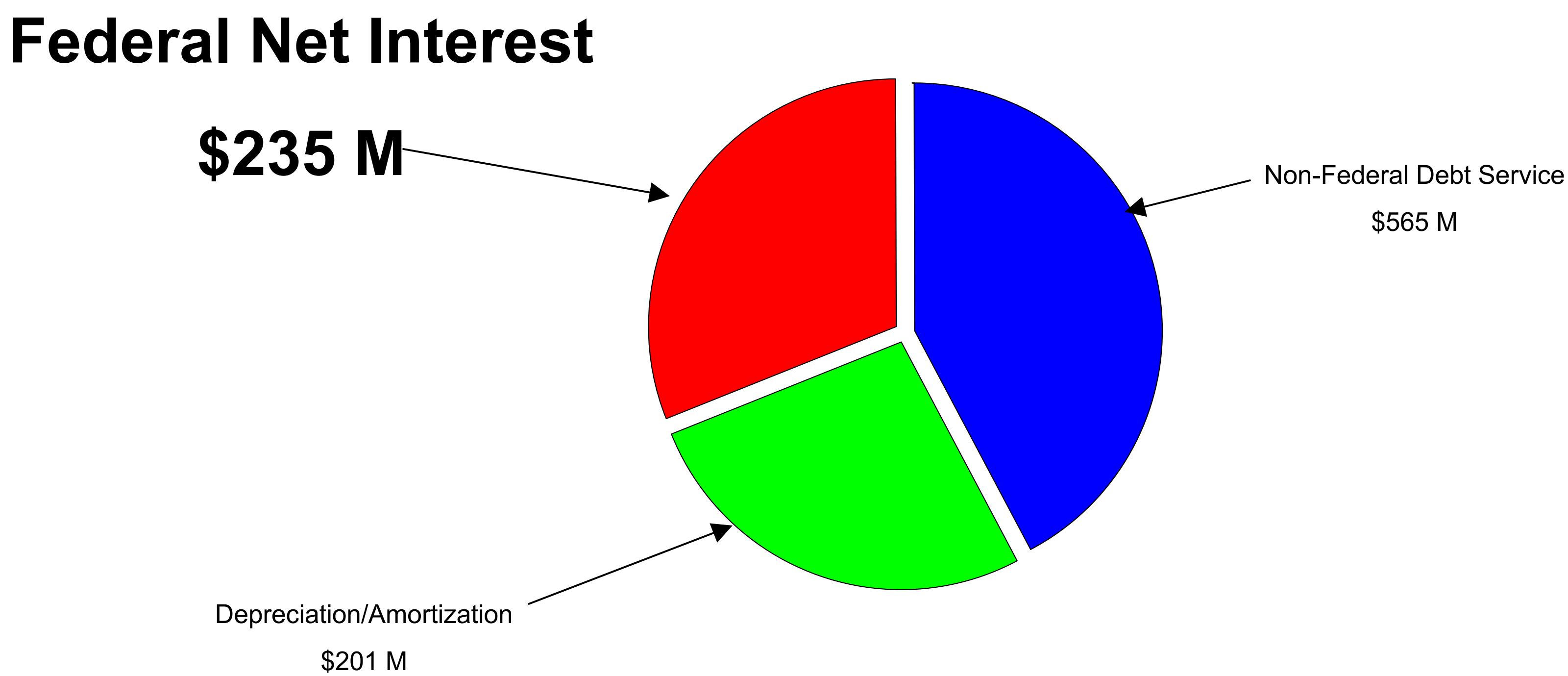
Federal Net Interest

Average Annual Expenses for FY 07-09



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Components of Federal Net Interest Expense

	FY 97-01 Average	FY 02-06 Average	FY 07-09 Average
Net Interest Expense	$183.4 M	$184.3 M	$235.1 M
Increase/Decrease		0.9 M	50.8 M
% increase		0.5%	28%

The components of Net Interest Expense are:

1. **Interest on outstanding bonds and appropriations**. For PBL, bonds issued to the U.S. Treasury by BPA are for capital equipment, F&W, conservation and the direct-funding of COE and USBR investments. Congressional appropriations are for the power portion of COE and USBR hydro projects, including F&W.
2. **Interest credit.** A significant variable is an interest credit associated with interest income from cash in the BPA Fund attributable to PBL cash flows.
3. **Amortization of certain cash events.** These include the non-cash expenses for amortization of capitalized bond premiums and the capitalization adjustment resulting from the BPA Appropriations Refinancing Act.
4. **Allowance For Funds Used During Construction (AFUDC).** This is included to offset bond interest used to fund assets under construction.

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FY 07–09 Forecast: Risks & Opportunities

Federal Net Interest Expense Forecast

	($ in thousands)	2002	2003	2004	2005	2006	2007	2008	2009
1	Interest on Federal Investment -								
2	On Appropriated Funds	226,488	215,119	220,828	213,111	200,861	205,475	211,061	215,775
3	On Long-Term Debt	54,383	39,012	36,536	43,811	59,186	74,672	91,001	100,636
4	Interest Credit	(20,589)	(14,307)	(29,410)	(24,599)	(2,852)	(9,977)	(10,413)	(10,628)
5	Amort of Cap Bond Prem	1,065	613	613	613	613	613	613	185
6	Capitalization Adjustment	(47,672)	(47,917)	(48,122)	(45,937)	(45,937)	(45,937)	(45,937)	(45,937)
7	AFUDC	(12,093)	(15,925)	(17,913)	(9,320)	(8,593)	(8,593)	(8,593)	(8,593)
8	**Net Interest Expense**	201,582	176,595	162,532	177,679	203,278	216,254	237,732	251,437

2006 – 2009 do not include interest income on average annual cash balances.

Risks:

- Rising interest rates, affecting the cost of future Treasury borrowing
- Changes in the plant in service schedule of the Columbia River Fish Mitigation project by the Corps of Engineers
- Reduced cash balances, decreasing interest credit

Opportunities for Reductions:

- Continued aggressive debt management to reduce interest costs
- Continuation of the Debt Optimization Program
- Lower interest rates
- Increased cash balances, increasing interest credit

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Capital Funding Mechanisms

BPA currently funds capital investments in two ways:

1. Bonds Issued to Treasury
2. Capital Appropriations

Bonds Issued to Treasury

- Bonds issued to Treasury represents debt issued by Bonneville to the US Treasury since the late 1970's to finance BPA investments in transmission, fish & wildlife, and conservation, and in direct-funded Corps & Bureau investments.

- Bonds outstanding are limited by law to $4.45 billion. Interest rates are set at prevailing government agency rates.

- BPA draws on the BPA Fund for the capital expenditures and issues bonds to Treasury to replenish the Fund. The term of the bonds is not to exceed the associated average service life. Interest is paid semi-annually on the bonds and the principal is paid at the end of the term. Callable bonds may be issued and can be called (paid early), but BPA must then pay a premium.

Capital Funding Mechanisms (Continued)

Capital Appropriations

- Appropriations represent funding from annual Congressional appropriations for Corps and Bureau capital investments in hydro related facilities, including fish recovery measures. With passage of the 1996 BPA Appropriations Refinancing Act, interest rates are at Treasury's prevailing market rates, without mark-up.

- This specifically includes Corps of Engineers' investment in the Columbia River Fish Mitigation (CRFM) project. The Corps receives appropriated funds and uses them for construction. Once a project is complete, it is transferred to plant-in-service. It is at this point that the power portion becomes BPA's obligation to repay to Treasury. These obligations must be paid within 50 years.

Drivers of Change, FY 07-09

- Debt Optimization Program increases the repayment of Federal obligations, both bonds and appropriations, thereby reducing interest expense
- Increased capital investment for Conservation Augmentation, PBL/Corporate Information Technology, Fish & Wildlife and Direct Funding programs for the Corps and Bureau
- CRFM plant-in-service schedule pushed out from original 2001 in-service date or brought into service sooner than forecasted

Bonds issued to the U.S. Treasury and Congressional Appropriations, actual data and current forecasts:

	Borrowing ($ thousands)	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
1	ConAug	40,000	0	30,000	32,500	29,000	32,000	32,000	32,000
2	F&W	0	20,000	0	36,000	36,000	36,000	36,000	36,000
3	Captial Equipment (inc Corp)	1,990	45,062	27,300	19,220	18,000	18,050	15,500	16,500
4	COE/USBR:								
5	Direct Funding	50,000	160,000	119,800	153,671	119,400	133,000	145,000	137,000
6	CRFM	8,797	68,435	75,880	17,000	182,000	100,200	113,400	147,400
7	Other Appropriations	5,130	6,791	53,000	0	0	0	0	0
8	Total COE/USBR	63,927	235,226	248,680	170,671	301,400	233,200	258,400	284,400

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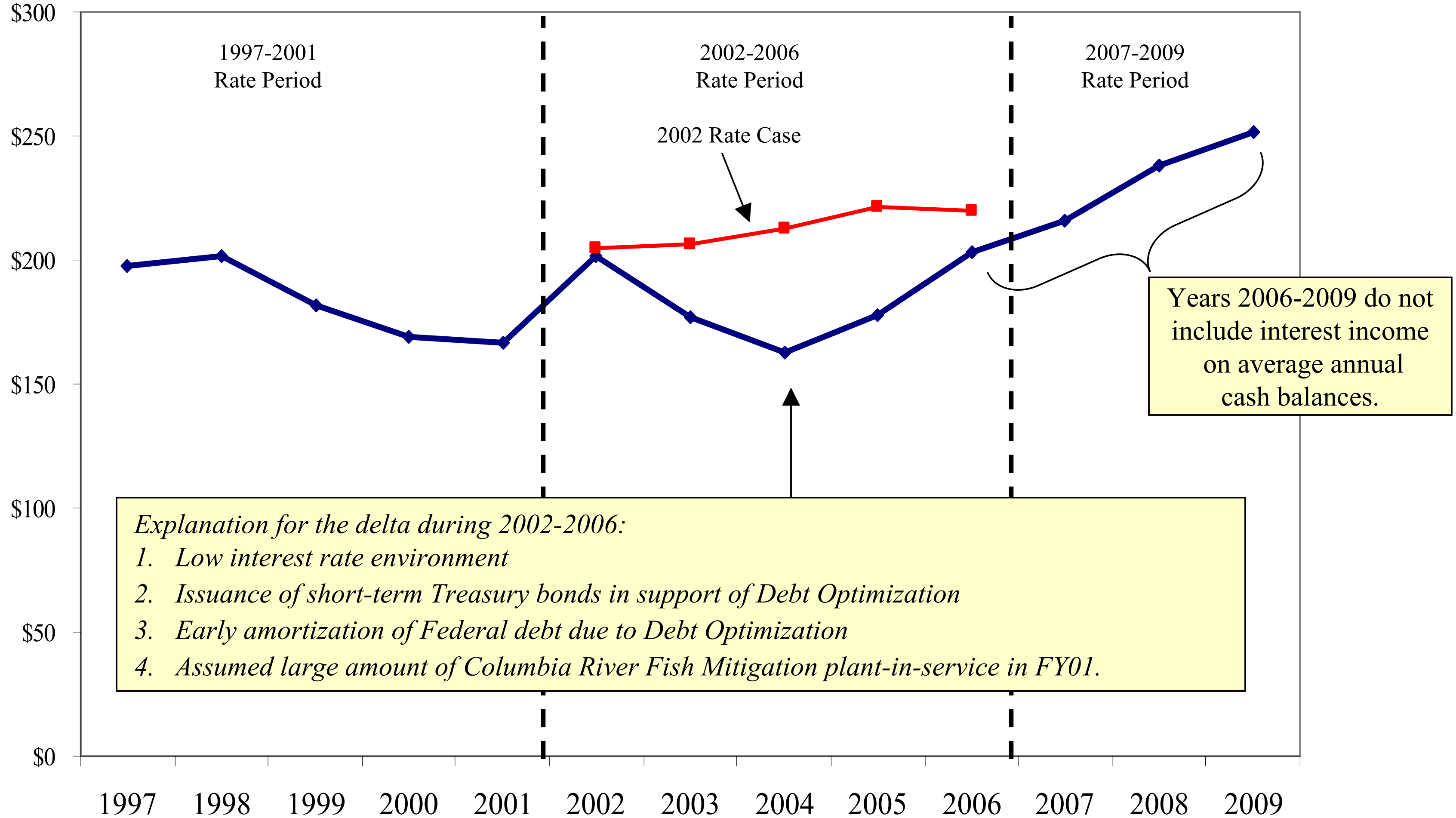
Actual and Forecasted Federal Net Interest Expense

($ millions)



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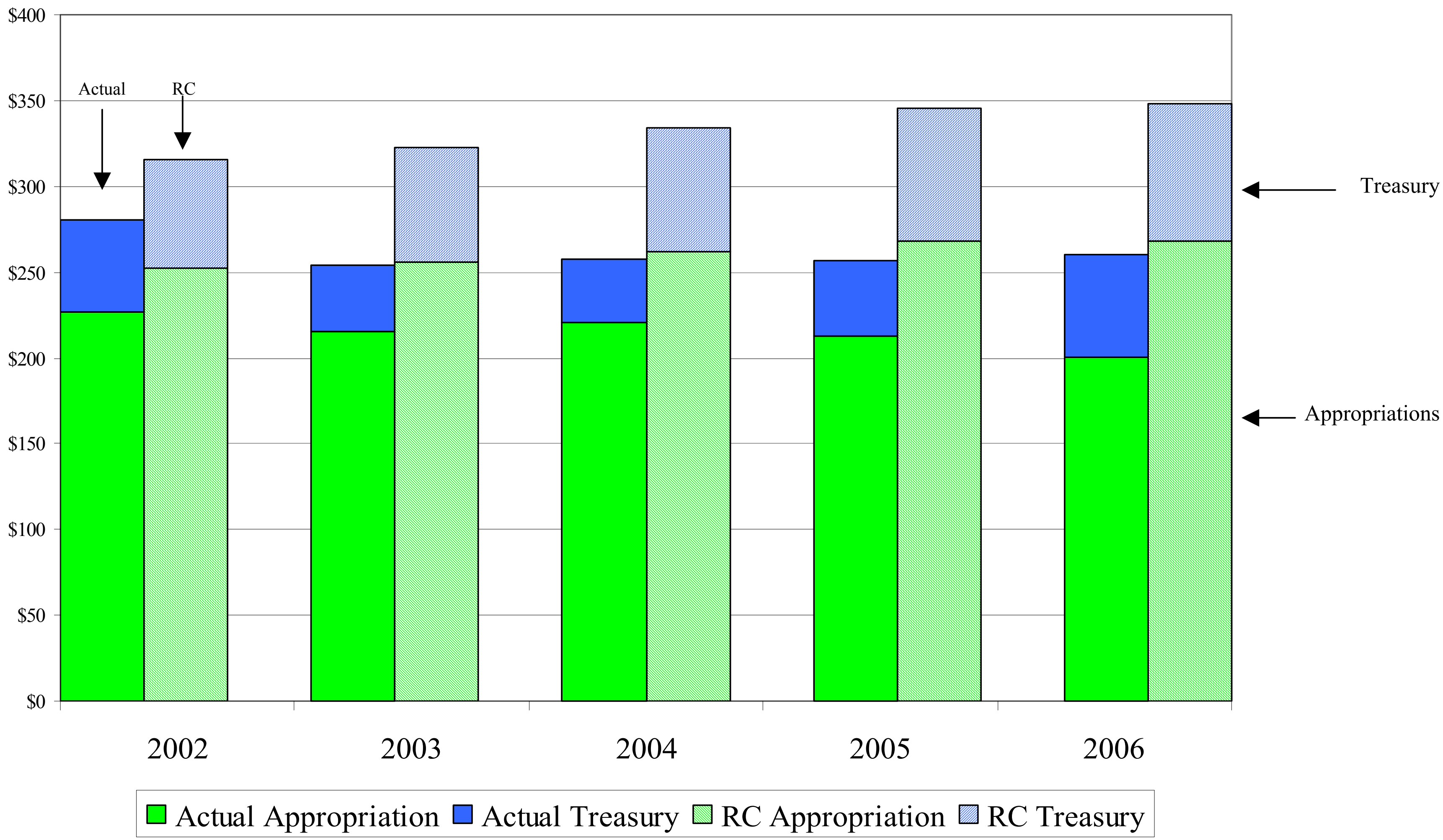
Comparison of Actual & Forecast Federal Gross Interest to 2002 Rate Case

($ millions)



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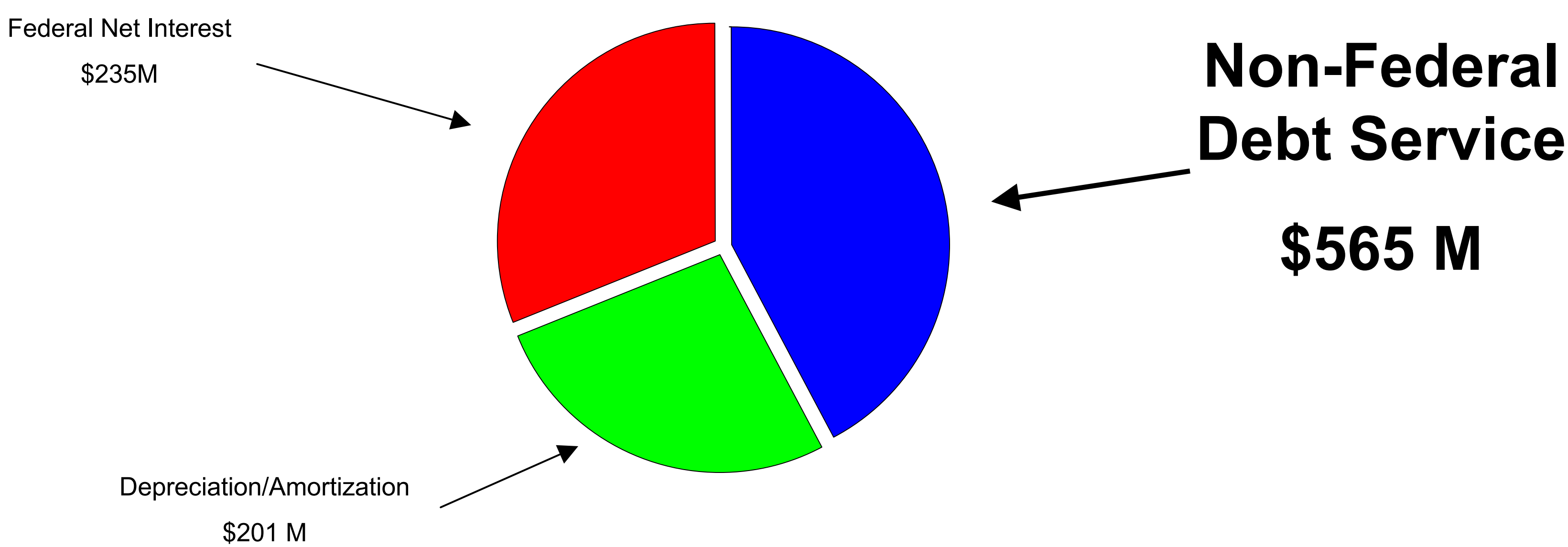
Non-Federal Debt Service

Average Expenses for FY 07-09



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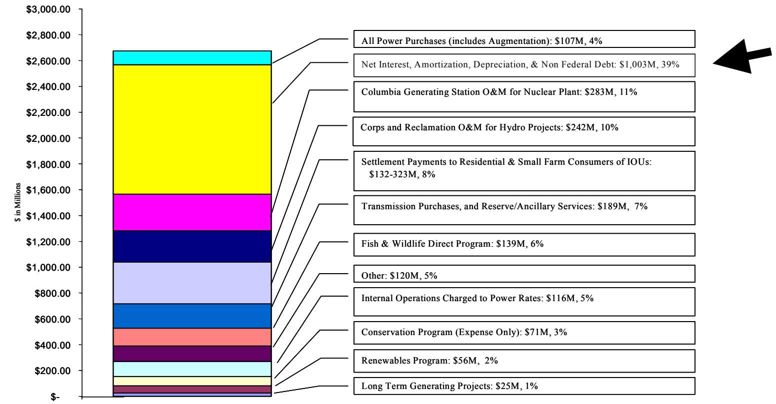
FY07-09 Power Expenses

Non-Federal Debt Service

	FY97-01 Average	FY02-06 Average	FY07-09 Average
Program Level	$571M	$446M*	$566M
Increase/Decrease		($125M)	$119M
% increase		-21.8%	26.6%

* Corrected data



Program:

- This program is driven by BPA's strategic direction related to our financial objectives: ensure sustainable access to capital, ensure cost recovery over time, and maintain adequate cash flow for liquidity and Treasury payment.

- *Program components of $566M/year annual expense for FY07-09:*
  - 56% Non-Operating Generation Projects – WNP 1 & 3, Trojan, Conservation Augmentation Program, Northern Wasco, CARES, Tacoma
  - 44% Operating Generation Projects – Columbia Generation Station, Cowlitz Falls

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Non-Federal Debt Service Forecast
FY 07 – FY09

Non-Federal Debt Service	FY 07-09 Ave
Operating Generation Projects	$245.4 M
Non-Operating Generation Projects	$319.9 M
Total	$565.3 M
Increase/Decrease	$119 M
% Change	26.60%

What is Non-Federal debt service?

- It consists of third party debt service or payment costs associated with capitalized contracts and other long-term, fixed contractual obligations.

What are the drivers of change for the FY 07–09 period?

- The major component in this category is EN debt service, which has never been level. It has been shaped to minimize the revenue requirement for the benefit of ratepayers.
- Debt management actions from 2000 – 2004:
  - Debt Optimization
  - EN Debt Service Reserve Fund Free-ups
  - Refinancings for Savings
  - New money financing at EN

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Non-Federal Debt Service Forecast FY07 – FY09 (cont)

What are the opportunities for decreases to the FY 07–09 forecast?

- Continued Debt Optimization (increased EN interest expense; decreased Federal Net Interest Expense)
- Continued debt financed capital additions at EN (increased non-Federal interest expense, decreased other EN budget expenses). Traditionally, these have not been financed. BPA agreed to finance for FY 04-06, but it is not assuming financing for FY 07-09.
- Financing Uranium Tails Pilot Project (increased non-Federal interest expense, decreased other EN budget expenses)
- Traditional refinancings for savings (decreased non-Federal interest expense)

Where are debt management decisions made?

- EN-related: These are made at the Administrator, CFO and the EN Board level.
- Other 3rd Party: These are made at the Administrator, CFO and utility management level.
- BPA: These are made at the Administrator and CFO level.

What is Non-Federal Debt Service?

Non-Federal Debt Service	FY 97-01 Ave	FY 02-06 Ave	FY 07-09 Ave
Operating Generation Projects	$197.5 M	$112.4 M	$245.4 M
Non-Operating Generation Projects	$373.8 M	$333.9 M	$319.9 M
Total	$571.3 M	$446.3 M	$565.3 M
Increase/Decrease		- $125 M	$119 M
% Change		-21.80%	26.60%

- Non-Federal debt service consists of 3rd Party arrangements with the following entities: Energy Northwest (EN-Nuclear Plants), Eugene Water and Electric Board (EWEB-Trojan), Lewis County PUD (Cowlitz Falls Hydro Project), Conservation and Renewable Energy System (CARES), City of Idaho Falls, Northern Wasco (McNary), City of Tacoma, and Emerald PUD.

- Debt service for EN and EWEB is paid through net billing and consists of: principal, interest, investment income, reserve & contingency funds, treasury services fees, and other miscellaneous items.

- Debt service for Lewis County, CARES, City of Idaho Falls, Northern Wasco, City of Tacoma and Emerald is paid directly by BPA and consists of principal and interest only.

- Non-Federal debt service is not level year by year. The primary factor that drives the debt service level in a given year is the amount of maturing principal in that year.

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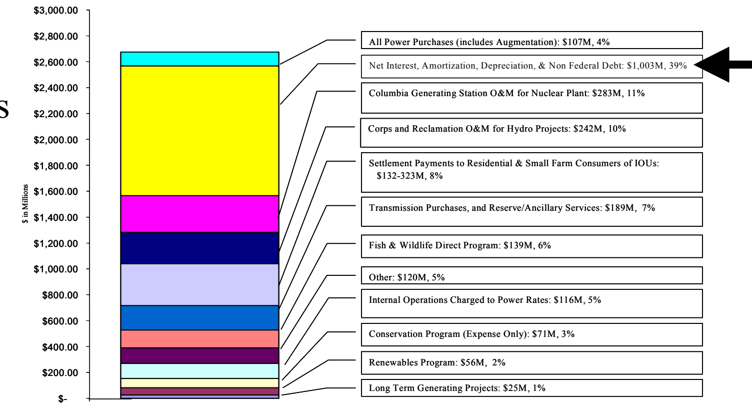
Debt Management Actions

Examples of Impacts of Past Debt Management Actions

BPA manages its Federal and non-Federal debt at an agency level, as a single portfolio. The debt management actions BPA takes affect various components of BPA's capital costs, and those effects are not always apparent without looking at each of the components. In the FY02-05 period there have been numerous actions, in some cases with off-setting impacts. The table below indicates how some of the major changes in the FY 2002-2005 period impacted costs.



	FY02 Compared to Rate Case	FY03 Compared to Rate Case	FY04 Compared to Rate Case	FY05 Compared to Rate Case
Reserve free-ups	↓	↓	↓	↑
EN Principal	↓	↓	↓	↓
Federal Principal	↑	↑	↑	↑
EN Interest	↑	↑	↑	↑
Federal Interest due to advance amortization	↓	↓	↓	↓

Debt management is a critical component of BPA Financial Management

BPA manages its overall debt on a single portfolio basis, which has created significant synergies between its non-Federal and Federal debt, in order to optimize the entire Agency debt load, which produces:

1. Restored Borrowing Authority
2. Controlled or Lower Costs
3. Increased Liquidity

Debt management refers primarily to three main types of activities:

1. Debt Optimization
2. En Debt Service Reserve Fund Free-Ups
3. Refinancings for Savings

Debt Management Actions – Debt Optimization

1. What is Debt Optimization?
   - Energy Northwest replaces old bonds that are currently coming due with new bonds that will become due in the 2013 –2018 period.
   - This refinancing only occurred because BPA agreed with EN that if the refinancing occurred, BPA would use cash in the Bonneville Fund that would have been used to pay the old EN bonds to pay off higher-cost Treasury debt early.
   - This additional BPA amortization was a necessary condition of the refinancings. BPA's available Treasury borrowing authority increases; overall interest costs go down.
2. Debt Optimization is working as intended by EN and BPA. The goals are to:
   - Restore Treasury borrowing authority.
   - Prevent any overall negative impact on rates.
   - Minimize the cost of BPA's overall debt portfolio.

($ in millions) **Advanced Federal Payments Due to Debt Optimization**

Obligation Type	FY01	FY02	FY03	FY04	Totals
Power Bonds	2	93	-	83	**178**
Transmission Bonds	-	-	315	31	**346**
Power Appropriations	95	173	-	58	**326**
Transmission Appropriations	-	-	-	174	**174**
Total Advanced Payments	**$97**	**$266**	**$315**	**$346**	**$1,025**

Debt Management Actions – EN Debt Service Reserve Fund Free-ups

1. What are EN debt service reserve fund free-ups?

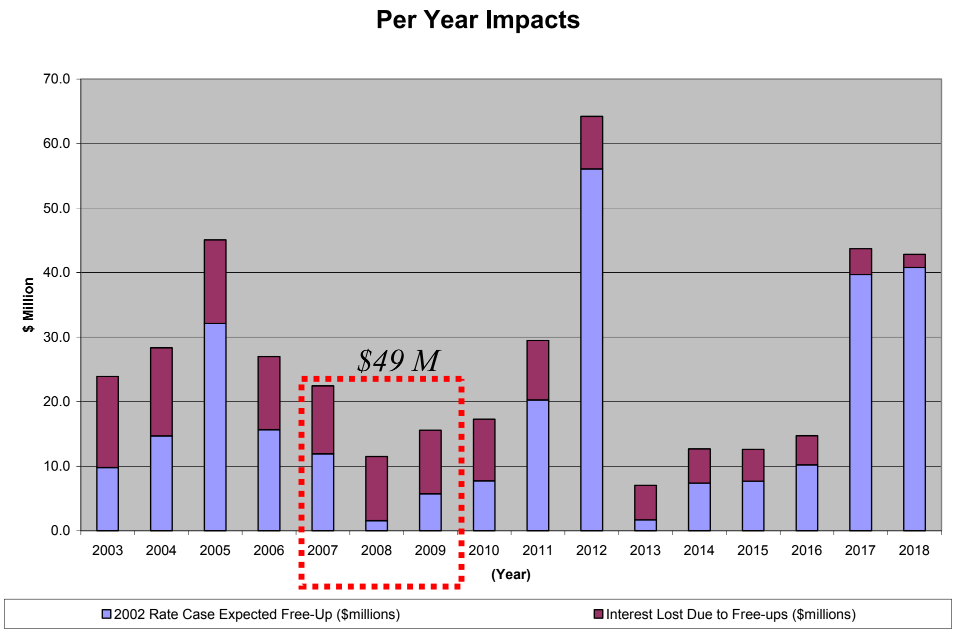
    - Debt service reserve fund accounts were routinely created upon the issuance of municipal bonds through EN as a safety net for bondholders.
    - The reserves, along with the interest earnings on them, were available to pay debt service on the bonds during the year the final principal payment was scheduled to mature for a particular series.
    - For the bonds coming due in each year through 2018, there were reserve funds that would free up naturally with the maturing final principal payment.

2. Through recent debt management actions, all the reserves were freed up early in 2000 – 2004 and used to offset EN debt service costs in those years. This was a decision made for liquidity purposes in the Financial Choices forum to offset debt service costs in the 2002 – 2004 period.

3. The effect of this decision is that there were lower out-of-pocket EN debt service costs in the 2002 – 2004 period, but there will be higher out-of-pocket EN debt service costs in 2005 – 2018 period.

Debt Service Reserve Fund Free-Ups

Fiscal Year	2002 Rate Case Expected Free-Up	2002 Rate Case Begining Reserve Levels ($ millions)	Interest Lost Due to Free-ups	Total Rate Impact Per Year
1998	5.2			5.2
1999	0.0			0.0
2000	0.1			0.1
2001	0.7			0.7
2002	3.7			3.7
2003	9.8	282.9	14.1	23.9
2004	14.7	273.2	13.7	28.3
2005	32.1	258.5	12.9	45.1
2006	15.7	226.3	11.3	27.0
2007	11.9	210.7	10.5	22.5
2008	1.6	198.8	9.9	11.5
2009	5.7	197.2	9.9	15.6
2010	7.7	191.5	9.6	17.3
2011	20.3	183.8	9.2	29.5
2012	56.1	163.5	8.2	64.2
2013	1.7	107.4	5.4	7.0
2014	7.4	105.8	5.3	12.7
2015	7.7	98.4	4.9	12.6
2016	10.2	90.7	4.5	14.7
2017	39.7	80.5	4.0	43.7
2018	40.8	40.8	2.0	42.9
Totals	**292.7**		**135.5**	



- $287 M was freed up through refinancings and the issuance of surety bonds between FY00 and FY04. Of this, $49 M was used in FY00 to pay down Federal debt. $238 M was used in FY02-04 to lower EN debt service expenses and not used to pay down Federal debt.
- If the debt service reserve fund free-ups had not occurred earlier than originally anticipated in the 2002 Rate Case, the balance would have been $211 M as of the beginning of FY07, and would have generated interest earnings throughout the FY07-09 rate period.
- FY07-09 Impacts will be about $49 M

See Financial Disclosure Statements on Page 2

Refinancing for Savings

1. What are refinancings for savings?

   - BPA Corporate Finance pursues traditional refinancings for interest rate savings when established target thresholds are met by market conditions.
   - These "high-to-low" refinancings take advantage of the low interest rate environment.
   - Typically the original maturities on the bonds do not change and the principal stays roughly the same, but the interest rate decreases.
   - All interest rate savings from these refinancings accrue to PBL.

2. During FY03, refinancings were completed for BPA-backed bonds with Lewis-County PUD (Cowlitz Falls), CARES, and Tacoma PUD, totaling $188 million. Combined average annual savings are about $1.6 million per year for FY 07-09.

3. During FY01-04, 12 EN bond refinancings totaling about $3.1 billion were also completed. Several were very complex transactions and combined both refinancings for savings and refinancings in support of Debt Optimization, making it difficult to segregate out actual savings due to refinancings for FY07-09.

Single Portfolio Debt Management has Created Significant Results

- Between FY00 and FY04, the weighted average interest rate (WAI) on total outstanding liabilities decreased from 6.6% to 5.6%, a 100 basis point (1.0%) reduction, currently saving over $100 million per year in interest expense.

- Even though the amount of long-term liabilities has been relatively constant from FY00 to FY04, just under $13 billion, about one-third of the portfolio has turned over.

- A number of factors have contributed to these results:
  - Low interest rate environment
  - Prepayment of Federal debt due to Debt Optimization
  - Issuance of short-term Treasury bonds
  - Refinancings for savings

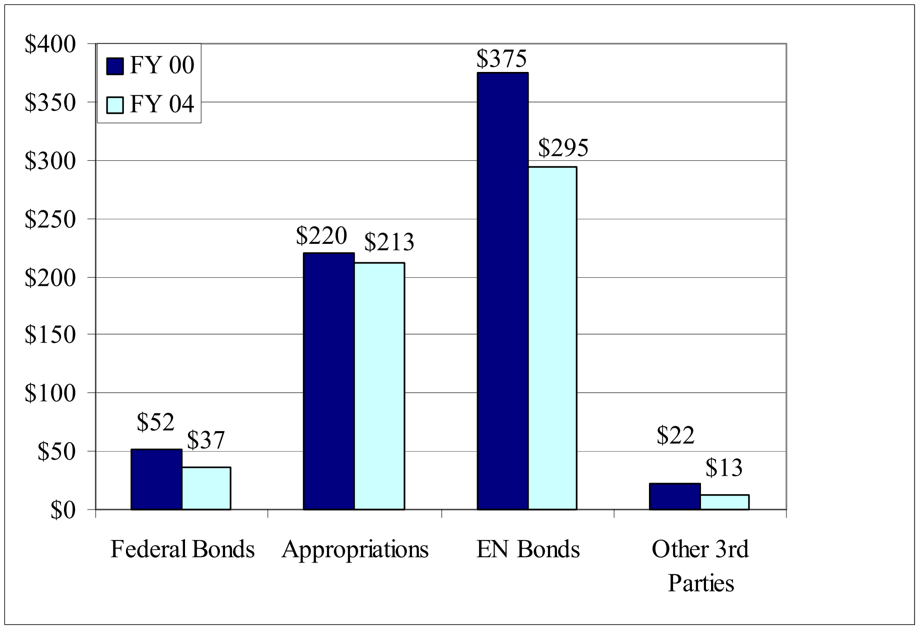
(See next Slide)

Understanding How Debt Management Actions Produced Over $100 Million in Interest Savings

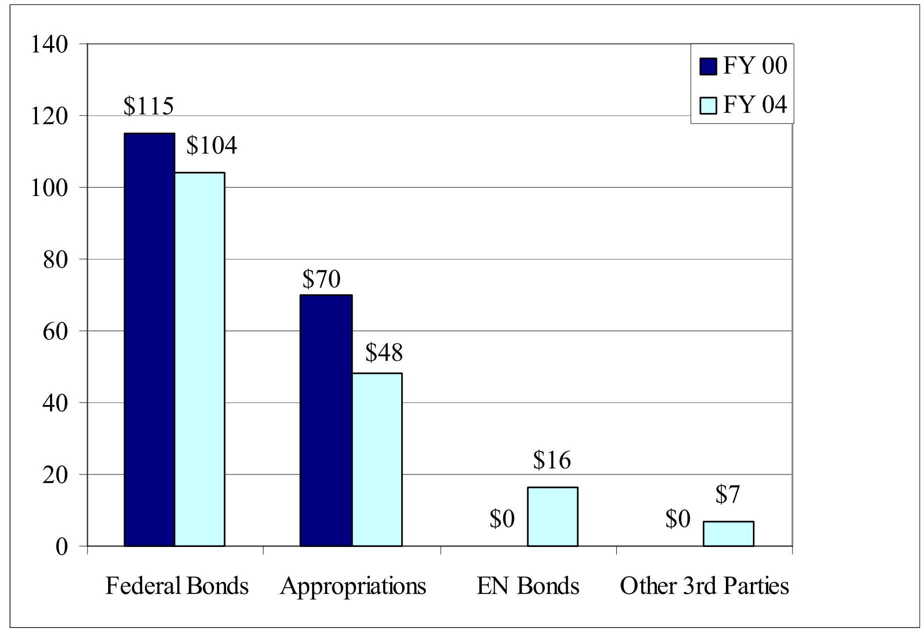
Interest expense below is calculated by multiplying each outstanding principal balance by the weighted average interest rate for that category at the end of FY '00 and FY '04.

($ in Millions)

Power



Transmission



$112M in Power

$10M in Transmission

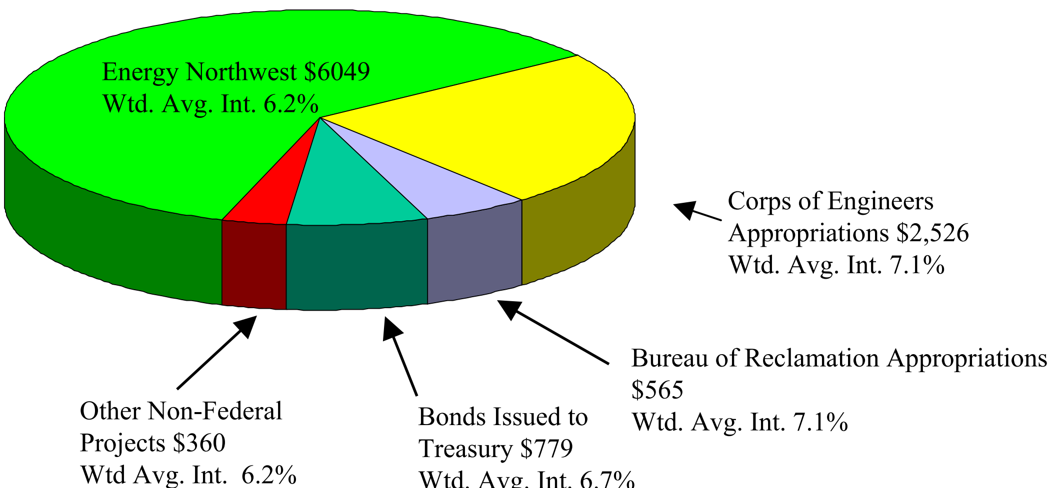
See Financial Disclosure Statements on Page 2

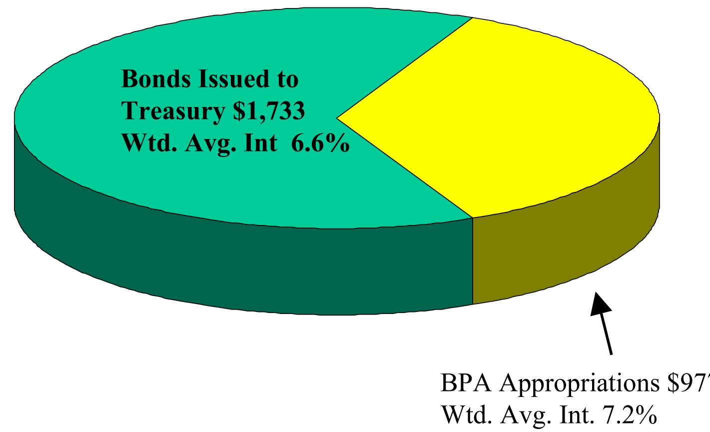
BPA's Total Debt Portfolio, 9/30/00[1/]

Power

Transmission

($ millions)





	Power		Transmission		Total	
	Liabilities Outstanding ($millions)	WAI Rate	Liabilities Outstanding ($millions)	WAI Rate	Liabilities Outstanding ($millions)	WAI Rate
Total Appropriations [2/]	$3,091	7.1	$977	7.2	$4,068	7.1
Total Bonds Issued to Treasury	779	6.7	1,733	6.6	2,512	6.7
Total Federal Liabilities	3,870	7.0	2,710	6.8	6,580	6.9
BPA Liabilities to Non Federal Parties	6,409	6.2	0	0	6,409	6.2
Total FCRPS Liabilities	$10,279	6.5	$2,710	6.8	$12,989	6.6

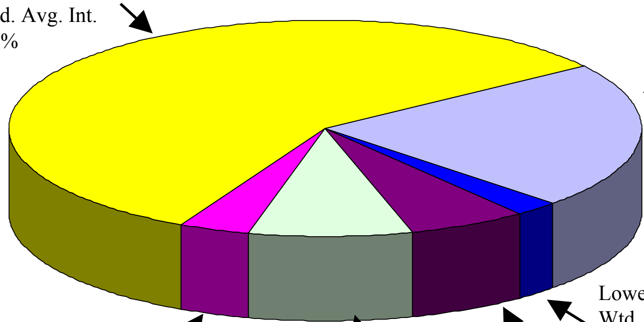
1/ Irrigation assistance liability not included ($770 million at zero percent interest).
2/ Appropriation amounts exclude appropriations for work still in progress.

This information has been made publicly available by BPA on August 3, 2004 and is consistent with BPA's and Energy Northwest's FY2000 annual reports.

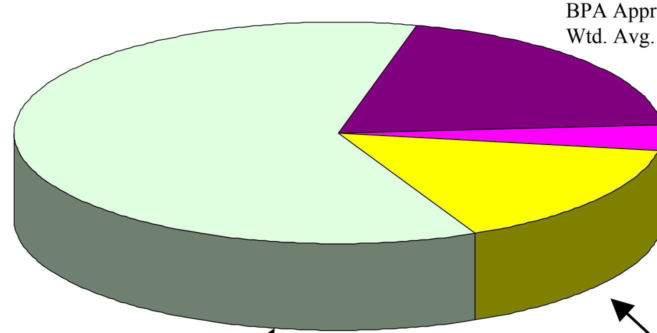
BPA Total Debt Portfolio, 9/30/04 1/

($ millions)

Generation



Transmission



	Power Marketing		Transmission		Total	
	Liabilities Outstanding ($millions)	WAI Rate	Liabilities Outstanding ($millions)	WAI Rate	Liabilities Outstanding ($millions)	WAI Rate
Total Appropriations 2/	$3,080	6.9	$667	7.2	$3,747	7.0
Total Bonds Issued to Treasury	858	4.3	2,042	5.1	2,900	4.9
Total Federal Liabilities	3,938	6.3	2,709	5.6	6,647	6.1
BPA Liabilities to Non Federal Parties	6,039	5.1	415	5.5	6,454	5.3
Total FCRPS Liabilities	$9,977	5.6	$3,124	5.6	$13,101	5.6

1/ Does not include irrigation assistance liability of $722 million at zero percent interest ($53.9 of this amount is for Lower Teton, for which the Administrator has no obligation to recover costs). "Liabilities" on this page do not directly relate to "liabilities" as reflected in the Combined Statements of Capitalization and Long-Term Liabilities.

2/ Appropriation amounts exclude appropriations for construction work still in progress (CWIP). 2004 CWIP for appropriations was $669.1.

3/ Lower Snake Fish and Wildlife previously included in Corps of Engineers.

4/ EN Principal ties to EN FY04 Annual Report, Financial Operating Statistics page. The WAI will not match EN's Annual Report because BPA overlays a debt instrument on top of some EN variable rate debt (from Projects 1 and 3). The effect is that approximately $500m of EN variable rate debt is a synthetic fixed rate obligation for BPA, making BPA's WAI on EN debt different than the WAI noted in EN's books.

5/ TBL principal is different from the actual amount issued in bonds due to: 1) premium bonds issued, 2) timing differences, and 3) transactions costs. TBL is assigned the repayment obligation for the 3 items stated above, which equals the additional Federal prepayment made on TBL's behalf.

dmj 2-23-05

Debt Service Reassignment

Debt Service Reassignment & Power Rates

In terms of EN debt service expense, this Power rate case will be different than previous rate cases because of Debt Service Reassignment (DSR). Why?

- Debt Optimization applied to Transmission Federal obligations reduces Power's <u>future</u> EN obligation.
- Transmission is assigned all future debt service costs (principal, interest, issuance costs, and any other expenses) related to the new EN debt.
- While the new EN bonds do not mature until 2013 –2018, interest is due semiannually on these bonds. The principal and interest expense on any EN bonds that were issued to allow Transmission Federal obligations to be retired will be paid by the Transmission business line.
- Because of DSR, this will be the first time that a portion of annual EN debt service expense **<u>will not</u>** be incorporated into the Power Revenue Requirement.

Let's review DSR in more depth.

Mechanics of Debt Optimization, Simplified

(Debt Service Reassignment Design)

	Past	Present	Future
PBL	PBL rates set to recover EN principal due	PBL realizes original EN principal as a power expense	No further power customer obligation: "power" cost "paid"
Corp		EN debt rollout Cash from Bonneville Fund used to repay Federal transmission debt	Borrowing Authority restored: Ability for PBL and TBL to borrow for new capital projects
TBL		TBL assigned debt service on rolled-out EN debt as obligation	Transmission rates recover EN debt service and Federal transmission debt service

The Details of Debt Service Reassignment

- Debt Service Reassignment equals the portion of Debt Optimization that is applied to Transmission Federal obligations and is equivalent to the amount of EN Debt retired for Power.
- Under DSR Transmission is assigned the repayment obligation for all future debt service costs on the new EN debt extended to retire Federal Transmission obligations.
- In the Power Income Statement, the line that captures DSR is labeled *EN Retired Debt*.
- Let's review how the EN debt service expense accrual is calculated. For Power, in any given year, accrual will be equal to:

Debt Optimization applied to TBL from the current year transaction (Addit'l TBL Federal Pymt)

\- The DSR portion of the current year EN bond extension accrued in the prior fiscal year

\+ One-quarter of the projected DSR allocation for the following fiscal year

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EN Retired Debt Accrual

Excerpt from Power Income Statement

Report ID: 2001FY05	**PBL Statement of Revenues and Expenses**
Run Date/Time: February 03,2005/ 08:32	**Through the Month Ended September 30, 2004**
	Preliminary Unaudited

		A	B	C
		Actuals: FY 2002	**Actuals: FY 2003**	**Actuals: FY 2004**
	Non-Federal Debt Service			
	Energy Northwest Debt Service			
72	COLUMBIA GENERATING STATION DEBT SVC	67,137	18,114	79,663
73	WNP-1 DEBT SVC	85,753	58,526	93,477
74	WNP-3 DEBT SVC	56,527	19,873	39,164
75	EN RETIRED DEBT	54,750	315,200	181,858
76	EN LIBOR INTEREST RATE SWAP		6,032	12,043
77	**Sub-Total**	264,168	417,744	406,204
	Non-EN Debt Service			
78	TROJAN DEBT SVC	2,562	7,817	10,475
79	CONSERVATION DEBT SVC	3,847	3,906	5,020
80	COWLITZ FALLS DEBT SVC	12,408	5,267	7,442
81	**Sub-Total**	18,817	16,989	22,937
82	**Non-Federal Debt Service Sub-Total**	282,985	434,734	429,142

See Financial Disclosure Statements on Page 2

Debt Service Reassignment (EN Retired Debt): A Look at the Calculation

Fiscal Year	DSR Cash	DSR Accrual	Calculation Explained	The Math				
FY02	$0	$55	Actual FY02 DSR - FY02 portion accr'd in FY01, plus	$0	-	$0	=	$0
			1/4 of projected FY03 DSR	$220	x	25%	=	$55
			FY02 DSR Accruals					$55
FY03	$315	$315	Actual FY03 DSR - FY03 portion accr'd in FY02, plus	$315	-	$55	=	$260
			1/4 of projected FY04 DSR	$220	x	25%	=	$55
			FY03 DSR Accruals					$315
FY04	$205	$198	Actual FY04 DSR - FY04 portion accr'd in FY03, plus	$205	-	$55	=	$150
			1/4 of projected FY05 DSR	$190	x	25%	=	$48
			FY04 DSR Accruals					$198

See Financial Disclosure Statements on Page 2

Debt Service Reassignment (EN Retired Debt): BPA FY vs. EN FY

Why does BPA accrue, in the current year, ¼ of the projected DSR planned for the following year?

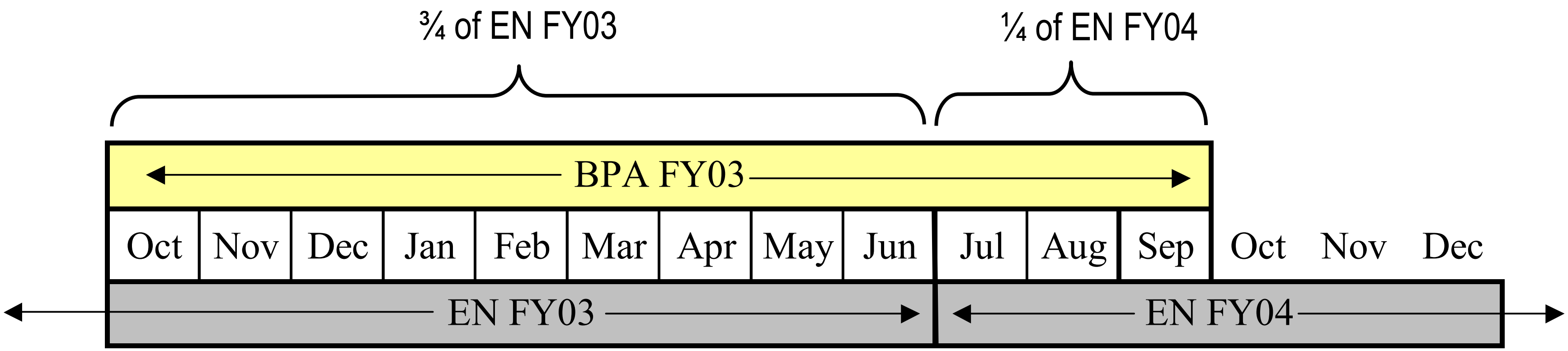
- EN debt comes due at the end of their fiscal year, which runs from July 1st to June 30th.

- BPA's fiscal year runs from October 1st to September 30th. This means ¼ of EN's new fiscal year falls into BPA's current fiscal year. Or simply, that EN's fiscal year is three months ahead of BPA's fiscal year.

- In accordance with Generally Accepted Accounting Principles (GAAP), each month BPA accrues 1/12 of the EN due principal—this coincides with the liability for the EN principal due.

Fiscal Years = Timing Differences

BPA FY03 = **¾ of EN FY03** + **¼ of EN FY04**



An Example:

- EN FY03 Debt Optimization = $315m
- EN FY04 Debt Optimization = $346m
- BPA FY03 Debt Optimization = ($315 * ¾) + ($346 * ¼) = $323m

Excerpt from Power Income Statement

Report ID: 2001FY05	PBL Statement of Revenues and Expenses
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	Preliminary Unaudited

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81	**Sub-Total**	18,817	16,989	22,937
82	**Non-Federal Debt Service Sub-Total**	282,985	434,734	429,142

FY04 DSR Accrual $198M LESS debt service charge of $16M for which Power is not responsible.

See Financial Disclosure Statements on Page 2

Accounting for Debt Service Reassignment:

Why does the FY04 accrual appear to be $182m rather than $198m?

- In BPA's FY04 and prior years, gross EN debt service costs were initially recorded to the Power business unit.
- Because of debt service reassignment, Power is no longer responsible for the EN debt service on any EN debt that was reassigned. Therefore, in FY04, credit entries were made to the Power EN Retired Debt line (formerly entitled ENW Debt Reassignment) for $16M -- the amount of debt service associated with the new EN bond issues.
- This accounting methodology will change in BPA FY05. CGS, WNP-1, and WNP-3 debt service expense line items will reflect the net reduced amount of EN debt service.

Summary of Depreciation & Amortization, Federal Net Interest Expense, and Non-Federal Debt Service

Summary

- 40% of PBL's total expense are Depreciation & Amortization, Federal Net Interest Expense, and Non-Federal Debt Service
- Debt management activities for the past few years have been significant in terms of magnitude and impact on rates both now and in the future.
- Single portfolio management has played a key role in strengthening BPA's financial health and maintaining high credit ratings.
- Freeing up all EN debt service reserve funds early served a valuable purpose in the 2002-2004 period but their impacts are now being realized.
- The Debt Optimization Program is providing the financial benefits to BPA ratepayers as originally envisioned and agreed to by BPA and EN
- The <u>concept</u> of Debt Optimization and Debt Service Reassignment is <u>simple</u>, but the <u>mechanics</u> of recording Debt Optimization and Debt Service Reassignment transactions and understanding its impact on rates are <u>complex.</u>
- BPA is open to discussing potential opportunities that could affect the current forecasts.