Debt Management Foundation

Summary presentation in advance of the Fall 2013 Debt Management Public Discussions

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Purpose of Debt Management Meeting

This information package is a brief introduction to the Debt Management session to be held on October 23, 2013 at the new rates hearing room.

The purpose of the following slides is to provide a general background on BPA's historic capital funding and debt management strategies. An understanding of these historic strategies and their corresponding long-term effects will serve as foundation to discuss the region's future capital funding strategies and continue to build a solid BPA with the lowest possible rates to consumers under sound business practices.

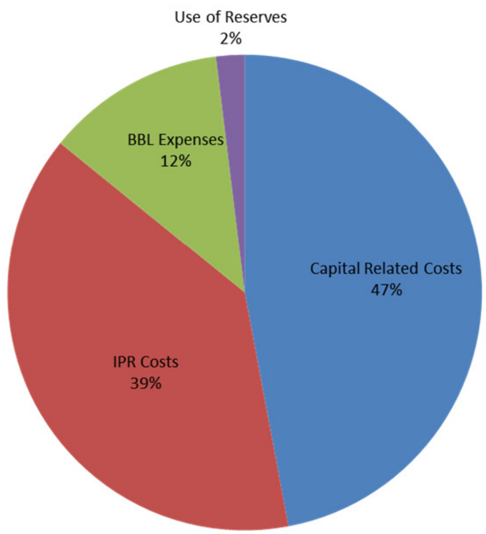
The following slides are for debt management discussion purposes only. Discussions on capital investment are scheduled to occur in February 2014 as part of the Capital Investment Review (CIR) process.

Why is Debt Management Important?

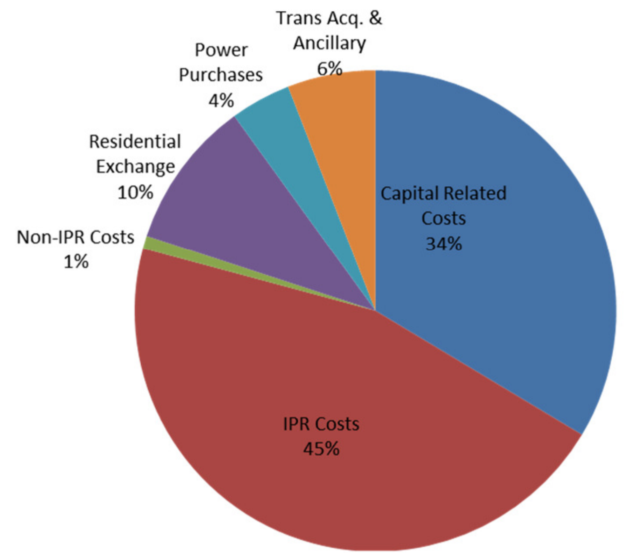
- The costs associated with BPA's debt portfolio are significant. They make up about one-third of Power's revenue requirement and about one-half of Transmission's.
- BPA has 3 goals for this process:
  - **Access to Capital**: Develop solutions that provide BPA with sustainable access to capital, at a minimum, over the next 10 years.
  - **Credit Rating**: Reduce BPA's outstanding regulatory assets and maintain current credit ratings.
  - **Business Strategy**: Define Power and Transmission future debt service in the context of each business units' strategic goals.
    - Mature, stable Power sales at Tier 1 rates.
    - Expanding Transmission responsibilities to meet regional needs.
    - Re-invest in aging infrastructure, assure reliability.

Revenue Requirement Breakdown

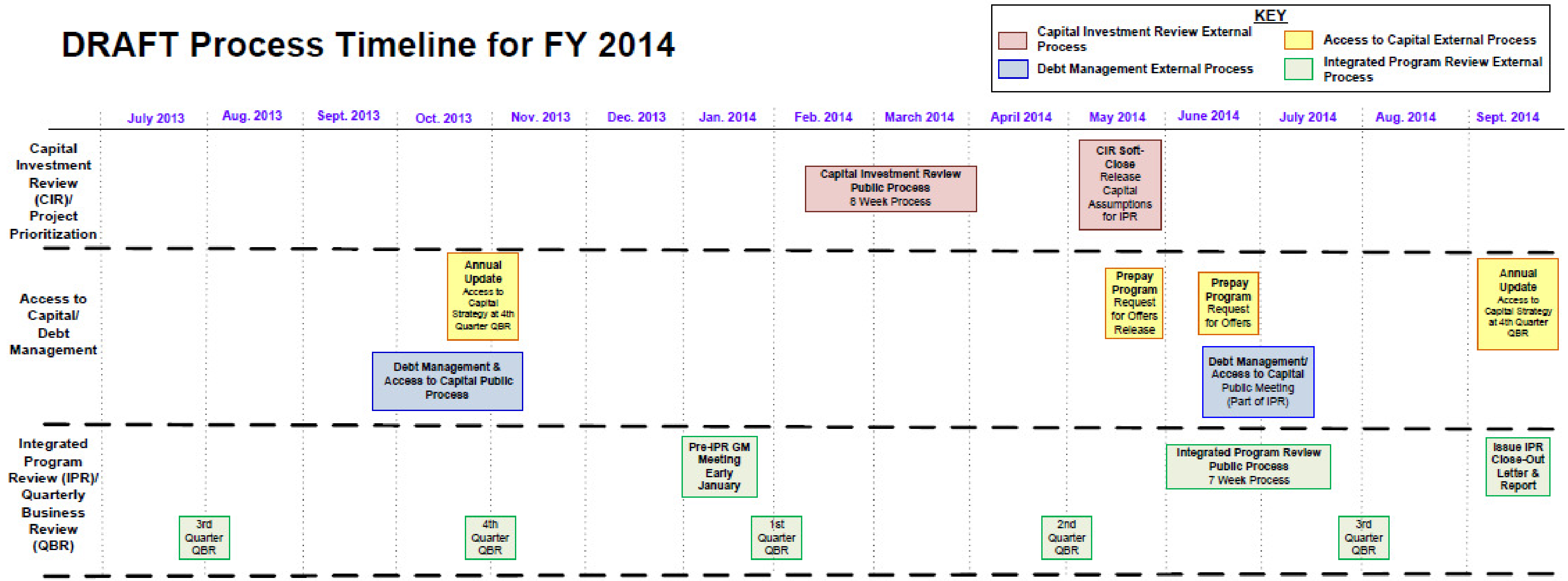
BP-14 Transmission



BP-14 Power



DRAFT Process Timeline for FY 2014



– **Debt Management and Access to Capital** – reviews the Agency's capacity to finance capital investment projections over a 10-year horizon given available financing tools. The review considers financing costs, risks and availability of tools.

– **Capital Investment Review (CIR)** – the CIR presents for discussion and comment BPA's draft Asset Strategies. Asset strategies chart the course for achieving the agency's long-term outcomes for assets by setting asset performance objectives, prioritizing risks, developing strategies, and forecasting costs and cost uncertainties.

– **Integrated Program Review (IPR)** – provides participants with an opportunity to review and comment on expense and capital spending levels prior to inclusion in the upcoming rate cases.

Debt and BPA - Background

- Debt financing generalized
  - An entity typically issues debt based upon the principles of leverage; that the entity would not be able to make the investment without the ability to borrow. For example, if BPA was a start-up enterprise and wanted to build a dam to generate electricity, how could that be done without borrowing?
- BPA's primary sources of capital financing
  - Appropriations:
    - BPA's existence began by Congress authorizing the building of Federal Hydro Electric projects. The funding for those projects came from appropriations that BPA pays back in full, on time and with interest.
    - BPA receives no new annual appropriations from congress but the U.S. Corps of Engineers and the Bureau of Reclamation receive some appropriations that BPA is eventually responsible for paying back.
  - US Treasury Bonds:
    - BPA now issues debt to US Treasury to fund investments in Federal Hydro Projects, Fish and Wildlife, Conservation, IT, Environment, Transmission Construction, and other small capital investments.
    - US Treasury financing is limited by statute to $7.70 Billion outstanding and is not anticipated to be increased again in the near future.
  - Non-federal financing:
    - BPA counts certain debt issued by non-Federal entities as "non-Federal debt", meaning debt secured by BPA:
      - Energy Northwest (EN), to fund new investments for Columbia Generating Station (CGS) and to refinance the original construction debt for CGS and two terminated EN projects, in each case under "net billing agreements".
      - Project lessors to fund Transmission construction projects under lease-purchases.
      - Conservation and generation resource project sponsors under resource acquisitions (e.g., Northern Wasco, Cowlitz Falls, etc.)
      - Power Prepay program
    - The amount of non-Federal debt issued is not limited by statute like US Treasury bonds but by BPA's ability to meet its obligations to third parties to make debt service payments. The cost of non-Federal debt is directly related to our credit rating. The higher the percentage of annual debt service compared to revenues and principal debt outstanding to assets, the lower our credit rating which in turn increases the borrowing cost and restrictions of non-Federal borrowing.
  - Reserve Financing:
    - $15 million per year starting in 2006
  - Revenue Financing to date:
    - $30 million in 1996, $15 million in 2004 & 2005

Debt and BPA - Background

- Approximately half of BPA's total debt portfolio is comprised of non-Federal municipal debt issued over several years for the EN nuclear projects[1/] , plus some smaller portions of debt for BPA conservation projects, small generating resources, power prepay program, and lease financing debt[2/].

- The other half of BPA's total debt portfolio is comprised of Federal[3/] debt, split between Appropriations[4/] and Federal bonds[5/].
  - Appropriations represent debt outstanding on the Federal Hydro Projects and Columbia River Fish Mitigation (CRFM) on the Power side and Transmission Construction Projects on the Transmission side.
  - Federal Bonds represent debt outstanding for both Power and Transmission to fund Federal Hydro Projects, Fish and Wildlife, Conservation, IT, Transmission Construction and Environment capital programs.
  - Federal Bonds outstanding is limited by statutory authority to $7.70 billion, of which $750 million is reserved for liquidity management purposes in the rate setting process.
  - As of 2012 available borrowing authority was $4.28 billion.

- 1/ page 10, BPA Liabilities to Energy Northwest, $5,941 million
- 2/ page 10, BPA Liabilities to Other Non-Federal Parties, $803 million
- 3/ page 10, Total Federal Liabilities, $7,241 million
- 4/ page 10, Total Appropriations, $3,820 million
- 5/ page 10, Total Bonds issued to Treasury, $3,421 million

Debt and BPA - Background

- BPA repays[1/] debt as well as issues [2/] new debt annually.
  - As an example, BPA issued $638 million in US Treasury capital related debt in FY2013 and repaid $186 million.
- When debt matures, meaning its at the end of its contractual life, BPA typically repays it, but can often restructure[3/] it.
- Debt management strategies can fall within one or a combination of these categories: issuance, repayment, or restructuring.
  - Repayment[1/] strategies typically focus on repaying the highest interest rate bonds or appropriations available (callable or maturing) given borrowing authority constraints
  - Issuance[2/] strategies typically focus on the maturity selection of the bond.
    - Shorter maturities for interest savings but higher interest rate risk if not planned to repay.
  - Restructuring[3/] strategies typically focus on projected principal repayment shape and effect on the revenue requirement and/or borrowing authority.
    - Debt may be moved from one period to another to achieve a more stable revenue requirement over time or increase borrowing authority if necessary.

1/ **Repay**: to extinguish, to pay back.

2/ **Issue**: issuing debt raises funds by promising to repay the lender at a certain point in the future and in accordance with the terms of the contract

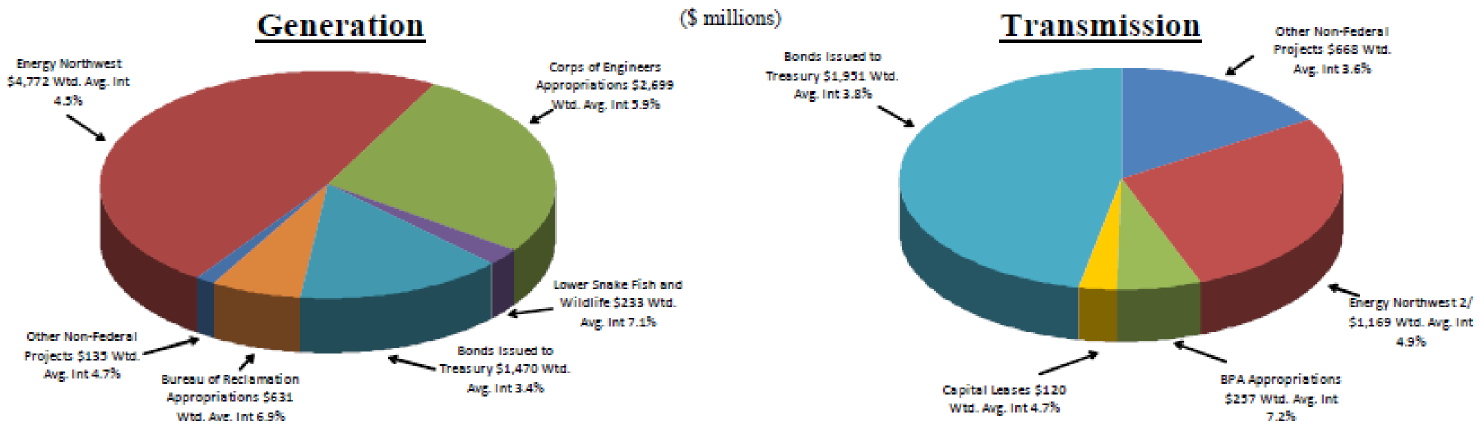
3/ **Restructure**: To extinguish and simultaneously re-issue new debt with a different maturity than previously held, as long as the proposed final maturity is within the useful life of the financed assets.

Debt and BPA - Background

- Rate Mitigation and Borrowing Authority – Debt Management Actions
  - The “high-to-low” traditional refinancing for interest savings that began in the late 80’s and continued into the mid-90’s (hundreds of millions in savings).
  - The “Accelerated Front-end Savings” program in the early 90’s that shaped non-federal debt service to glean significant savings in the early years and back-end loaded non-federal debt (~ $300 million up front savings for rate relief).
  - The “Debt Optimization Program” from 2001-2012 extended maturing EN debt each year to restore Treasury Borrowing Authority (~$2.2 billion in borrowing authority improvement).
  - Continued debt restructurings/extensions for Power rate relief – “Scenario B” in 2011/12 (~ $104 million rate relief per year), and the proposed debt extension of CGS maturing debt in 2014/15 (~$85 million rate relief per year).
  - Uranium Fuel Financing in FY12 provided ~$22 million in Power rate relief per year (2014/15).

Debt and BPA - Background

Federal Columbia River Power System (FCRPS)
Total Liabilities to Federal and Non Federal Parties
as of 9/30/2012
($ millions)



$ millions	Generation Liabilities Outstanding	Generation WAI Rate	Transmission Liabilities Outstanding	Transmission WAI Rate	Total Liabilities Outstanding	Total WAI Rate
Total Appropriations [1/]	$3,563	6.1	$257	7.2	$3,820	6.2
Total Bonds Issued to Treasury	1,470	3.4	1,951	3.8	3,421	3.6
Total Federal Liabilities	$5,033	5.3	$2,208	4.2	$7,241	5.0
BPA Liabilities to Energy Northwest	$4,772	4.5	$1,169 [2/]	4.9	$5,941	4.6
BPA Liabilities to Other Non Federal Parties	135	4.7	668	3.6	803	3.7
BPA Liabilities for Capital Leases [3/]			120	4.7	120	4.7
Total Non Federal Liabilities	$4,907	4.5	$1,957	4.5	$6,864	4.5
Total FCRPS Liabilities	$9,940	4.9	$4,166	4.3	$14,105	4.8

1/ Federal Appropriation amounts are less than the amount per the FCRPS financial statements because the repayment obligation does not begin until the related assets are placed in service. Appropriation amounts exclude appropriations for construction work still in progress (CWIP), which was $217 million in FY 2012. Unspent appropriations received by the COE and BOR as well as some adjustments are also excluded.

2/ 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.

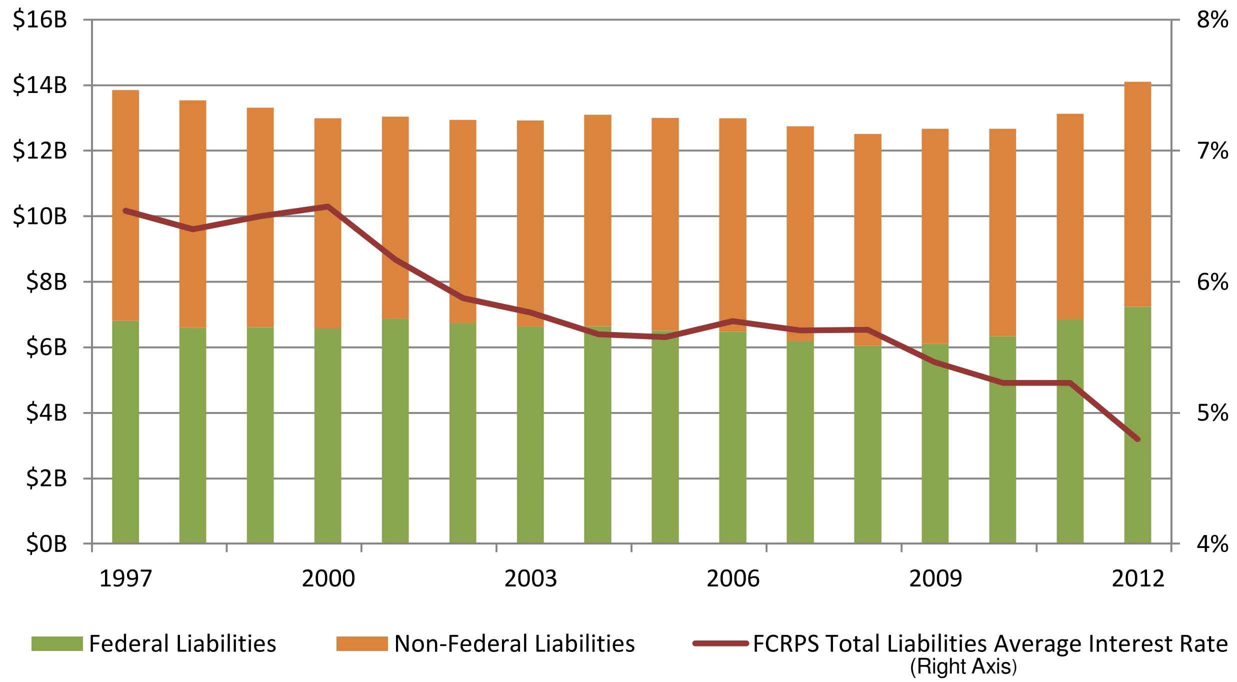
3/ Beginning in the BPA 2012 Annual Report, capital leases were included as a part of Nonfederal Financing. In prior years the capital leases were reported under Deferred credits and Other.

NOTE: This data does not include irrigation assistance liability of $665.9 million at zero percent interest.

This information made publicly available by BPA in November 2012.

Debt and BPA - Background

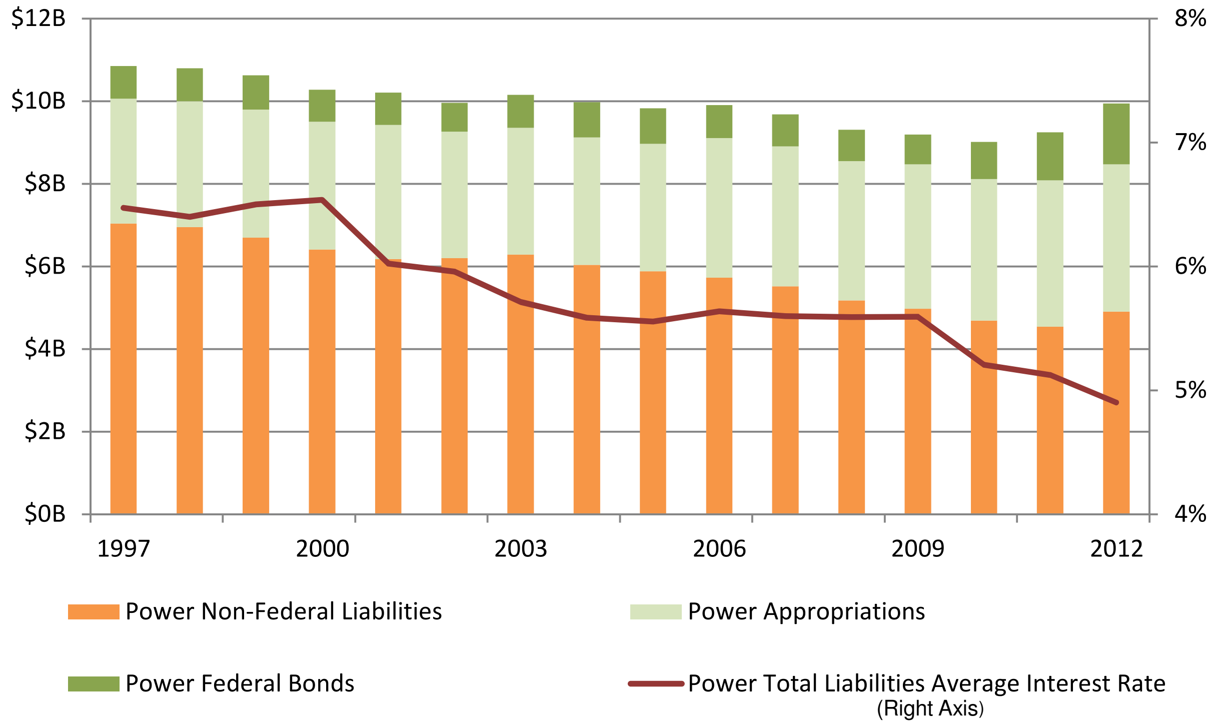
Agency Historical Principal Outstanding



- Decreasing total principal through 2010
- Stable Non-Federal principal with repayment of Energy Northwest nuclear plants 1&3 offset by increased lease financing

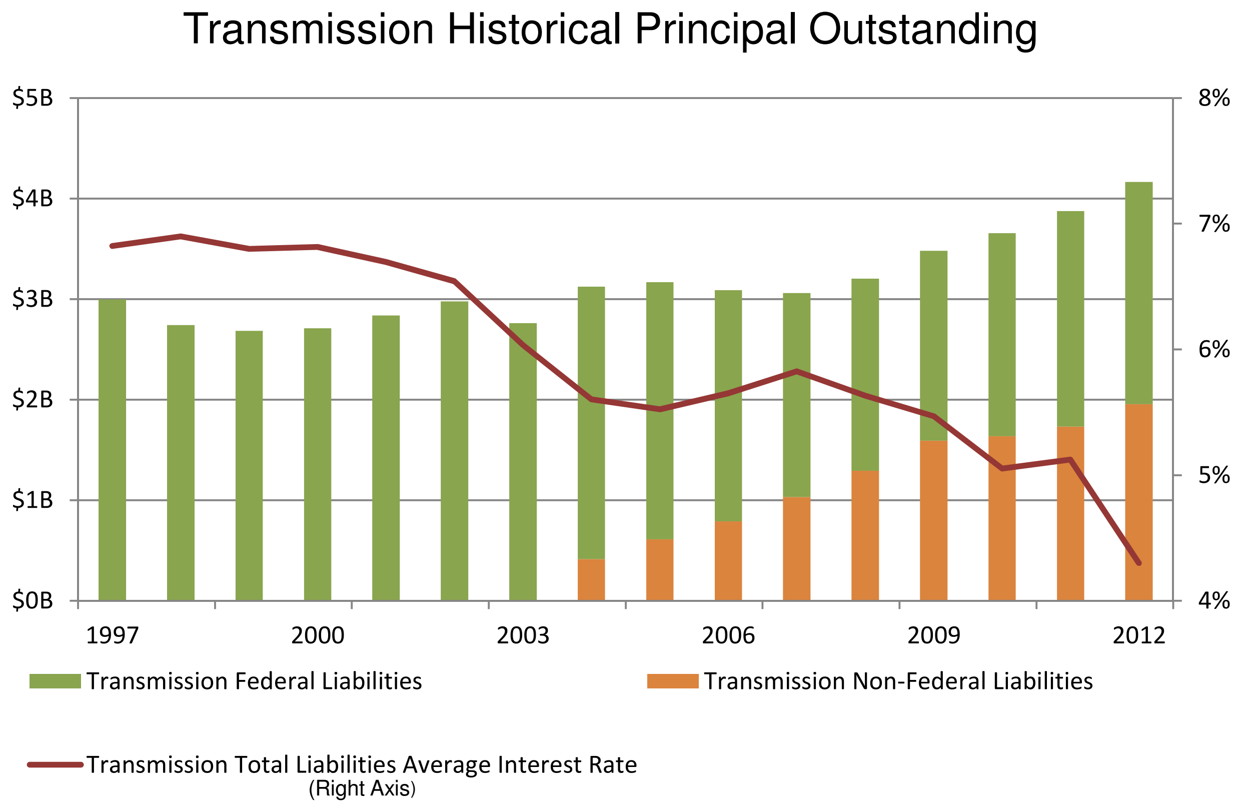
Debt and BPA - Background

Power Historical Principal Outstanding



- Decreasing total principal through 2010
- Increase in 2012 principal amount mainly due to Depleted Uranium Enrichment Program financing

Debt and BPA - Background



- Increasing Total debt outstanding
- Stable Federal Liabilities at onset of lease financing
- Energy Northwest debt accounts for ~$1.17 billion of Non-Federal principal through debt service reassignment (DSR)
- Increasing Non-Federal principal due to lease financing
- Appropriations near fully repaid - $257 million remaining scheduled to be paid by FY 2017

Debt Management Framework

Access to Capital Strategy

BPA's access to capital strategy goals (January 2013) established three goals:

1. Ensure that capital financing needs are covered over a rolling 10-year period.
2. Develop strategies and tools that extend BPA's period of sufficient access to capital.
3. Ensure that BPA is able to meet its capital requirements at low cost.

http://www.bpa.gov/Finance/FinancialPublicProcesses/AccesstoCapital/Access%20to%20Capital%20-%20Final%20Strategy.pdf

Financial Plan

BPA's most recent Financial Plan (July 2008) further described the access to capital goal to:

> "Ensure that capital financing needs are covered over a rolling 10-year period with the ultimate goal of ensuring access to Treasury borrowing authority on a rolling 20-year basis. As BPA continues to develop a capital funding plan to sufficiently meet capital requirements over the next 20 years, it will consult with interested stakeholders through public workshops and/or other forums."

http://www.bpa.gov/Finance/FinancialInformation/FinancialPlan/Documents/BPA-financial-plan.pdf

Debt Management Framework

Capital Financing Philosophy

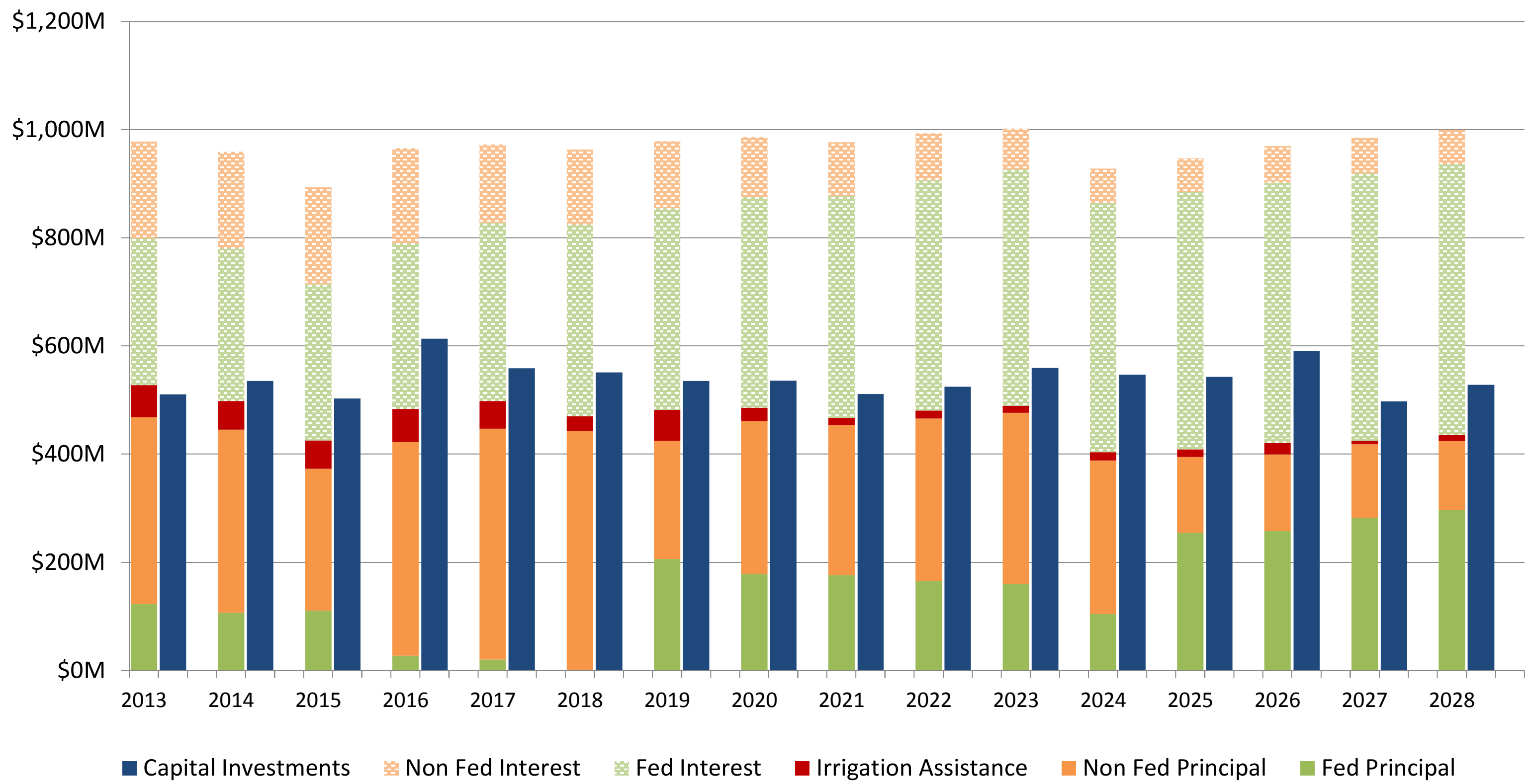
- Power Debt Service Profile
  - FY12 – FY28 Regional Dialogue contracts identify the power available for sale at Tier 1 rates as: output from the Federal Base System.
  - Power capped Tier One sales and have aging infrastructure, therefore the challenge will be to maintain a flat or downward trending debt service forecast.
- Transmission Debt Service Profile
  - Transmission system is evolving and growing and also has aging infrastructure.
  - High investment level forecast results in a potential doubling of debt service costs in the next 20 years.
  - Challenge is to invest in the system at the right time matching expected system growth while minimizing rate effects over time.
- Credit Rating
  - BPA would be better positioned in the view of the rating agencies by reducing outstanding debt.
  - Moody's views BPA's large capital program and reliance on debt as a "growing concern" and they will continue to monitor BPA's long term debt profile.
  - BPA's downgrade by Moody's in 2011 was primarily due to "credit quality deterioration driven by rising non-federal debt service, total reserves for risk dropped a cumulative 36% over a 2 year period ending FY2010 and non-federal debt service coverage dropped to around 2.0-2.5 times in 2009 and 2010 compared to 4.4 times average in 2004 to 2008."

Recap Debt Management Framework

Capital Financing Considerations

1. Align capital structure and debt repayment with business cycles
   - Power capped Tier One sales & aging infrastructure, Transmission growing revenue as well as new and aging infrastructure
2. Long term view of BPA's debt portfolio
   - BPA issues debt up to 30 years
   - Balance near term cost with long term targets of stable, low cost revenue requirement.
   - Use of lowest cost of capital financing tools
3. Strong credit rating
   - Commensurate with peer utilities (Aa1, AA Credit)
     - Consider debt and coverage ratios
     - Consider debt associated with regulatory assets (e.g. WNP plants 1&3, fish & wildlife, conservation)
   - Improve liquidity position
4. CGS debt extension
   - Repay an amount of Federal debt/Revenue Finance equivalent to the CGS extended debt over a reasonable period of time

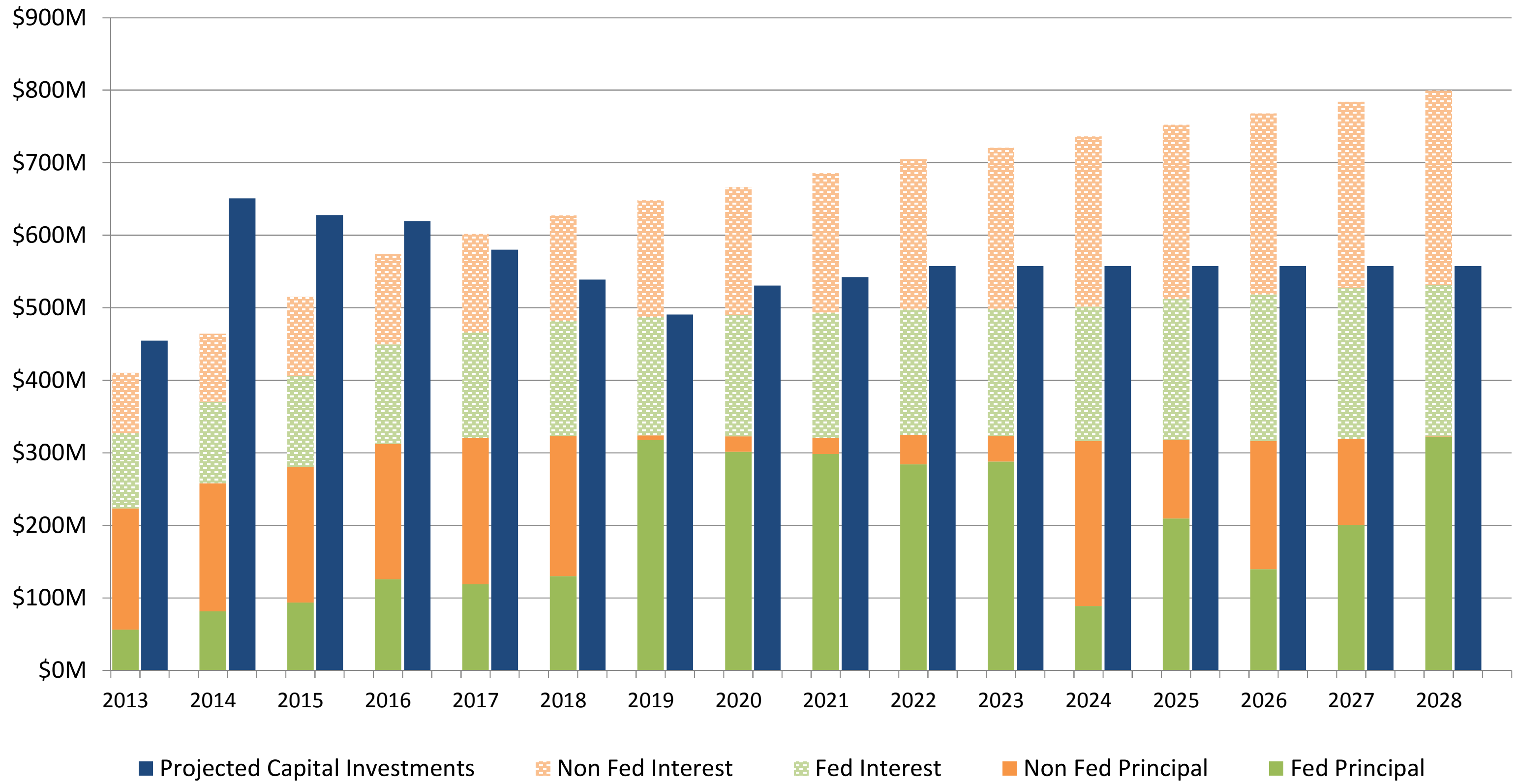
Power Debt Service Profile



- Projected annual debt service is estimated to be double the amount needed for annual capital investments through FY28.

Note 1: Capital projections from 2012 IPR2 and CIR with 10 year projection horizon.
Note 2: Repayment study based on BP14 final proposal. Debt service and capital investment in the graph above excludes $340 million of pre-pays.

Transmission Debt Service Profile



- By FY28, projected annual debt service is estimated to grow to be 1/3 higher than the amount needed for annual capital investment in that year.

Note 1: Capital projections from 2012 IPR2 with 2013-2015 reductions reshaped between FY 2016-21. Capital spending straight-lined after FY21. Consistent with the 2012 CIR. $15 million of reserve financing assumed from FY13-21.
Note 2: Repayment study based on BP14 final proposal with inclusion of 50% Lease Financing.

Capital Assumptions - Power

The following table represents the capital investment assumptions that will be used for the debt management session on October 23, 2013. It is for discussion and illustrative purposes only. Capital investment discussions are scheduled to occur in February 2014 as part of the Capital Investment Review (CIR) process.

Power Capital to be assumed in October 23rd debt management scenarios

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Fed Hydro (Lapsed)	226	228	227	236	232	237	238	239	241	241
Columbia Generating Station	115	116	135	156	121	113	71	78	76	83
Columbia River Fish Mitigation	142	99	39	69	57	51	57	47	21	27
Conservation	75	76	92	95	98	101	104	107	110	110
Corporate	23	19	19	20	20	20	20	20	20	20
Fish and Wildlife	60	60	51	37	31	29	45	45	44	44
Total Power Capital	**641**	**598**	**563**	**612**	**558**	**550**	**535**	**535**	**510**	**524**

Except for CGS:

Source for 2013-2015 capital: Integrated Program Review 2 (June 2013).

Source for 2016-2022 capital: 2012 Capital Investment Review.

Source for 2023 and thereafter: Level with 2022

Capital Assumptions - Transmission

The following table represents the capital investment assumptions that will be used for the debt management session on October 23, 2013. It is for discussion and illustrative purposes only. Capital investment discussions are scheduled to occur in February 2014 as part of the Capital Investment Review (CIR) process.

Transmission Capital to be assumed in October 23rd debt management scenarios

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Expand Total (AFUDC, loaded, Lapsed)	219	323	295	305	282	227	163	200	213	213
Sustain (AFUDC, loaded, lapsed,15m Reserve)										
Other Misc TS Capital	39	52	33	28	28	31	29	27	22	22
Reserve Financing	(15)	(15)	(15)	(15)	(15)	(15)	(15)	(15)	(15)	-
Sustain	233	260	282	269	252	262	280	286	289	289
Sustain Total (AFUDC, loaded, lapsed,15m Reserve)	258	296	300	282	265	279	295	297	296	311
Total Sustain/Expand "Construction Costs"	**477**	**619**	**595**	**587**	**547**	**506**	**458**	**498**	**509**	**524**
	-	-	-	-	-	-	-	-	-	-
Environment	6	5	5	5	5	5	5	5	5	5
Corporate Capital (IT, Facilities, Security)	33	24	24	25	25	25	25	25	25	25
Total Transmission Capital	**516**	**648**	**625**	**617**	**577**	**536**	**488**	**528**	**540**	**555**

Source for 2013 capital : Second Quarter End-of-Year forecast

Source for 2014-2015 capital: Integrated Program Review 2 (June 2013)

Source for 2016-2022 capital: Capital Investment Review re-shaped to include capital reductions in 2013-15 from CIR to IPR2.

Source for 2023 and thereafter: Level with 2022.

Financial Disclosure

This information has been made publicly available by BPA on September 24, 2013 and contains information not reported in agency financial statements.