

Debt Management

Technical Customer Workshop
June 8, 2010

Today's Agenda

	Topic	Slide #	Presenter
1:00 - 1:30	Workshops Overview/Introduction IPR/Debt Management Processes Current BPA Debt Portfolio	3 - 6	Andrews/ Coseo
1:30 – 2:00	Repayment Model and Policies Depreciation/Amortization/Interest 2012/13 Expenses Summary	7 -10 11 -13 14	Homenick
2:00 – 2:30	Drivers of Non-Federal Debt Service & Federal Interest	15 - 19	Hesser/ Coseo
2:0 – 3:00	Debt Management Chronology	20 - 25	Mertsching
3:00- 3:45	Looking Forward - Current Capital Access to Capital <ul style="list-style-type: none"> • Treasury Borrowing Authority • ARRA • Lease Financing 	26 - 28 29 - 42	Nakaji
3:45 - 4:00	Next Steps	43 - 45	Carbonari



Workshop Overview

Workshop 1

- Total Current Debt Portfolio
- Repayment Study and Rate Making
- Non-Federal Depreciation/Amortization (Power & Transmission)
- Non-Federal Debt Service Increase
- Drivers of the Increase in Non-Federal Debt Service
- Federal Interest Expense
- Debt Management Background & History
- Power Debt Structure
- Current Capital Spending Levels
- Access to Capital
 - Lease Financing
 - Treasury Borrowing Authority/ARRA

Workshop 2

- Debt Restructuring/Extension
- Hedging Opportunities
- Nuclear Fuel Financing

Workshop 3 (tentative)



IPR/Debt Management Processes

- The 2010 Integrated Program Review (IPR) provides a way for discussing agency expense and capital program levels in a single forum. The IPR occurs every two years, or just prior to each rate case, and provides participants with an opportunity for customers and other interested parties to influence program levels before establishing the revenue requirement in the rate case.
- This year BPA created a separate sub-process for reviewing debt management activities, strategies, and items of interest, both past and present, because of the major policy issues confronting us in the debt management area.
- Debt management is a technical and highly complex subject. Decisions now will have impacts for many years to come.
- The coordinated debt management and IPR process will share some of the same forums, such as the July 13 general manager meeting.
- In addition to our regional conversation with BPA customers and interested parties, we have discussed some issues with the Energy Northwest Executive Board, and our intent is to also meet with the Energy Northwest Participants Review Board (PRB.)



Current and Future Debt Management Challenges

- Power debt service 2012/13 increases (Federal and non-Federal) are about \$100m per year over 2010/11 levels.
- Of the \$100m, approximately \$70m is due to non-Federal debt service increases. This is comprised of principal increases of approximately \$103m and \$33m of interest payment decreases (a net of \$70m).
- This increase is expected and is primarily the result of various debt management actions, many of which extended principal or deferred payment of principal for EN debt and paid Federal debt earlier.
- Federal principal payments are lower by about \$22m, offset by gross interest expense increases of about \$22m. The increase in gross interest expense is primarily due to a net increase in Federal debt from increase capital expenditures and paying less principal each year than the amounts issued.
- In addition, there is on average about \$30m per year of irrigation assistance payments in 2012/13 period. Irrigation payments through 2010/11 have been minimal, but will increase through 2018.
- This debt profile will play out over a number of years as the non-Federal debt is paid off and Federal principal payments are reduced in response.

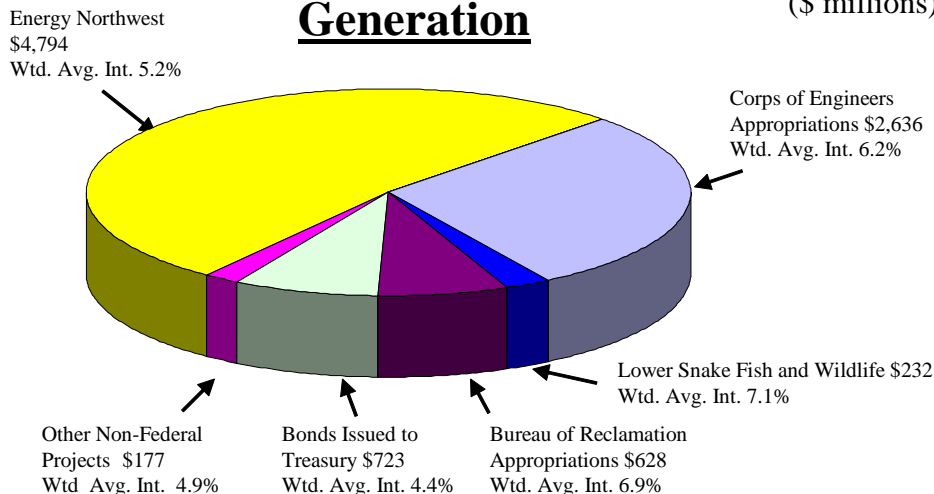


Where BPA Is Now

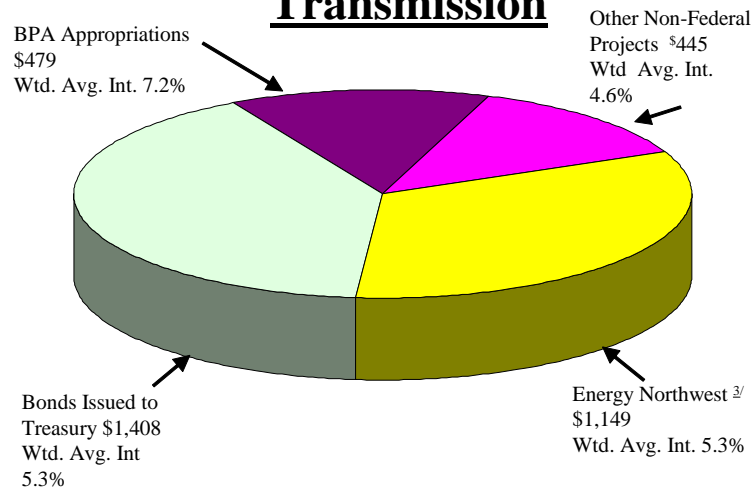
Federal Columbia River Power System (FCRPS) Total Liabilities to Federal and Non Federal Parties as of 9/30/2009 ^{1/}

(\$ millions)

Generation



Transmission



	<u>Power Marketing</u>		<u>Transmission</u>		<u>Total</u>	
	<u>Outstanding (\$millions)</u>	<u>WAI Rate</u>	<u>Outstanding (\$millions)</u>	<u>WAI Rate</u>	<u>Outstanding (\$millions)</u>	<u>WAI Rate</u>
Total Appropriations ^{2/}	\$3,496	6.4	\$479	7.2	\$3,975	6.5
Total Bonds Issued to Treasury	723	4.4	1,408	5.3	2,131	5.0
Total Federal Liabilities	4,219	6.1	1,887	5.8	6,106	6.0
BPA Liabilities to Non Federal Parties	4,971	5.2	1,594	5.1	6,565	5.2
Total FCRPS Liabilities	\$9,190	5.6	\$3,481	5.5	\$12,671	5.6

1/ Does not include irrigation assistance liability of \$706 million at zero percent interest (\$40million 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). 2009 CWIP for appropriations was \$258.6 million.

3/ Transmission Services (TS) principal is different from the Non-Federal repayment obligation due to: 1) premium bonds issued, 2) timing differences, and 3) transactions costs. TS is assigned the repayment obligation for these items, which equals the additional Federal prepayment made on TS' behalf.



Rate Setting

- In BPA rate cases, the revenue requirement establishes the level of revenues necessary from rates to recover the costs associated with the production, acquisition, marketing and conservation or the transmission of electric power.
- The generation revenue requirement includes recovery of the Federal investment in hydro generation, fish and wildlife, and conservation costs; Federal agencies' operations and maintenance (O&M) expenses allocated to power; capitalized contract expenses associated with non-Federal power suppliers such as Energy Northwest (EN); other power purchase expenses, such as short-term power purchases; power marketing expenses; cost of transmission services necessary for the sale and delivery of FCRPS power; and all other generation-related costs incurred by the Administrator pursuant to law.
- Transmission revenue requirements include recovery of the Federal investment in transmission and transmission-related assets; the operations and maintenance (O&M) and other annual expenses associated with the provision of transmission and ancillary services; the cost of generation inputs for ancillary services and other inter-business-line services necessary for the transmission of power; and all other transmission-related costs incurred by the Administrator.
- Typically, repayment studies are performed as the first step in determining revenue requirements. The studies establish a schedule of annual U.S. Treasury amortization for the rate period and the resulting interest payments.
- These results are driven by outstanding past capital investments and projections of future capital requirements and financing assumptions.



Repayment Practices

- FCRPS capital investments include Corps of Engineers (COE), Bureau of Reclamation (BOR), BPA capital investments and 3rd Party resource investments for which debt is secured by BPA.
- Bonds issued to Treasury are used to finance BPA capital program investments and COE and BOR investments that BPA has agreed to direct-fund.
- BPA also repays the power portion of COE and BOR capital investments of the FCRPS that have been financed by Federal appropriations as well as outstanding BPA appropriations received prior to self-financing for transmission system construction.
- The maximum maturities on Treasury bonds and appropriations are based on the average service lives of the associated assets. Bonneville's practice in recent years has been to issue bonds with maturities far less than the allowable terms. A bond-rollover feature has been incorporated in the repayment model to accurately represent interest expense and to utilize, as necessary, the maximum allowable repayment period for the short-term bonds.
- Projected bonds in BPA repayment studies have the following maximum allowable maturities:
 - Corps/Reclamation Direct-Funding – 45 years
 - BPA Fish & Wildlife – 15 years
 - Conservation – 5 to 20 years, depending on the particular program
 - Transmission Construction – 35 years
 - BPA Capital Equipment – 35 years (as part of BPA's overall plant-in-service)



Repayment Policy

Bonneville's repayment policy is based on statutory provisions, DOE policy, FERC orders, and precedent. This policy requires that FCRPS revenues be sufficient to:

1. Pay the cost of obtaining power through net-billing agreements (Energy Northwest);
2. Pay the cost of operating and maintaining the power and transmission systems;
3. Pay the cost of obtaining purchase and exchange power and transmission services;
4. Pay interest on and repay outstanding bonds issued to the Treasury to finance transmission system construction, COE and BOR direct funding, conservation, and fish and wildlife projects;
5. Pay interest on the unpaid investment in power and transmission facilities financed with appropriated funds;
6. Pay, with interest, any outstanding deferred annual expenses;
6. Repay the power investment in each Federal hydroelectric project within 50 years of going into service;
7. Repay each increment of the investment in the Bonneville transmission system financed with appropriated funds within the average service of the transmission facilities (42 years);
8. Repay the investment in each replacement at a Federal hydroelectric project within its service life;
9. Repay construction costs at Federal reclamation projects which are beyond the ability of the irrigators to pay.



Irrigation Assistance

- As directed by legislation, BPA is required to repay the construction costs of certain Pacific Northwest irrigation projects that have been determined to be beyond the ability of the irrigators to repay.
- Irrigation assistance payments are repaid without interest. Consequently, they are scheduled for payment when due.
- BPA has repaid \$52.7 million to date.
- Irrigation assistance payments are treated in the Power revenue requirement as a cash requirement in the same way as repayment of bonds issued to the U.S. Treasury and congressional appropriations.

(\$thousands)	
Total Principal	Due Date
1,182	2012
58,822	2013
52,426	2014
51,987	2015
60,813	2016
51,277	2017
27,308	2018
57,298	2019
24,412	2020
12,200	2021
14,402	2022
12,951	2023
15,220	2024
13,642	2025
20,899	2026
6,190	2027
11,259	2028
4,065	2029
2,147	2030
10,633	2031
4,351	2033
7,843	2035
28,930	2036
16,361	2037
14,244	2039
73,659	2042
11,700	2045
666,221	



Repayment Model

- The primary purpose of the repayment study is to determine a schedule of Federal principal payments that satisfies the statutory requirement to set rates to assure timely repayment of the Federal investment at the lowest cost to consumers consistent with sound business principles.
- Annual debt service streams for non-Federal (primarily EN) payment obligations are included as fixed requirements that the study must take into account in establishing the overall levelized debt service for the agency.
- The study uses an iterative methodology to find the lowest level of combined non-Federal and Federal interest and principal payments such that all debts are paid within the repayment period (50 yrs for Generation; 35 yrs for Transmission.)
- Relative to other years, a large amount of EN principal that matures in a particular year causes a spike that forces higher Federal debt service in prior years (“critical year”).



Depreciation/Amortization, Net Interest and Repayment -Transmission

	2009 Actuals	2010 TR-10 Rate Case	2011 TR-10 Rate Case	2010 Second Quarter Review	2011	2012	2013
Depreciation/Amortization	174,786,000	189,702,000	201,536,000	182,100,000	191,515,000	207,870,000	226,365,000
Net Interest Expense	122,892,000	154,020,000	172,107,000	122,000,000	150,187,000	172,043,000	195,976,000
Minimum Required Net Revenues		74,517,000	75,641,000			65,363,000	55,118,000
Federal Principal Repayment	212,659,000 *	215,156,000	224,707,000	215,156,000	224,707,000	190,181,000	70,169,000
Debt Service Reassignment Prinipal	10,407,000	12,000	154,000	12,000	154,000	41,118,000	165,628,000
* Rate Case Plan, increase was DOP	172,659,000						

- **Depreciation & Amortization:** Depreciation is the annual capital recovery expense associated with FCRTS plant-in-service. BPA transmission and general plant are depreciated by the straight-line method of calculation, using the remaining life technique.
- **Net Interest Expense** is computed as the sum of the interest on Federal Appropriations and, Bonds issued to the U.S. Treasury, Amortization of Capitalized Bond Premiums, Capitalization Adjustments, Debt Service Reassignment Interest, Non-Federal Interest, AFUDC, and Interest Income from Cash Reserves.
- **Minimum Required Net Revenues:** Determination of this element is a result of annual cash inflows and outflows. MRNR may be necessary so that the cash provided from operating activities will be sufficient to cover the planned amortization and Debt Service Reassignment principal payments. For Transmission, it includes the difference between Federal depreciation and amortization, the annual non-cash expense associated with the 1996 refinancing of appropriated debt, and non-cash revenues from sources such as Large Generator Interconnection Agreements.



Non-Federal Debt Service, Depreciation, Net Interest and Repayment-Power

	2009 Actuals	2010 WP-10 Rate Case	2011 WP-10 Rate Case	2010 Second Quarter Review	2011	2012	2013
Non-Federal Debt Service	457,044,000	565,486,000	581,494,000	550,068,000	576,131,000	665,879,000	621,153,000
Depreciation/Amortization	180,788,000	197,839,000	206,934,000	186,535,000	204,966,000	205,581,000	219,973,000
Net Interest Expense	151,508,000	167,119,000	173,301,000	174,726,000	199,345,000	214,523,000	233,024,000
Minimum Required Net Revenues		54,110,000	46,505,000			82,089,000	5,933,000
Federal Principal Repayment	219,360,000*	202,673,000	204,163,000	244,673,000	162,163,000	193,000,000	169,068,000
Irrigation Assistance	7,274,000	0	0	0	0	48,918,000	11,086,000
* Rate Case Plan, increase was DOP	103,065,000						

- Non-Federal Debt Service:** Third-party debt service or payment costs associated with capitalized contracts and other long-term, fixed contractual obligations. Debt service costs associated with EN projects (WNP-1, CGS, and WNP-3) make up the majority of these costs.
- Depreciation/Amortization:** Depreciation is the annual capital recovery expense associated with FCRPS plant-in-service, calculated by the straight-line method of calculation, using the particular service life: Reclamation, Corps and U.S. Fish & Wildlife at 75 years; BPA capital equipment (office furniture and fixtures, data processing hardware and software, and communications equipment) at the average service lives for the particular accounts of capital investment. Amortization is the annual capital recovery expense associated with non-revenue-producing assets. Conservation investments are amortized over three different periods: Legacy conservation investments prior to FY 2002 are a 20-year life and Conservation Acquisition investments are amortized using a five-year life beginning in FY 2007, and a thirteen-year life beginning in FY 2011.
- Net Interest Expense:** Net Interest Expense is computed as the sum of Interest on Appropriated Funds, Capitalization Adjustment, Interest on Bonds Issued to U.S. Treasury, Amortization of Capitalized Bond Premiums, AFUDC, and Interest Income from Cash Reserves.
- Minimum Required Net Revenues:** Determination of this element is a result of annual cash inflows and outflows. MRNR may be necessary so that the cash provided from operating activities will be sufficient to cover the planned amortization and irrigation assistance payments. For Power, it includes the difference between Federal depreciation and amortization, and the annual non-cash expense associated with the 1996 refinancing of appropriated debt.



Summary of 2012-2013 Expense Changes

WP10 Rate Case to May 2010 IPR (\$millions)

Expenses	Change from Avg 10/11 to Avg 12/13	% Change in Rates ¹
1 Non-federal Debt Service	\$81.1	4%
2 Columbia Generating Station	56.1	3%
3 Fish and Wildlife / USF&W /Planning Council	32.9	2%
4 Bureau of Reclamation	25.9	1%
5 Corps of Engineers	25.8	1%
6 Net Interest Expense	14.0 to 24.0 ²	1%
7 Depreciation and Amortization	6.5 to 10.4 ²	0% to 1%
8 Hydro Projects Insurance	10.0	1%
9 Power Non-Generation Operations	8.2	0%
10 G&A	6.4	0%
11 Purchased Power Expenses	?	?
12 Residential Exchange	?	?
13 DSI Service	?	?
14 Other expenses, net	-1.3	0%
15 Transmission Acquisition	-4.3	0%
16 Renewable and Conservation Generation	-37.2 to 90.7 ²	-2% to 5%
17 Net Change in Expenses	\$224 to 366	

← **Update:** 1. Non-federal Debt Service current forecast is \$70.0 million. Explanation of the change will be described in the next few pages.

← **Update:** 6. Net Interest Expense current forecast is \$52.0 million. Explanation of the change will be described in the next few pages.



Drivers Increasing Power Non-Federal Debt Service

- Background:** Power Services' average annual non-federal debt service for the 2010/11 rate period was initially expected to increase approximately \$81 million in the 2012/13 rate period. The four major debt management actions that drove this increase are:

- Reserve Fund Free-ups:** The reserve fund free-ups pulled principal from 2005-2018 making debt service requirements much higher than they would have otherwise been, as these funds would have been used to offset debt service in the final year of maturity for each bond series.
- Major 2003 Restructuring & Variable Rate Transactions:** These transactions were completed during the SN CRAC period. They focused on rate relief through both traditional refinancings for savings, principal restructuring, and converting fixed rate debt into synthetic fixed rate (variable plus corresponding interest rate swaps.)
- CGS Debt Extension:** In 2006 BPA and EN extended \$350 million for rate relief. A significant portion of the principal came out of the years 2010-2012.
- Debt Optimization:** Debt restructuring from 2001-2009 whereby EN debt was moved predominately to the 2013-2018 time period, replacing Federal debt already in that period, in order to improve Treasury Borrowing Authority. (Recall there is a Federal debt service decrease related to DO also.)

- The table below shows an average increase from FY 2010-11 to FY 2012-13 of \$92 million. Numerous other debt management transactions of lesser significance have positively mitigated the average delta to the initially expected \$81 million.

Significant Nonfederal Debt Management Affecting Debt Service						
(\$ in millions)						
	1) Reserve Fund Freeups	2) 2003 VRD & Refi for Savings	3) CGS Ext Principal PushOut	4) Debt Opt	Delta Total	Rate Period Average Delta
2010	8	(27)	(72)	55	(36)	(32)
2011	20	(32)	(70)	54	(27)	
2012	56	(58)	(68)	81	10	61
2013	2	(64)	0	173	111	
Ave Annual Difference	15	(32)	37	72	92	92



Drivers Decreasing Power Non-Federal Debt Service in FY12-13

- Power Services' average annual non-federal debt service for the 2012 to 2013 rate period decreased since the IPR Proposed budget in December 2009.

(millions)

Generation Nonfederal Debt Service IPR Proposed (Dec '09)			Debt Mgmt Process Base Run May 2010		
2010	2011	Average Annual DS	2010	2011	Average Annual DS
565	581	573	565	581	573
2012	2013	Average Annual DS	2012	2013	Average Annual DS
676	633	655	666	621	644
Increase in Average Annual DS		81	Increase in Average Annual DS		70

- Changes in debt service are due to the following:
 - 2010 CGS New Capital: The increase is primarily due to higher interest expense associated with financing more new capital than was originally forecast.
 - EN Treasury Services: The decrease is primarily due to a significant decrease in expenses related to fixing out the variable rate debt. The decrease was also due to taking into account Reserve and Contingency Surplus that was previously not reflected in the nonfederal database.
 - CGS New Capital forecast: The decrease is primarily due to a revised financing assumption for modeling projected CGS new capital additions for debt issuances in 2012 and beyond.

December 2009 vs May 2010 Crosswalk (millions)			
	2012	2013	Average Annual DS
IPR Proposed (Dec. '09)	676	633	655
2010 CGS New Capital	1	1	1
EN Treasury Services	-9	-9	-9
CGS New Capital forecast	-2	-3	-2
Total Deltas	-10	-12	-11
Debt Mgmt Process (May '10)	666	621	643



Drivers Increasing Power Federal Interest Expense

- As the chart on pg. 13 shows, forecasted Net Interest Expense is higher by about \$14 - \$24M per year in the FY2012/13 period compared to the WP10 forecast for FY2010/11 period.
 - The range reflects capitalizing vs. expensing all conservation acquisitions.
 - Net Interest Expense is comprised of a number of components; gross interest expense and interest income being the most significant elements.
 - The forecasted increase, about midpoint in the range, is due an increase in gross interest expense of about \$15M per year; and a decrease in interest income of about \$6M per year.
- This forecast was based on early analysis that did not include the updated IPR capital numbers, nor did it include an updated view of the reserves forecast for the start of the next rate period.



Drivers Increasing Power Federal Interest Expense (cont.)

- Incorporating those changes – updated capital and reserves numbers -- puts forecasted Net Interest Expense in FY2012/13 about \$52M higher per year on average, compared to the WP10 forecast for the FY2010/11 period. The breakdown is as follows:

 - All the current base case scenarios show interest income down by \$30m per year. The reason: forecasted interest income offset is not anywhere near the levels that would have been forecasted in the WP10 rate case because we expect forecasted reserves levels for the EOY 2011 – 2013 to be much lower than previously expected.
 - Forecasted Federal gross interest expense is now forecasted to be about \$22M higher in the 2012/13 period compared to WP10 forecast of 2010/11. This change is due to higher forecasted capital levels compared to the initial analysis.
- While increasing capital and decreasing interest income offsets play a role in increased Federal Net Interest Expense, there is a bit more to the picture. On the Federal side, BPA is issuing more debt than it is paying off. This trend starts in FY10 and will become more dramatic over the coming years as BPA pays more non-Federal debt off, which pushes down Federal amortization. (see next slide)

(millions)

Generation Federal Interest Expense IPR Proposed (Dec '09)		
2010	2011	Ave Annual Int Exp
166	175	171
2012	2013	Ave Annual Int Exp
187	198	193
Increase in Ave Annual Int Exp		22

(millions)

Generation Federal Interest Expense Debt Mgmt Process Base Run (May '10)		
2010	2011	Ave Annual Int Exp
166	175	171
2012	2013	Ave Annual Int Exp
214	232	223
Increase in Ave Annual Int Exp		52

(millions)

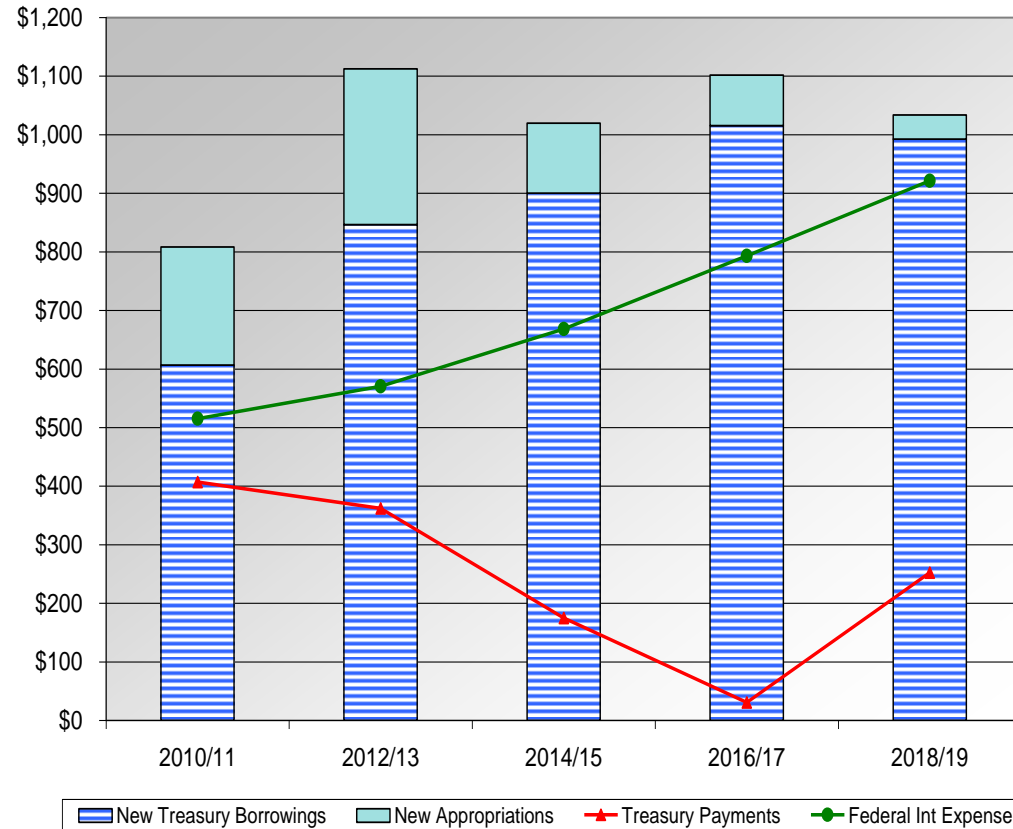
December 2009 vs May 2010 Crosswalk			
			Ave Annual
IPR Forecast (Dec '09)	2012	2013	Fed Int Exp
	187	198	193
Interest Income Loss	25	24	24
Increased Interest Expense	3	11	7
Debt Mgmt Process (May '10)	215	233	224



Drivers Increasing Power Federal Interest Expense (cont.)

- Increasing Federal interest expense is not solely related to higher capital spending; it is more about the net impact of *continued* higher new Federal debt issuance compared to the amount of Federal debt repaid each year.
- As the chart shows, in 2010/11 new Federal debt is nearly twice the amount paid. This trend continues more dramatically through the 2018/19 period.
- A few key points to bear in mind:
 - Historical debt actions typically have a much more significant interest expense impact in the upcoming rate period than forecasted debt issuances.
 - Federal principal payments are dropping to very low levels in response to the growing non-Federal payments that come due between now and 2018. This is as expected – the repayment study is designed to shape Federal payments around non-Federal requirements.
 - Federal interest expense is increasing, but is offset somewhat by reduced Federal principal payments. Federal principal payments are down due to increased non-Federal payments.

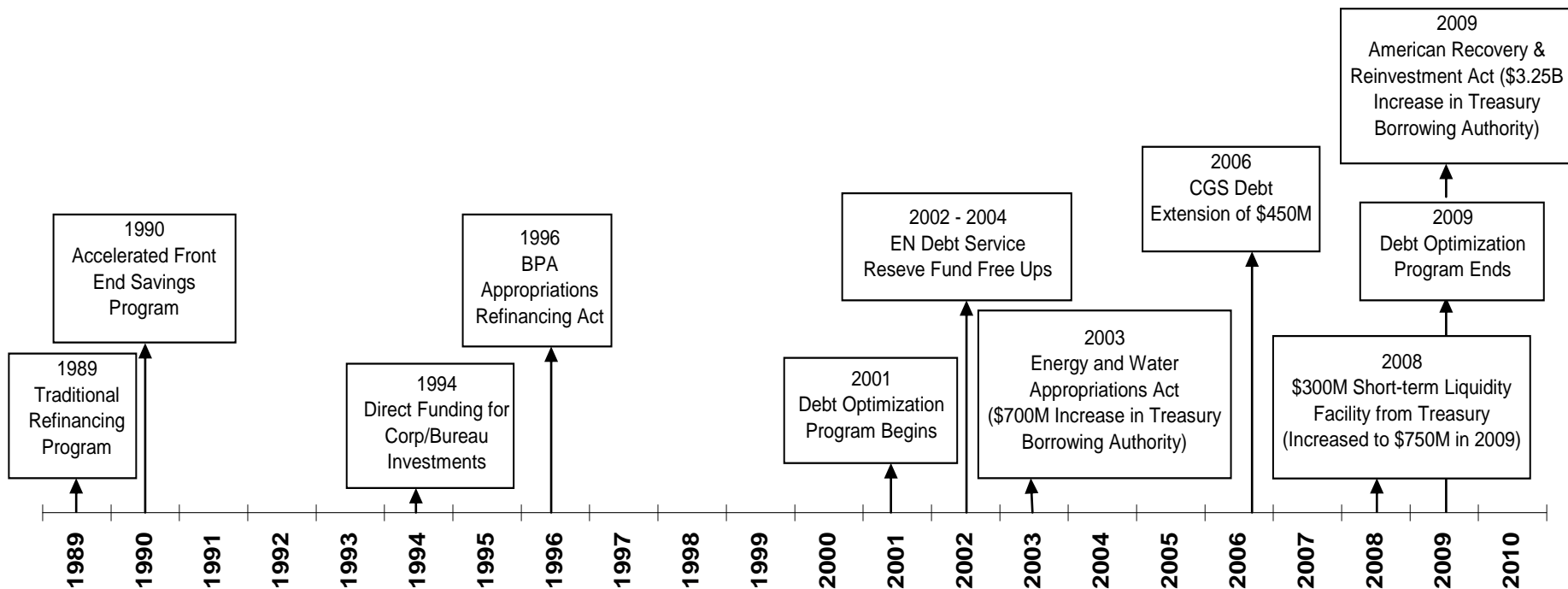
Forecasted Federal New Debt, Federal Principal Payments & Federal Interest Expense*
(\$ in millions)



* Generation only; based on 2010 IPR capital forecasts



Major Milestones in Recent Debt Management History



Non-Federal Debt Management Chronology (Late 80's to Mid 90's)

Pre-Refinancing Program:

- By the late 80's, after the initial financings for the WNP-1/-2/-3 nuclear projects during the late 70's and early 80's, BPA backed approximately \$6 B of Washington Public Power Supply System (Supply System) bonds on the books with a weighted average interest cost of about 10.5%. Some of this outstanding original debt had tax-exempt interest rates as high as 14-15%.
- Due to the Supply System municipal bond default in 1983, the Supply System and BPA were not able to sell bonds to refinance this high-cost debt during the mid-80's, even though interest rates were dropping. Although this default only involved Projects 4 and 5, there were several lawsuits related to the default that precluded any refinancing activity on the BPA-backed bonds.
- Furthermore, credit ratings on Supply System WNP-1/-2/-3 bonds were suspended in June 1983 by Standard & Poor's and Moody's due to bankruptcy issues, including challenges to the validity of the net-billing agreements.
- In 1986, a comprehensive refinancing study analyzed the legal impediments to bond market re-entry in an effort to capture the growing potential for significant economic refinancing savings for the region.
- Congress enacted technical bankruptcy code amendments ("Technical Corrections Act") in 1986 that eliminated the potential investor concern over the Supply System declaring bankruptcy related to the Projects 4 and 5 default.
- With credit ratings restored BPA and the Supply System jointly worked on an initial refinancing bond sale.



Non-Federal Debt Management Chronology (Late 80's to Mid 90's)

Supply System/BPA Re-enter the Markets:

- BPA and the Supply System conducted the first refinancing in September 1989 with a \$721m bond sale. This was the first bond transaction since the municipal bond default (Projects 4 and 5) of the Supply System debt in the early 1980's.
- This “high-to-low” refinancing kicked off the traditional “refinancings for savings program” that captured hundreds of millions of interest rate savings for the region over the next several years.

Stepped Debt Service Plan:

- Prior to the second refinancing in December 1989, BPA asked the Supply System to shape the debt service rather than make it level.
- This request was based on BPA's repayment study analysis that showed ratepayer benefits if the Supply System debt service was optimized with the Federal debt service (a total portfolio perspective).
- The newly shaped debt service was named the “stepped debt service structure,” and it set in place a new shape for non-Federal debt service from 1990 – 2018. The primary intent of this shaping was to pay more Federal debt earlier than planned repayment.

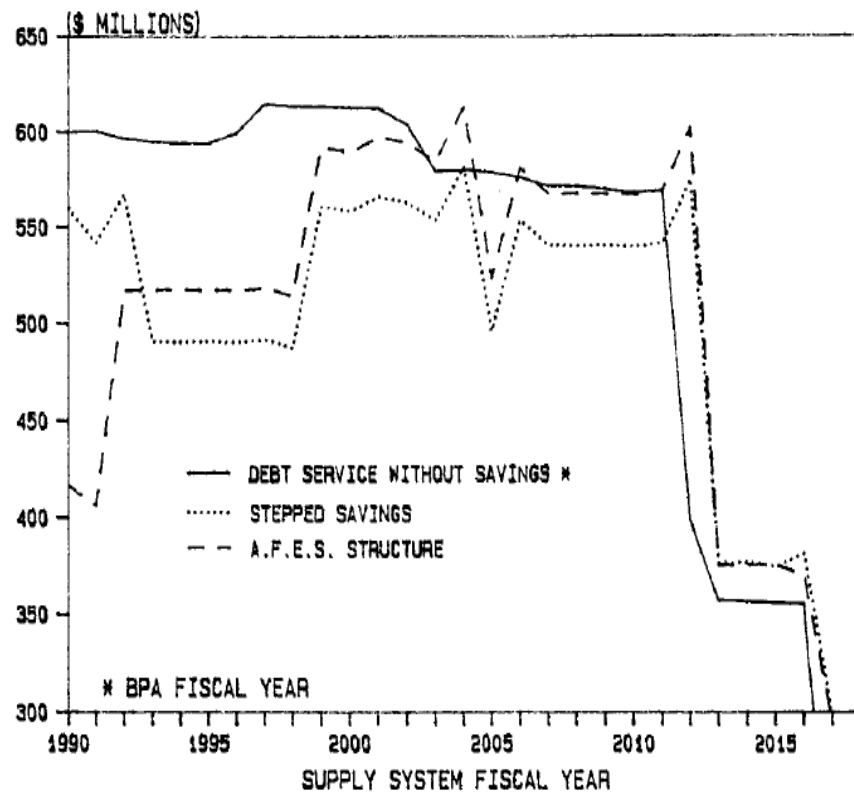


Non-Federal Debt Management Chronology (Late 80's to Mid 90's cont.)

AFES Development:

- New tax developments increased the allowable amount of advance refundable bonds that could be refunded on a tax-exempt basis. In the spring of 1990 BPA requested modification of the stepped program to put additional savings in 1990/91. This became the Accelerated Front End Savings (AFES) program.
- There were multiple goals behind the AFES structure:
 - The debt service savings created in the program would be used to finance a portion of the BPA planned capital expenditures for 1990/91 and pay higher interest rate Federal debt.
 - The significant up front net present value savings of approximately \$300 million from AFES could cushion BPA from having future Treasury deferrals. (BPA deferred some federal interest payments three times between 1975-1983.)
- AFES established the foundational layer for Energy Northwest debt service going forward.
- This program was before the Treasury Payment Probability standard established by BPA in the 1993 Financial Plan, and it was an attempt to achieve more certainty on Federal repayments.

BONNEVILLE POWER ADMINISTRATION
 SUPPLY SYSTEM DEBT SERVICE WITH REFINANCING SAVINGS
 STEPPED SAVINGS VS. A.F.E.S. STRUCTURE



Non-Federal Debt Management Chronology (80's & 90's continued)

AFES Modified:

- In 1992, BPA revenues fell significantly due to low water conditions and low aluminum prices -- general business conditions sharply deteriorated.
- The AFES bond transactions occurred between rate setting processes, and therefore had not been captured in rates at the time of the refinancings.
- BPA senior management made the decision to draw down the significant cash reserves generated by the AFES restructuring to produce rate relief, rather than follow the plan to reduce Federal debt outstanding.

Traditional Refinancing for Savings Continues:

- No major debt restructuring program occurred after AFES until the beginning of the Debt Optimization (DO) Program in 2001.
- Consecutive refinancings focused on traditional interest rate savings capturing low municipal bond interest rates throughout the 90's.
- However, several traditional refinancing for savings transactions included minimal debt restructuring in an effort to produce more level overall debt service.
- In FY 2000, just prior to DO, other debt management actions were completed that did not involve bond issuance in the financial markets, but were related to Energy Northwest debt service – as a result \$86 m in freed up funds was used to prepay Federal debt early.



Non-Federal Debt Management Chronology (2001- Present)

Debt Optimization 2001 - 2009:

- In FY99, BPA forecast that during FY04, it would exhaust its available Treasury borrowing authority by funding the capital programs supported by the region, unless other actions were taken.
- BPA decided it was prudent to consider alternative methods of financing its capital-intensive business; the Debt Optimization Program was developed in response. The program was the least cost alternative for maintaining continued access to Treasury borrowing authority.
- The primary goal of the program was to restore availability of Treasury borrowing authority. Specifically, it was designed to replenish up to \$3 billion of available Treasury borrowing authority.
- The program did not increase BPA's outstanding total debt and did reduce the weighted average interest expense for the agency.
- In conjunction with the DO Program in FY 2001, BPA initiated the CGS debt extension debt past its final maturity, from 2012 to 2018, based on asset life analysis and tax counsel opinion.

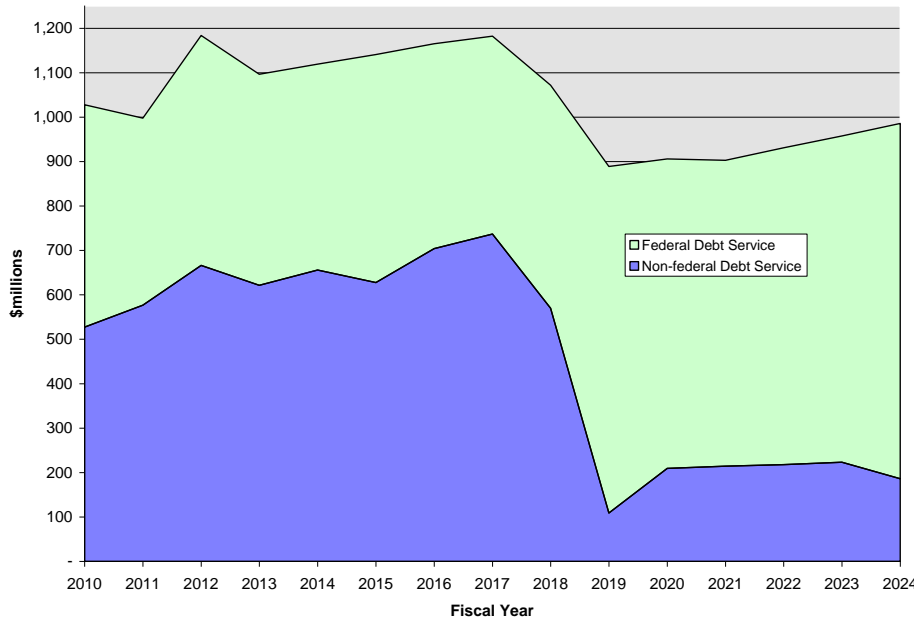
Non-Debt Optimization Transactions 2001 – 2010:

- BPA and EN conducted many other transactions during the 2001 – 2010 period not related to debt optimization.
- These transactions focused on creating savings for the region – refinancings for savings, debt extension for rate relief, establishing some synthetic fixed rate debt, restructuring principal placement to create upfront savings, financing new CGS capital additions.
- These transactions along with DO completely reshaped non-Federal debt and the way Federal debt payments would be shaped through FY 2018 and somewhat through FY 2024. The next slides will compare the debt service picture at the start of 2001 to the current debt service outlook.

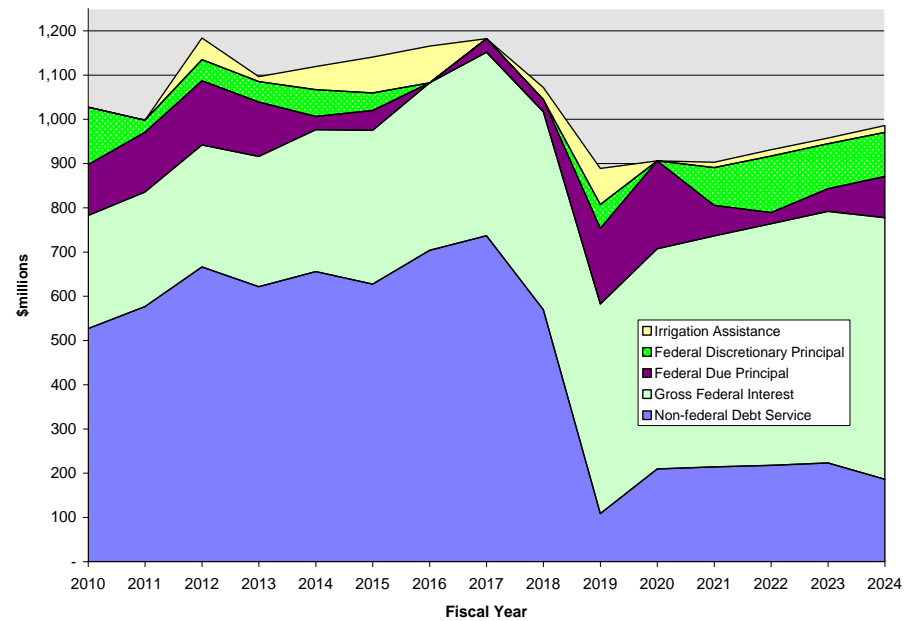


Looking Forward (Power)

Generation Debt Service



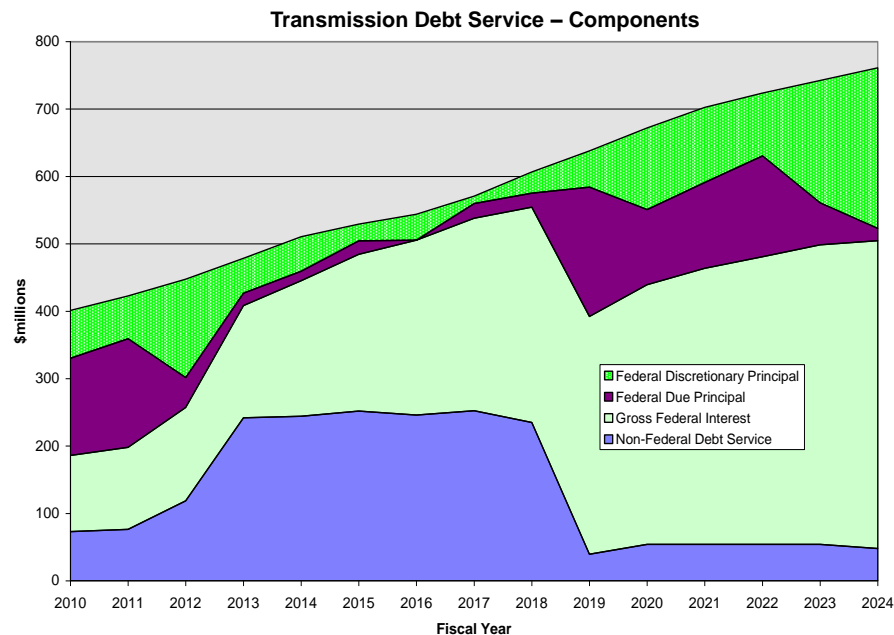
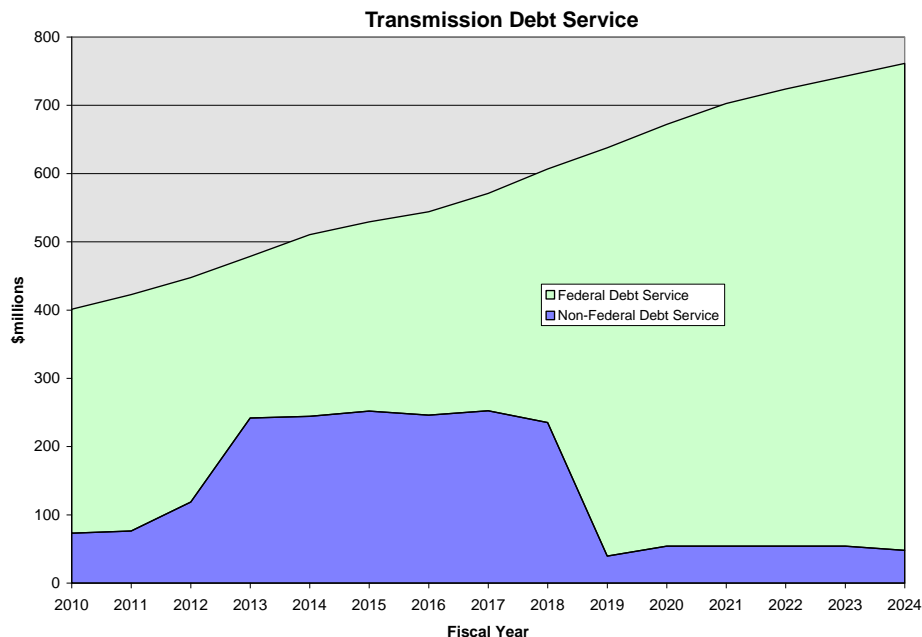
Generation Debt Service – Components



- Charts depict debt service on both outstanding debt and projected debt.
- Federal outstanding principal: \$4.2B; Non-Federal outstanding principal: \$5.0B, as of 9/30/09.
- Federal Capital forecast: 2010 consistent with the FY2010 Borrowing Plan; 2011-17 consistent with May 2010 IPR; 2018-24 forecast is a shaped and escalated forecast.
- 15 year Federal Capital forecast: \$7.7B
- CGS new capital: 2011-2024 total of \$660M (debt service exists past 2024 due to planned CGS capital financings)



Looking Forward (Transmission)

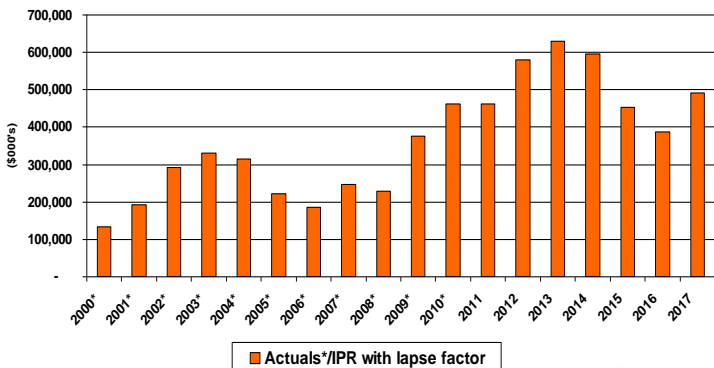


- Federal outstanding principal: \$1.9B; Non-Federal outstanding principal: \$1.6B, as of 9/30/09.
- Charts depict debt service on both outstanding debt and projected debt.
- Federal Capital forecast: 2010 consistent with the FY2010 Borrowing Plan; 2011-17 consistent with May 2010 IPR; 2018-24 forecast is a shaped and escalated forecast.
- 15 year Federal Capital forecast: \$7.4B
- No lease financing projections included in forecast

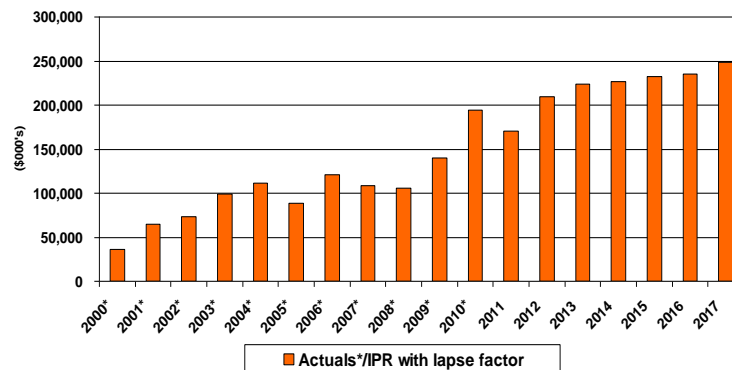


Looking Forward

TRANSMISSION CAPITAL

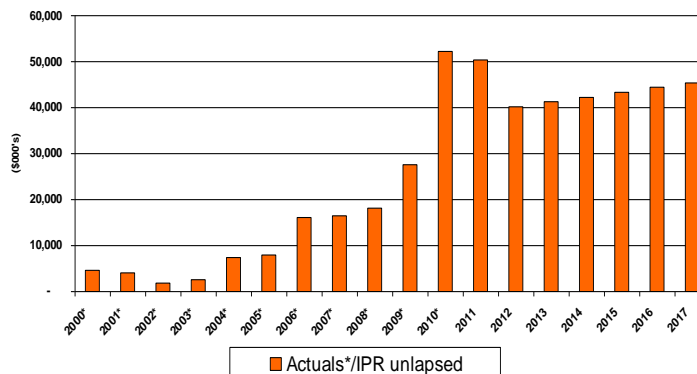


HYDRO CAPITAL

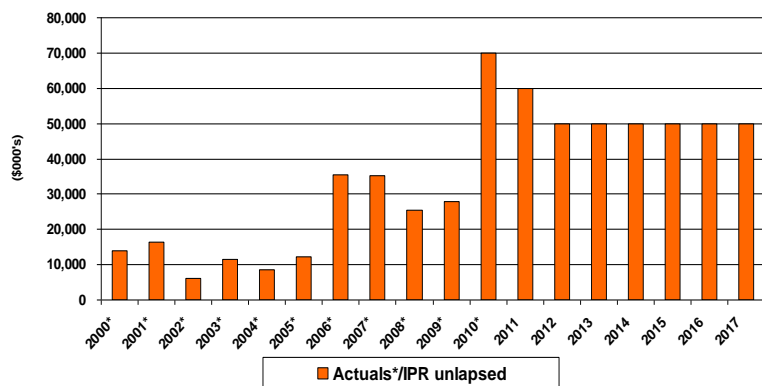


IT CAPITAL

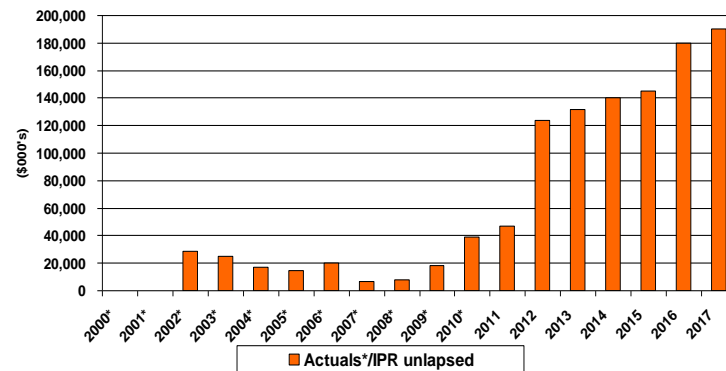
(Includes Power and Transmission IT)



FISH & WILDLIFE CAPITAL



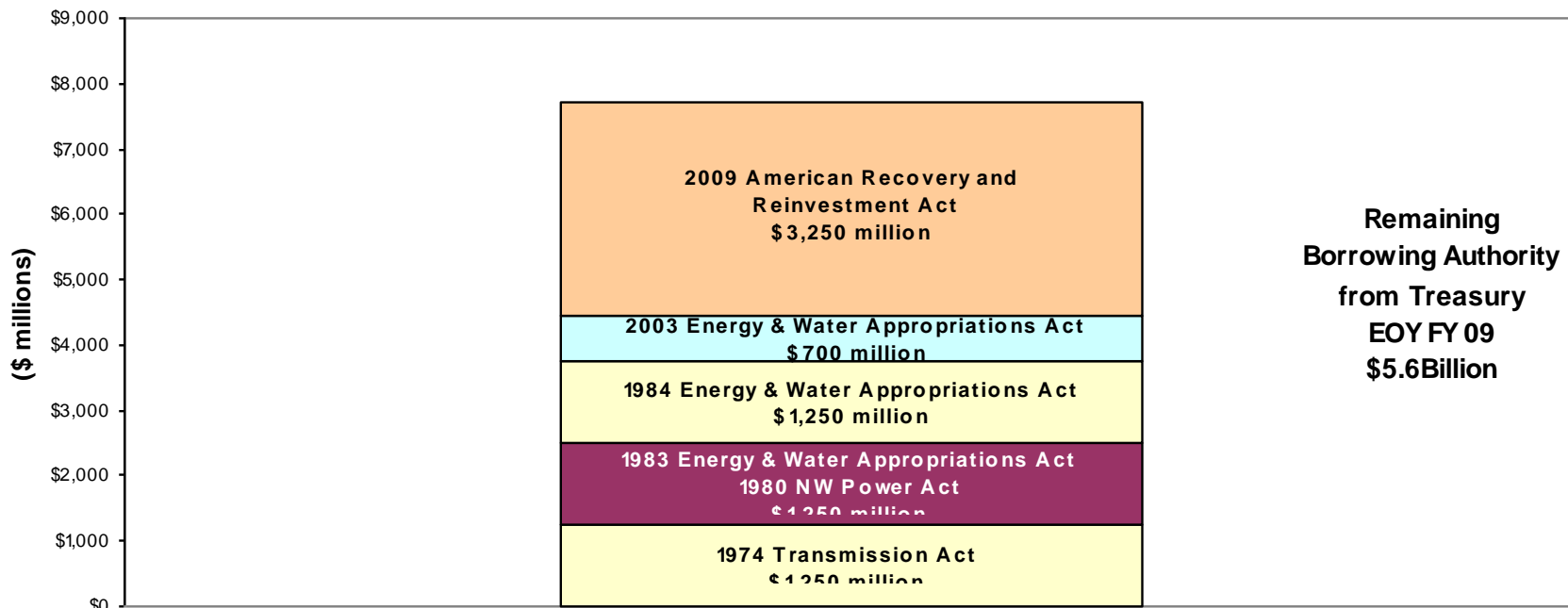
CONSERVATION & ENERGY EFFICIENCY CAPITAL



Access to Capital

Sources of Borrowing Authority: 1974-2009

\$7.7 Billion Permanent Authority

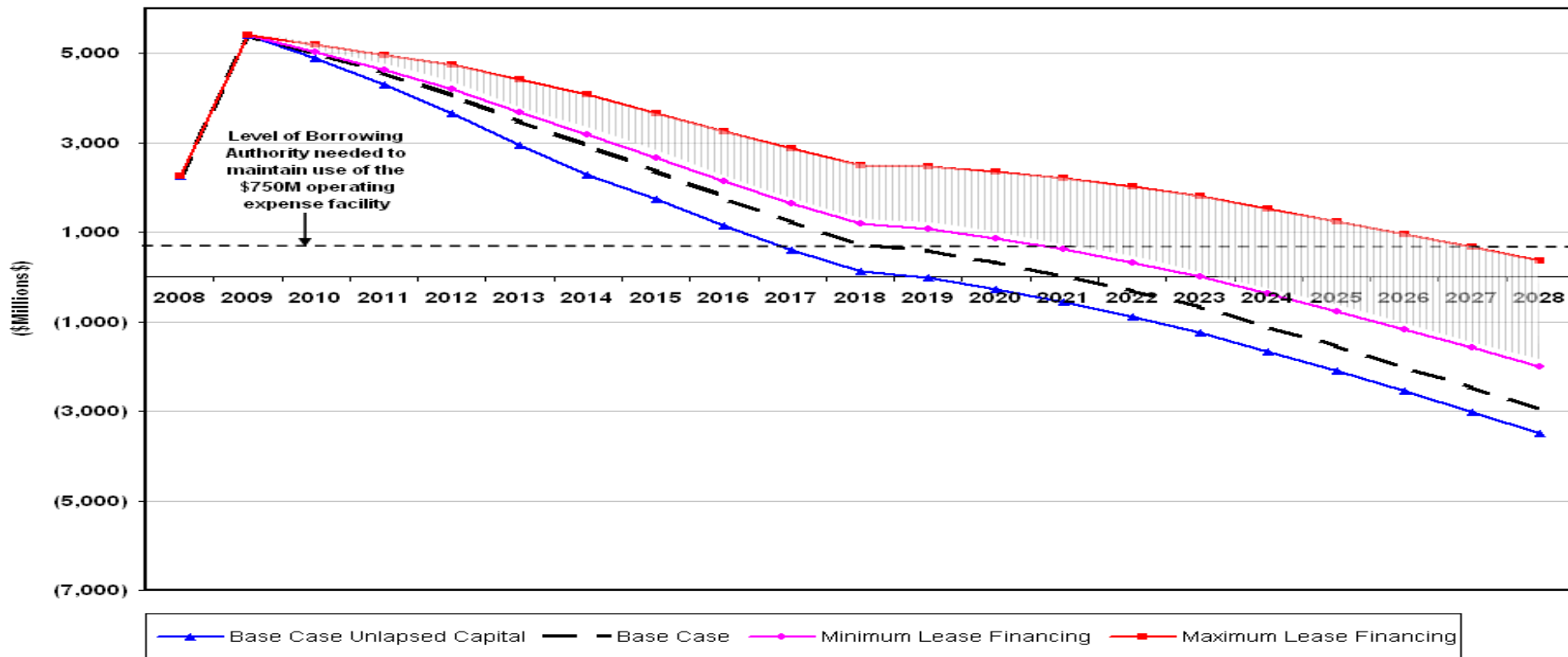


**Remaining
Borrowing Authority
from Treasury
EOY FY 09
\$5.6Billion**

Bonneville Treasury Borrowing Authority



Remaining Treasury Borrowing Authority: February 2009 IPR2 Update



- Chart data are consistent with the capital and amortization assumptions from the 2009 IPR2 public process. Shading between the two Lease Financing scenarios shows the range of lease financing scenarios.
- Assuming that BPA reserves \$750 million of borrowing authority in order to maintain access to the operating expense liquidity facility, Treasury borrowing authority could expire as follows:

Base Case Unlapsed Capital	Base Case	Minimum Lease Financing	Maximum Lease Financing
2017	2018	2021	2027



American Recovery and Reinvestment Act (ARRA)

- The Recovery Act provides BPA with a \$3.25 billion increase in Treasury Borrowing Authority under the Transmission System Act, thereby increasing the total amount of bonds that may be outstanding at any one time to \$7.7 billion.
- The increased borrowing authority is permanently available.
- BPA has identified \$2 billion in major projects in four asset areas that are planned to be attributed to this increased borrowing authority:
 - Transmission
 - Four major reinforcement projects, three currently under environmental review, that, if built, would add more than 220 miles of lines to the Northwest transmission grid and allow BPA to provide firm transmission service to about 3,360 megawatts of requests for new transmission service.
 - Additional main grid upgrade projects, upgrades and additions, and system replacements
 - Hydro system modernization program at six existing Bureau of Reclamation hydroelectric projects.
 - Energy Efficiency (Conservation) capital program
 - Environment, Fish & Wildlife - Three fish hatchery projects
- BPA's planned ARRA investments are well positioned to meet Recovery Act goals for stimulating the economy, modernizing infrastructure and enhancing energy independence by proceeding with the increased BPA planned capital programs needed to enhance transmission and hydro system infrastructure.



Borrowing Authority Modeling Scenarios and Assumptions

May 2010 IPR Update

BASE CASE ASSUMPTIONS

- **Capital forecast:** New capital forecast for 2010-2017; 2017-29 forecast is a shaped and escalated forecast. Total Treasury bond capital projections for 2010-2029 is \$19.1 billion
- **CRFM projections:** Power only, \$803 million in total through 2029
- **All capital categories that were lapsed for the May 2010 IPR update (Federal Hydro, Construction, Environment, and all Corporate except for IT) were lapsed for the 20 year period for this analysis (15% lapse factor).**
- **Reserve finance:** Transmission = \$15 million per year 2010-2029; Power = \$0
- **CGS new capital:** Power only, \$903 million in total through 2028; 2009-2012 level debt service from 2020-24, 2013-2028 level debt service for rolling 20 years
- **Interest rates forecast:** Official BPA forecast from 11/4/09

BASE CASE + 10% of TRANSMISSION CAPITAL LEASE FINANCING

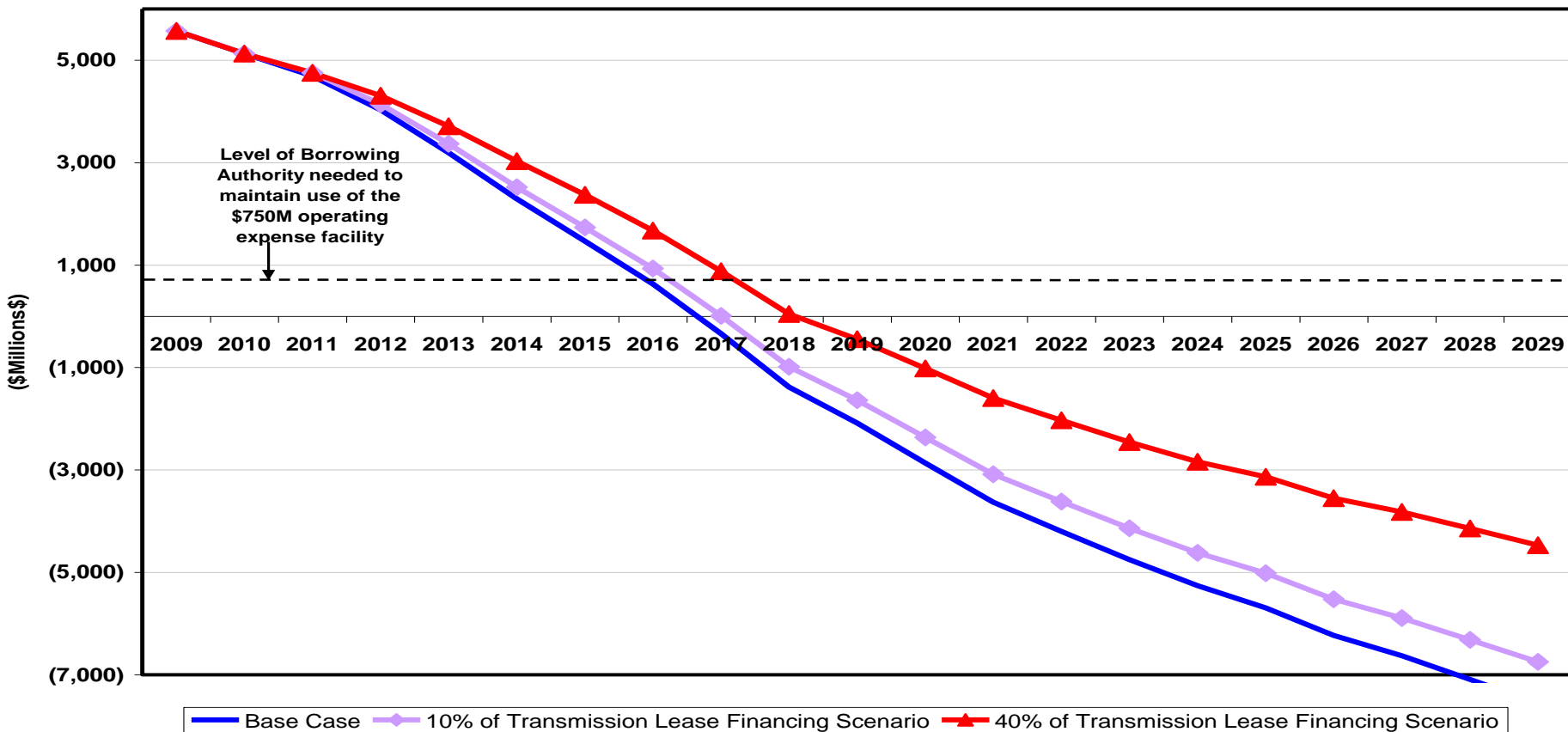
- Same as above, except add Lease Financing projections through 2029 totaling \$918 million

BASE CASE + 40% of TRANSMISSION CAPITAL LEASE FINANCING

- Same as above, except add Lease Financing projections through 2029 totaling \$3.5 billion



Remaining Treasury Borrowing Authority: May 2010 IPR Update



- Chart data are consistent with the capital from the May 2010 IPR update.
- All capital categories that were lapsed for the May 2010 IPR update (Federal Hydro, Construction, Environment, and all Corporate except for IT) were lapsed for the 20 year period for this analysis (15% lapse factor).
- \$15M of reserve financing for Transmission was assumed for each of the 20 years of the analysis.
- Assuming that BPA reserves \$750 million of borrowing authority in order to maintain access to the operating expense liquidity facility, Treasury borrowing authority could expire as early as:

Base Case	10% Lease Financing Scenario	40% Lease Financing Scenario
2016	2017	2018

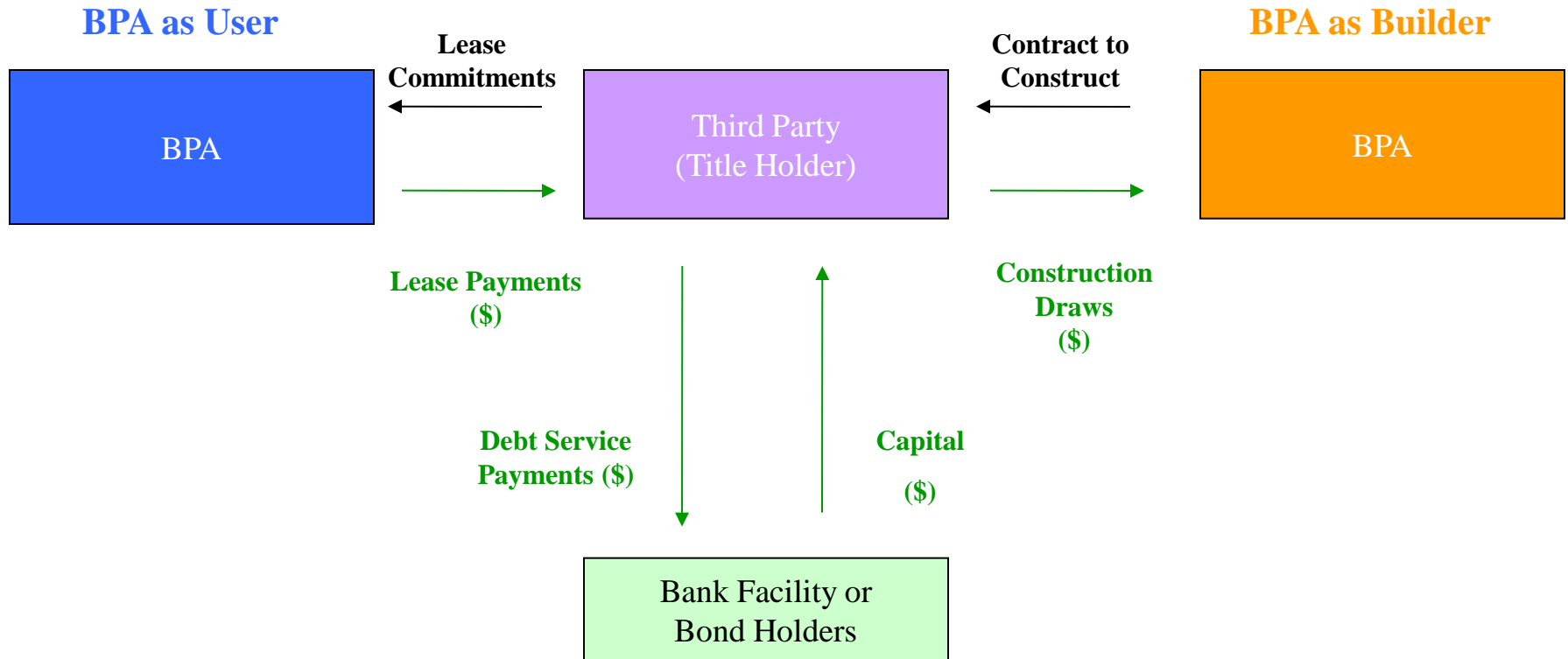


Remaining Treasury Borrowing Authority: May 2010 IPR Update cont.

- Even with the increased borrowing authority from ARRA, without the Lease Financing program, BPA projects remaining Treasury borrowing authority may be exhausted as early as 2016 when reserving \$750M for the operating expense facility.
- Higher capital projections are the primary driver for this forecast and for the steep slope of the base line.
- Lease financing can help to preserve borrowing authority. Assuming \$750M is reserved for the operating expense facility:
 - If 10% of Transmission's capital program is assumed to be lease financed each year, then we anticipate running out of borrowing authority as soon as 2017.
 - If 40% of Transmission's capital program is assumed to be lease financed each year, then we anticipate running out of borrowing authority as soon as 2018.
- Currently, lease financing is BPA's most cost effective tool for preserving Treasury borrowing authority, however, we have only used it to finance Transmission capital.



Lease Financing Structure Review



BPA has implemented two types of lease financing:

- The third party can issue long term bonds to finance the construction of the asset. This method used primarily to finance stand alone, large projects such as the Schultz-Wautoma line. In this situation, BPA enters into a long term lease with the third party to match the terms of the financing.
- The third party may use funds from a short term line of credit to finance the construction. This structure is used to finance multiple smaller projects. BPA enters into a short-term lease with the third party (seven years) to match the terms of the financing. After the construction of the assets is completed and the lease period ends, the third party issues long-term bonds and renegotiates the term of the lease.



Lease Financing Structure Review cont.

- BPA enters into a series of individual lease commitments with one or more bankruptcy remote special purpose entities.
- BPA's lease payment commitments are to be made regardless of whether the related facility is completed, operable or operating.
- The third party irrevocably pledges BPA lease payments to the payment of bank loans or other debt.
- The related project assets are not pledged as collateral.
- The third party initially holds title to the assets, but BPA obtains full benefit and use of the assets.
- BPA pays all costs to operate and maintain the assets.
- At the end of the lease, BPA will acquire title to the assets for a nominal charge.
- BPA has only used this mechanism to finance Transmission capital projects.
 - BPA does not own the Corps of Engineers and Bureau of Reclamation assets
 - Conservation and Fish & Wildlife capital are intangible assets and BPA typically doesn't hold title.
- Lease financing can not be used for all Transmission capital projects. Land and access roads are some examples of projects that are excluded from the program.
- Assets not leased initially become a permanent lost opportunity for preserving borrowing authority.



Lease Financing Program Status

- Since the start of the Lease Financing program in 2004, BPA has entered into roughly \$447M leases for projects located in three different states with four different third parties:
- BPA has lease agreements with the Northwest Infrastructure Financing Corporation (NIFC), NIFC II, NIFC III, and NIFC IV. All of these third parties are bankruptcy remote, special purpose entities under Global Securitization Services.

LEASE COMMITMENT AMOUNT BY ENTITY	
NIFC I	\$120M
NIFC II	\$90M
NIFC III	\$200M
NIFC IV	\$37M
	<u>\$447M</u>

LEASE COMMITMENT AMOUNT BY FISCAL YEAR	
2004	\$120M
2007	\$51M
2008	\$148M
2009	\$126M
2010	\$2M
	<u>\$447M</u>

LEASE FINANCING RATE COMPARISON			
	WEIGHTED AVERAGE ALL IN RATE	COMPARABLE TREASURY FINANCING RATE	DELTA
NIFC I	5.52%	5.23%	0.29%
NIFC II	5.54%	4.63%	0.91%
NIFC III	3.90%	3.73%	0.17%
NIFC IV	5.70%	3.71%	1.99%



Property Taxes

- At the June 2009 Lease Financing update, we mentioned that one of the risks to the overall program costs was property tax expense.
- At that time, we estimated that property taxes could add approximately 1.00% to the all in costs for lease financed projects in Oregon and 0.70% to the all in costs for projects in Idaho.
- In order to mitigate the potential property tax expense, BPA has an ongoing effort to obtain property tax exemptions for the program.



Property Taxes cont.

Montana:

- Due to high property tax rates and low levels of investment, BPA has chosen to not lease finance projects in Montana at this time.

Washington:

- Lease financed assets are exempt from property taxes.
- When the Schultz-Wautoma lease was set up, the Washington Department of Revenue issued a favorable ruling on the basis that the arrangement was a financing lease and that “the property interests in the project should be treated as though they are owned by BPA.”

Idaho:

- Lease financed assets are subject to property taxes.
- The NIFCs paid roughly \$70,000 in property tax payments under protest to the Idaho Tax Commission for the 2009 tax year.
- BPA is exploring the use of the Idaho Energy Resource Authority (IERA) as a third party. IERA may be tax exempt in Idaho.



Property Taxes cont.

Oregon:

- In April 2008, BPA began discussions with the Oregon Department of Revenue (DOR) regarding potential grounds for exemption.
- BPA asked the DOR for “informal advice” in order to assess the likelihood of property tax exemption. In response, the DOR indicated that the exemption would be denied (October 2008).
- From November 2008 through March 2009, legislation in Oregon granting an exemption was under consideration.
- On May 15, 2009, BPA submitted a request to the DOR for a formal Declaratory Ruling (after the legislative route did not materialize).
- On January 20, 2010, the DOR issued a Declaratory Ruling, declaring that because NIFC owns the projects, the assets are subject to property tax.
- BPA filed the complaint against the State of Oregon and Clackamas County on May 6. We expect the State to file an answer by July 16th and will have a conference call with all parties in early June to determine when Clackamas County will file its answer.
- We anticipate that the litigation could take up to two years to resolve.
- The DOR/counties have agreed to delay assessment of tax pending the final outcome of litigation.
- The Department of Justice and BPA believe that the lease-financed projects are effectively federal assets, which are not subject to state tax. In addition, Justice believes that the state tax statute discriminates against the federal government.
- We felt it was in the ratepayers’ best interests to continue to pursue property tax exemptions in the state of Oregon through litigation.



Challenges for the Lease Financing Program

Property Taxes

- BPA has a limited set of options for financing capital investments. BPA's lease financing is a low-cost alternative to ensure adequate access to needed capital over the long-term. Potential property tax liability on top of the added financing costs makes this alternative much less attractive. The increased costs from the taxes:
 - Puts constraints on capital alternatives,
 - Sub-optimizes the value of BPA's project financing alternatives with regional consumers ultimately bearing the additional cost and
 - Could potentially lead to delays in making transmission investments.
- BPA is managing this challenge by actively pursuing property tax exemptions.

Access to Lines of Credit – this issue only effects the lease financing program whereby the third party uses a line of credit to finance the initial investment.

- Currently, credit markets are still tight. Securing lines of credit in amounts large enough to support the program at a level high enough to sustain borrowing authority could be difficult.
- A seven year repayment term on the short term line of credit is a requirement for the lease financing program. The tight credit markets may make it difficult for banks to extend credit for that length of time.
- If additional lines of credit can be secured, it could come at a higher cost than desired due to the market conditions.
- This challenge is being managed by communicating with banks to gauge the credit market.

Third Party Costs

- BPA is receptive to alternative third-parties and third-party financing models but we always consider the cost effectiveness of the program.



Access to Capital and Lease Financing Summary

- Currently lease financing is BPA's lowest cost alternative form of financing Transmission capital.
- Not all of transmission's capital investments qualify for lease financing.
- By striving to meet the Administration's objectives for the use of ARRA borrowing authority, we have decreased the lease financing program size for FY10. However, the updated borrowing authority chart illustrates the need for BPA to continue a robust lease financing program.
- Potential property tax liability on top of the added financing costs makes this alternative much less attractive and could potentially hinder future investments.
- BPA believes that property tax litigation against the state of Oregon was the prudent thing to do to address inequities of potential tax assessment.



Next Steps

- BPA wants to engage with stakeholders regarding future debt management actions, including potential non-Federal debt service reductions in the 2012 – 13 rate period.
- BPA discussed a potential non-Federal debt extension/restructuring scenario with the Energy Northwest Executive Board on May 27th and may meet again with them in July to update on the regional conversation.
- BPA will meet with the Energy Northwest Participants Review Board regarding a potential non-Federal debt extension/restructuring scenario as soon as is convenient for its members, although such a meeting has not yet been scheduled.
- Initial debt management decisions are expected to be made this fall, prior to the expected release of BPA's Initial Rate Proposal in November 2010.



Comments

Submitting Comments:

- The Debt Management process includes a public comment period which commences today and lasts until July 29th.
- Comments can be submitted at any of the scheduled workshops or submitted in writing to:
 - Bonneville Power Administration, P.O. Box 14428, Portland, OR 97293-4428,
 - Email to comment@bpa.gov,
 - Faxed to (503) 230-3285



IPR Workshop Schedule

2010 Integrated Program Review (IPR) Workshop Schedule

All workshops are subject to change as necessary

	Workshop Topic	Date	Time
15	Internal Business Services Workshop (<i>to be reschedule</i>)	June 3, 2010	1:00-3:00 PM
16	General Manager Meeting (IPR Spending Level Discussion)	June 8, 2010	9:00-12:00 AM
17	Debt Management Technical Workshop (Non-IPR Workshop)*		1:00-4:00 PM
18	Transmission & Supply Chain FTE Benchmark Staffing Workshop*	June 10, 2010	9:00-11:00 AM
19	Renewable Resources Follow Up Workshop*		11:00-12:00 PM
21	Technology Innovation Workshop		1:00-3:00 PM
22	Debt Management Technical Workshop (Non-IPR Workshop)*	June 18, 2010	9:00-12:00 PM
23	General Manager Meeting (IPR, Debt Management & Risk Mitigation Discussion)	July 13, 2010	9:00-12:00 PM

*Asterisked workshops indicate the workshop has been recently added to the schedule.

