

Debt Management

Technical Customer Workshop #2 June 18, 2010

Today's Agenda

	Topic	Slide #	Presenter
9:00 – 9:15	Introduction IPR/Debt Management Processes	2 - 3	Carbonari
9:15 – 9:30	Key Messages from First Workshop Looking Forward - BPA Debt Portfolio Power Transmission Principles for Debt Management Actions	4 - 7	Mertsching
9:30 - 11:00	Opportunities for Non-Federal Debt Restructuring/Extension Scenario Analysis/Summary Table	8 - 21	Dull
11:00 – 11:20	Conservation Amortization Bond Maturities/Observations Future Revenue Requirement	22 - 26	Homenick
11:20 – 11:35	Hedging Interest Rates	27 - 32	Dull
11:35 - 11:50	Fuel: Customer Input Procurement Fuel Financing Policy Fuel Accounting	33 - 34 35 - 36	Carr Dull McGuire
11:50 - 12:00	Follow-up Question/Next Steps	37 - 38	Owen/Carbonari

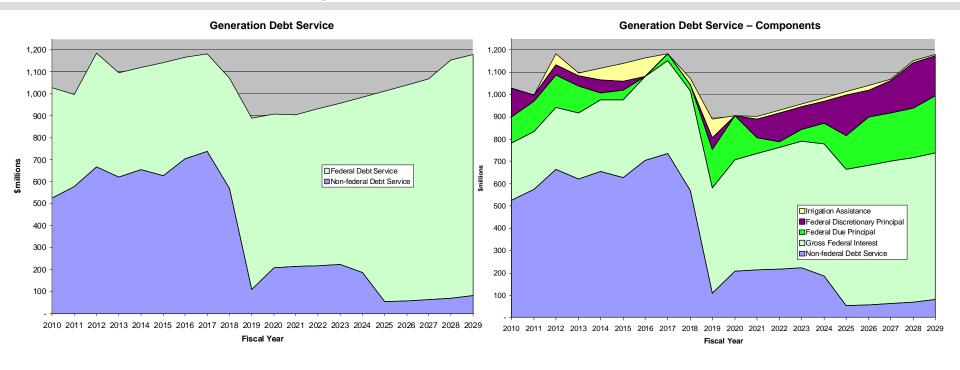
IPR/Debt Management Processes

- 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.)

Key Messages from First Workshop

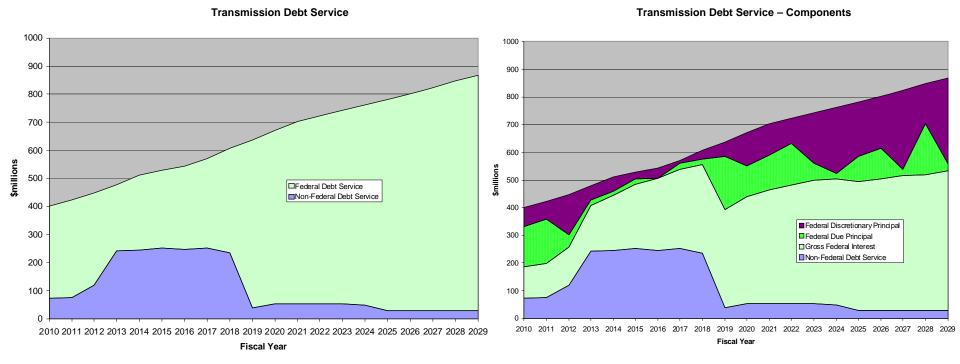
- Numerous debt management actions over the last 20 years have shaped non-Federal debt service going forward.
- Irrigation payment obligations are just now becoming due in significant amounts.
- BPA remains focused on access to capital in the future.
- Lease Financing provides a viable funding mechanism and is the least cost alternative to Treasury borrowing.

Looking Forward until 2029 (Power)



- Charts depict debt service on both outstanding and <u>projected debt</u>.
- 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; 2018-29 forecast is a shaped and escalated forecast.
- 20 year Federal Capital forecast: \$10.4B.
- CGS new capital: 2011-2029 total of \$903M (forecasted debt service exists past 2024 due to expected CGS capital financings, assuming license approval in 2012).

Looking Forward until 2029 (Transmission)



- Federal outstanding principal: \$1.9B; Non-Federal outstanding principal: \$1.6B, as of 9/30/09.
- Charts depict debt service on both outstanding and <u>projected debt (excluding lease financing projections)</u>.
- Federal Capital forecast: 2010 consistent with the FY2010 Borrowing Plan; 2011-17 consistent with May 2010 IPR; 2018-29 forecast is a shaped and escalated forecast.
- 20 year Federal Capital forecast: \$9.5B

Principles for Debt Management Actions

Background:

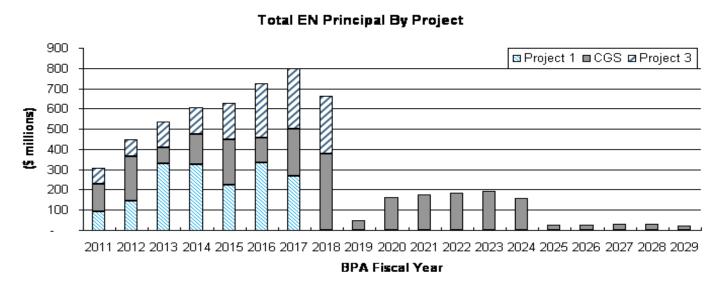
- This meeting and the entire debt management process is a dialogue between BPA and the region.
- BPA wants to collaborate with the region to determine a debt management solution to minimize a rate increase for the FY 2012/13 rate period.

Principles:

- Ensure low rates consistent with sound business practices.
- Take into account borrowing authority impacts.
- All else equal, repayment of assets should be matched with asset life, in an effort to ensure inter-temporal ratepayer equity.
- Balance short-term financial stresses against long-term agency financial stability.

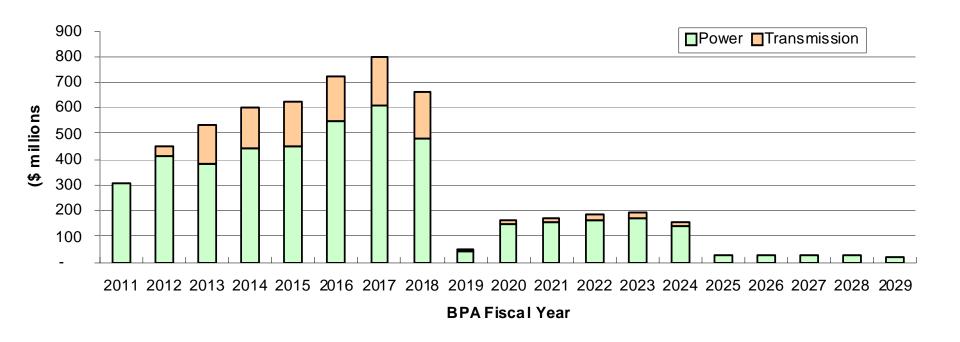
Energy Northwest Debt Profile (Existing and Projected)

- Projects 1 and 3 debt is scheduled to be completely paid off by 2017 and 2018.
- CGS went into service in 1984 and had an original life expectancy of 40 years, or 2024, and under current tax law some of the debt can be extended until 2032.
- Over \$2 billion of this debt would have been paid off by now, however EN supported the goals of various BPA debt management initiatives over the years.
- Debt Optimization did not increase the agency's overall debt load or its debt service costs. It did increase the
 nonfederal portion of the debt service we are facing in the fiscal year 2012-18 period, but it decreased the federal
 portion of the debt outstanding dollar for dollar.
- The DO Program preserved the shape of the total annual debt service as initially established by the early EN debt refinancings in the late 80's/early 90's, including the various refinancing transactions throughout the 90's.



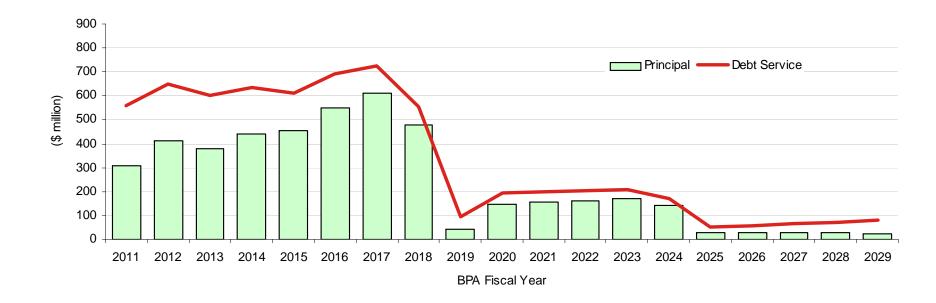
BPA Allocation of EN Principal by Power/Transmission

- In 2001 EN and BPA established the Debt Optimization Program that extended EN debt and paid down the same amount of federal power debt.
- In order to maximize the benefits of DO, in 2003, BPA initiated Debt Service Reassignment (DSR) as part of the DO program. With this new feature, federal transmission debt was paid off and the responsibility for future debt service on the extended EN debt was assigned to transmission.
- The amount of EN debt assigned to transmission is currently about \$1.2 billion.



BPA's Power Services' EN Debt Profile

- Power rates recover the cost of all of the principal and interest (debt service) associated with the EN debt, with the
 exception of the debt service assigned to transmission.
- When looking for opportunities to mitigate the magnitude of a potential rate increase in the FY12-13 Power rate case, we only look at the debt associated with Power Services.



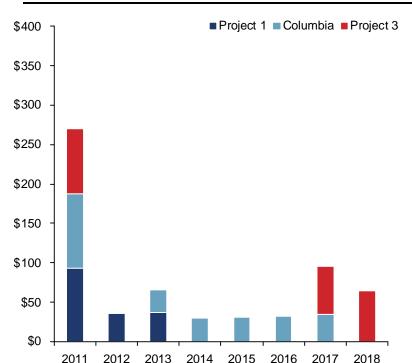
2011 & 2012 Maturing and Callable Bonds - Power

Substantial Rate Relief Can be Achieved By Restructuring Debt Over the Next Two Years

- There are near-term ways to shape the existing EN debt service:
 - Callable Bonds
 - Maturing CGS Bonds

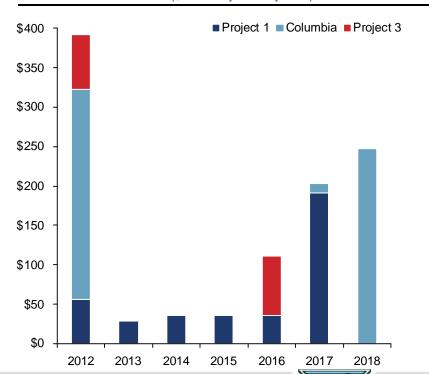
Debt Callable and Maturing in 2011

(\$ million by Maturity Date)



Debt Callable and Maturing in 2012

(\$ million by Maturity Date)



EN Maturing and Callable Bonds - Power

\$625 Million of Bonds Maturing or Becoming Callable in 2011

Project 1 - 2011 Callable Principal		
Par	Maturity	
35,465,000	2012	
37,520,000	2013	
72,985,000		

Columbia - 2011 Callable Principal		
Par	Maturity	
28,004,167	2013	
29,404,167	2014	
30,987,500	2015	
32,654,166	2016	
34,450,000	2017	
155,500,000		

Project 3 - 2011 Callable Principal		
Par	Maturity	
61,580,000	2017	
64,870,000	2018	
126,450,000		

Project 1 - 2011 Maturing Principal		
Par	Maturity	
93,045,000	2011	

Columbia - 2011 Maturing Principal	
Par	Maturity
94,350,000	2011

Project 3 - 2011 Maturing Principal		
Par	Maturity	
82,149,210	2011	

An Additional \$1.0 Billion Matures or Becomes Callable in 2012

Project 1 - 2012 Callable Principal		
Par	Maturity	
28,962,153	2013	
35,581,040	2014	
35,581,040	2015	
35,581,040	2016	
190,929,727	2017	
326,635,000		

Columbia - 2012 Callable Principal		
Par	Maturity	
12,260,000	2017	
247,215,000	2018	
259,475,000		

Project 3 - 2012 Callable Principal	
Par	Maturity
75,360,000	2016
75,360,000	

Project 1 - 2012 Maturing Principal		
Par	Maturity	
55,822,864	2012	

Columbia - 2012 Maturing Principal		
Par	Maturity	
266.580.739	2012	

Project 3 - 2012 Maturing Principal									
Par	Maturity								
69,131,730	2012								

Scenario Analysis

- EN's debt profile creates unique opportunities to mitigate the FY12-13 adverse rate impact due to increased non-Federal debt service.
- Ratepayer benefits in the FY 2012/13 rate period for Power Services could be as high as \$100m per year when we consider EN debt restructuring/extension.
- BPA analyzed three primary restructuring scenarios against a base case:

<u>Scenario A:</u> Extend \$155 million 2011 callable CGS principal; extend \$94 million 2011 maturing CGS principal; and place extended CGS principal in 2019-2024; restructure some callable Project 1 and 3 principal within the 2013 - 2018 timeframe.

	(DILIIIIO)													
<u></u>	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Refunded Bonds	80	43	56	30	31	48	88	49	0	0	0	0	0	0
New Bonds	71	18	54	8	25	0	0	33	104	19	20	21	23	18

<u>Scenario B:</u> Extend \$775 million CGS principal and redeem (pay) \$274 million callable Project 1 and 3 principal in both 2011 and 2012 (earlier than planned.) This results in the lowest non-Federal debt service from all the scenarios analyzed, and produces the lowest repayment study total debt service obligations in FY 2012-13 and through 2018.

	(DILIIO)													
_	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Refunded Bonds	146	250	87	65	86	183	302	234	0	0	0	0	0	0
New Bonds	1 16	155	60	11	33	32	113	106	179	98	98	108	1 14	89

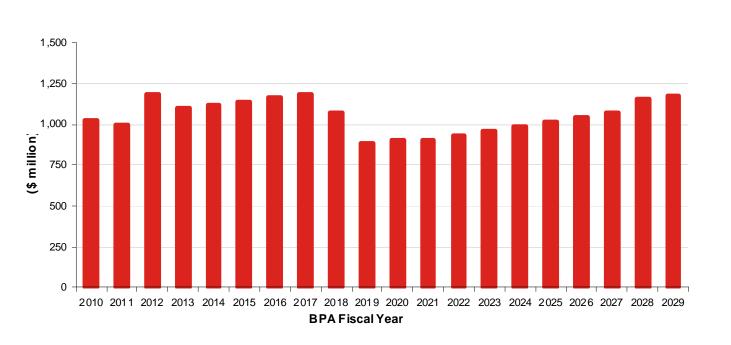
<u>Sensitivity Analysis:</u> Assume interest rates on refinanced debt increase by 3% while maintaining all the other parameters described in Scenario B.

Note: All 3 scenarios used a 13 year conservation amortization assumption.

Power Total Debt Service Base Case

(both Federal & Non-Federal)

- Ratepayers are expected to benefit from CGS through at least 2024, yet those in the post 2018 period are expected to pay a disproportionately lower amount towards debt service for this generating resource compared to those in the pre-2018 period.
- This debt service reduction can be seen in the chart below, the average FY10-18 power debt service is \$1.1 billion, while the average FY19-24 power debt service is \$930 million per year.
- This results in FY11-18 rate payers paying more than FY19-24 rate payers for power assets.
- Currently, all CGS debt is paid off by 2024 and assumes no license extension.

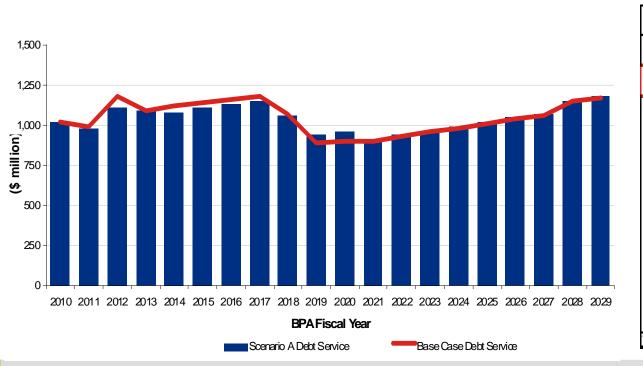


	Base Case Debt
BPA Fiscal Year	Service
2010	1,028
2011	998
2012	1,184
2013	1,096
2014	1,119
2015	1,141
2016	1,165
2017	1,182
2018	1,072
2019	889
2020	906
2021	903
2022	931
2023	957
2024	986
2025	1,012
2026	1,041
2027	1,068
2028	1,153
2029	1,178
Total	21,009

Scenario A: Extending and Restructuring 2011

2011 Debt Only - debt restructuring and extending CGS debt past 2018:

- By restructuring callable bonds in 2011 (Projects 1&3) and extending maturing and callable CGS debt in 2011, BPA achieves more levelized non-Federal debt service, which results in lowered total debt service requirements within the repayment study in FY2012-13, as well as FY14-18.
- Specifics: Extend \$155m of 2011 callable CGS principal; extend \$94m of 2011 maturing CGS principal. In 2011, redeem early \$94m of callable Project 1&3 debt that would otherwise mature in peak years.
- No rate case policy change and no hedging products are required as the deal would be completed before the final proposal, but may consider locking in interest rates.
- Average annual savings in FY2012-13 of \$37 m.

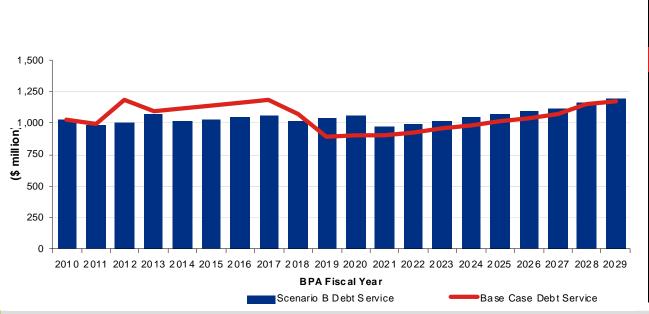


	Base Case Debt	Scenario A Debt	Delta from
BPA Fiscal Year	Service	Service	Base Case
2010	1,028	1,028	0
2011	998	981	(16)
2012	1,184	1,110	(74)
2013	1,096	1,096	0
2014	1,119	1,089	(31)
2015	1,141	1,110	(31)
2016	1,165	1,135	(31)
2017	1,182	1,152	(31)
2018	1,072	1,068	(4)
2019	889	942	53
2020	906	959	53
2021	903	914	11
2022	931	942	11
2023	957	968	10
2024	986	993	8
2025	1,012	1,021	8
2026	1,041	1,050	9
2027	1,068	1,077	9
2028	1,153	1,158	4
2029	1,178	1,185	7
Total	21,009	20,977	(32)

Scenario B: Extending and Restructuring 2011 & 2012

2011 & 2012 Debt - debt restructuring and extending CGS debt past 2018:

- By restructuring callable bonds in 2011 & 2012 (Projects 1&3) and extending maturing and callable CGS principal in 2011 and 2012, BPA achieves even more levelized non-Federal debt service, which results in lowered total debt service requirements within the repayment study in FY2012-13, as well as FY14-18.
- Specifics 2011: Extend \$155m of 2011 callable CGS principal; extend \$94m of 2011 maturing CGS principal. In 2011, redeem early \$94m of callable Projects 1&3 debt that would otherwise mature in peak years.
- Specifics 2012: Extend \$260m of 2012 callable CGS principal; extend \$266m of 2012 maturing CGS principal; redeem
 early approximately \$180m of Projects 1& 3 debt that would otherwise mature in peak years.
- The 2012 debt management action cannot be completed prior to the final proposal, unless we hedge the transaction.
- Average annual savings in FY2012-13 of \$104 m.



	Base Case Debt	Scenario B Debt	Delta from
BPA Fiscal Year	Service	Service	Base Case
2010	1,028	1,028	0
2011	998	981	(16)
2012	1,184	1,002	(182)
2013	1,096	1,070	(26)
2014	1,119	1,017	(102)
2015	1,141	1,032	(109)
2016	1,165	1,049	(116)
2017	1,182	1,066	(116)
2018	1,072	1,015	(57)
2019	889	1,044	155
2020	906	1,061	155
2021	903	967	65
2022	931	995	64
2023	957	1,022	64
2024	986	1,047	61
2025	1,012	1,070	58
2026	1,041	1,095	54
2027	1,068	1,118	50
2028	1,153	1,167	13
2029	1,178	1,191	13
Total	21.009	21.036	26

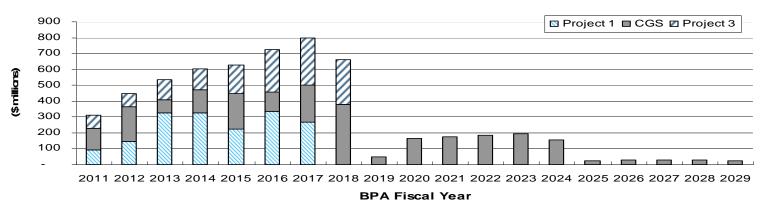
Total EN Scheduled Principal Payments (Before and After)

(Power & Transmission)

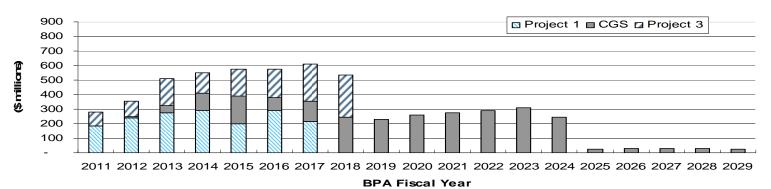
Extension/EN Project 1/3 Restructuring

- Extending \$775 million of CGS principal that is maturing and callable in 2011 and 2012
- Redeem early \$274 million Project 1 & 3 principal and restructure principal maturities

Total EN Principal By Project (Pre-Restructuring)



Total EN Principal By Project (Post-Restructuring)



Charts include both Power and Transmission EN non-Federal debt

Charts include projected new capital for CGS of \$903 million through 2029.

Total EN Scheduled Principal Payments (Before and After)

(Power & Transmission)

(\$ in Millions)

Pre- Restuc	turing																			
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Project 1	93	147	327	324	226	334	266	0	0	0	0	0	0	0	0	0	0	0	0	1,717
CGS	137	217	80	149	221	124	235	378	49	164	174	183	194	158	26	28	29	30	24	2,464
Project 3	79	85	130	131	180	266	299	283	0	0	0	0	0	0	0	0	0	0	0	1,454
Total	309	449	538	604	626	724	800	661	49	164	174	183	194	1 58	26	28	29	30	24	5,634

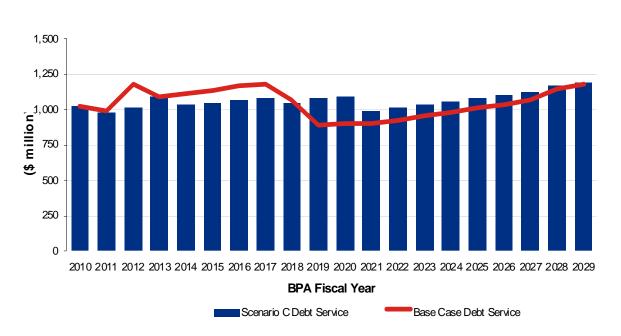
Post-Restu	cturing																			
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Project 1	186	241	275	291	199	291	217	0	0	0	0	0	0	0	0	0	0	0	0	1,699
CGS	0	10	52	1 19	189	88	138	245	228	262	276	291	308	246	26	28	29	30	24	2,453
Project 3	93	103	184	1 40	186	194	255	288	0	0	0	0	0	0	0	0	0	0	0	1,443
Total	279	354	511	5 50	574	573	610	533	228	262	276	291	308	246	26	28	29	30	24	5,596

Deltas																				
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Project 1	93	94	(53)	(33)	(27)	(43)	(48)	0	0	0	0	0	0	0	0	0	0	0	0	(17)
CGS	(137)	(207)	(28)	(30)	(31)	(36)	(97)	(134)	179	98	103	108	114	89	0	0	0	0	0	(11)
Project 3	14	18	54	8	6	(72)	(44)	5	0	0	0	0	0	0	0	0	0	0	0	(11)
Total	(31)	(95)	(27)	(54)	(53)	(151)	(190)	(128)	179	98	103	1 08	114	89	0	0	0	0	0	(39)

Note: Amounts pre-Restructuring and post-Restructuring do not exactly match because of cost of issuance and premium bonds issued

Sensitivity Analysis

- The majority of the benefits of the debt extension/restructuring scenario are attributable to extending principal so it is only somewhat interest rate sensitive; a 3% increase in interest rates would erode on average \$14 million in ratepayer benefits per year for the period 2012-2013.
- With a 3% increase in interest rates, the average annual savings in FY2012-13 decreases to \$89 m from \$104 m.
- BPA is considering ways to hedge a rise in interest rates.



	Base Case Debt	Sensitivity Debt	Delta from
BPA Fiscal Year	Service	Service	Base Case
2010	1,028	1,028	0
2011	998	983	(15
2012	1,184	1,012	(172
2013	1,096	1,089	(8)
2014	1,119	1,035	(84
2015	1,141	1,050	(91
2016	1,165	1,069	(96)
2017	1,182	1,086	(96
2018	1,072	1,051	(21
2019	889	1,079	190
2020	906	1,096	190
2021	903	994	91
2022	931	1,019	88
2023	957	1,036	79
2024	986	1,057	71
2025	1,012	1,080	68
2026	1,041	1,105	64
2027	1,068	1,128	60
2028	1,153	1,170	17
2029	1,178	1,192	14
Total	21,009	21,360	350

Summary Table

Gen	Generation Scenario Total Debt Service Deltas to Base Case (\$ in millions)											
	Scenario A	Scenario B	Sensitivity Analysis									
	FY 2011	FY 2011-12	FY 2011-12 Restructuring +									
	Restructuring	Restructuring	3%									
2010	0	0	0									
2011	(16)	(16)	(15)									
2012	(74)	(182)	(172)									
2013	0	(26)	(8)									
2012-13 Annual												
Average Delta	(37)	(104)	(90)									
2014	(31)	(102)	(84)									
2015	(31)	(109)	(91)									
2016 2017	(31) (31)	(116) (116)	(96) (96)									
2017	(4)	(57)	(90)									
2019	53	155	190′									
2020	53	155	190									
2021	11	65	91									
2022	11	64	88									
2023 2024	10 8	64 61	79 71									
2024	8	58	68									
2026	9	54	64									
2027	9	50	60									
2028	4	13	17									
2029	7	13	14									
20-Yr. Totals	(32)	26	350									

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Advantages and Disadvantages of Restructuring

Advantages:

- Eliminates the increase in non-Federal debt service for FY2012-13 rate period.
- Enables BPA to maintain low rates.
- Appropriately matches asset life with repayment of assets.

Disadvantages:

- Short-term financial needs can negatively impact longer term agency financial health.
- Expected repayment of debt as scheduled is altered and the amount of total outstanding debt does not decrease as currently scheduled.

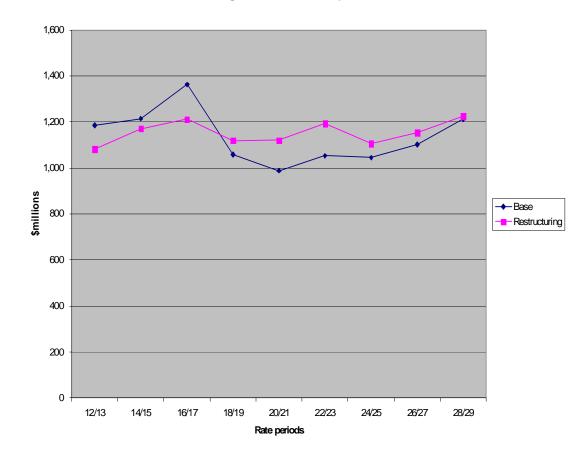
BONNEVILLE POWER ADMINISTRATION Total Revenue Requirement Change Comparison:

Scenario B to Base Case

Changes to the revenue requirement occur in Non-federal debt service, Federal interest and Minimum Required Net Revenues.

Average Annual Revenue Requirements

2012	annual change from base case (182)	avg annual change by rate period	change from previous rate period
2012	(26)	(104)	(13)
2014	(49)	,	` ,
2015	(40)	(45)	59
2016	(134)		
2017	(168)	(151)	(106)
2018	(95)	00	04.4
2019 2020	221 130	63	214
2020	132	131	68
2021	137	101	00
2023	143	140	9
2024	117		
2025	2	60	(80)
2026	54		
2027	50	52	(8)
2028	13	40	(0.0)
2029	13	13	(39)
(\$millions)			



Conservation Bond Maturities

- Since FY2007, BPA has been using a maximum repayment term of 5 years for Treasury bonds issued to finance Conservation measures. This is consistent with the accounting period for amortizing the investments.
- Consistent with the Northwest Power and Conservation Council's position on average service life of conservation measures, BPA is considering changing the life of new conservation investments to 13 years.
- In the Base Case, Scenarios A and B, and the Sensitivity Analysis (slides 15-20) a 13 year repayment term for Conservation bonds was used for these studies.
- In order to understand the debt impacts to this change in amortization period, the repayment studies for the Base Case and Scenario B were revised to reflect 5 year repayment terms for the Conservation debt.

Conservation Bond Maturities Repayment Study Results

BASE CASE				
Total Power Debt Service Comparison				
(\$ in Millions)				
	13 Yr.	5-Yr		
BPA Fiscal	Conservation	Conservation		
Year	Repmt	Repmt	Delta	
2010	1,028	1,028	0	
2011	998	998	(0)	
2012	1,184	1,135	(49)	
2013	1,096	1,191	94	
2014	1,119	1,213	94	
2015	1,141	1,234	93	
2016	1,165	1,257	92	
2017	1,182	1,274	92	
2018	1,072	1,165	93	
2019	889	980	91	
2020	906	997	91	
2021	903	935	33	
2022	931	947	16	
2023	957	963	6	
2024	986	956	(30)	
2025	1,012	958	(54)	
2026	1,041	982	(59)	
2027	1,068	1,004	(64)	
2028	1,153	1,066	(88)	
2029	1,178	1,090	(88)	
-	21,009	21,372	363	

SCENARIO B				
Total Power Debt Service Comparison				
(\$ in Millions)				
	13 Yr.	5-Yr		
BPA Fiscal	Conservation	Conservation		
Year	Repmt	Repmt	Delta	
2010	1,028	1,028	0	
2011	981	981	(0)	
2012	1,002	1,001	(1)	
2013	1,070	1,079	8	
2014	1,017	1,101	84	
2015	1,032	1,121	90	
2016	1,049	1,145	97	
2017	1,066	1,162	96	
2018	1,015	1,114	99	
2019	1,044	1,139	95	
2020	1,061	1,155	95	
2021	967	1,070	103	
2022	995	1,093	98	
2023	1,022	1,110	88	
2024	1,047	1,059	12	
2025	1,070	991	(79)	
2026	1,095	1,016	(80)	
2027	1,118	1,038	(80)	
2028	1,167	1,069	(97)	
2029	1,191	1,094	(97)	
	21,036	21,566	530	

Potential Exhaustion Date for Borrowing Authority*

	Bonowing Additiontly
Base Case	2016
Base Case with 5 year Conservation bond maturities	2017
Scenario B	2016
Scenario B with 5 year Conservation bond maturities	2017

*Assumes \$750M of borrowing authority has been reserved for the Operating Expense Facility.

Conservation Observations

(on Amortization Changes)

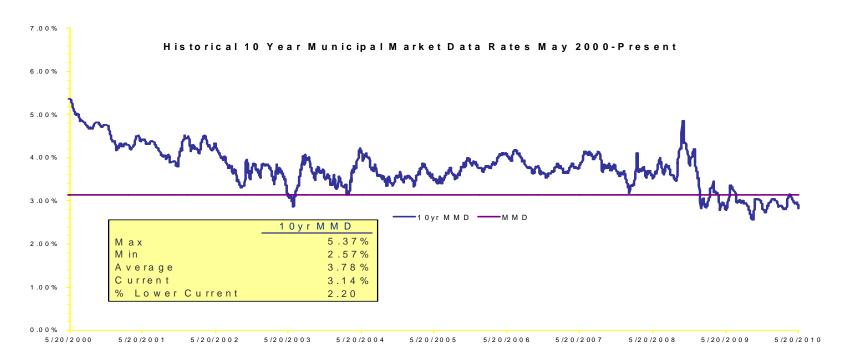
- Average annual debt service increases when a 5 year repayment term is used:
 - Base case FY2012-13 average annual debt service increases by approximately \$23M when compared to the Base Case study.
 - Scenario B –FY2012-13 average annual debt service increases by approximately \$4M when compared to the Scenario B study.
- 5 year Conservation bond maturities have a positive effect on borrowing authority. Assuming \$750M of borrowing authority is reserved for the operating expense facility, BPA gains approximately an additional year before borrowing authority is exhausted for both the Base Case and Scenario B if 5 year Conservation bond maturities are used.
- The 5 year Conservation repayment terms increases the revenue requirements for the upcoming rate period.

Rate Case Assumptions and Debt Management Practices

- BPA typically does not assume future non-Federal debt refinancings in rate case repayment studies mainly because refinancings can be highly interest rate sensitive.
- BPA does reflect new capital requirements in the repayment studies.
- BPA/EN can complete the 2011 restructuring prior to the rate case final proposal but cannot complete the 2012 restructuring because the bonds are not available until April 2012 (after the rates for 2012-2013 have been set).

Traditional Refinancing Opportunities

- If EN/BPA completed a traditional refinancing for savings of the EN callable debt associated with <u>Power Services</u> (about \$1.0 billion), the present value (PV) savings could be as much as \$80 million.
- If EN/BPA completed a traditional refinancing for savings of the EN callable debt associated with <u>Transmission Services</u> (about \$75 million), the PV savings could be as much as \$7 million.
- The majority of the benefits of the debt extension/restructuring scenario are attributable to extending principal so it is only somewhat interest rate sensitive; a 3% increase in interest rates would erode on average \$14 million in ratepayer benefits per year for the period 2012-2013.
- BPA is considering ways to hedge a rise in interest rates.



Interest Rate Hedges Are Expensive

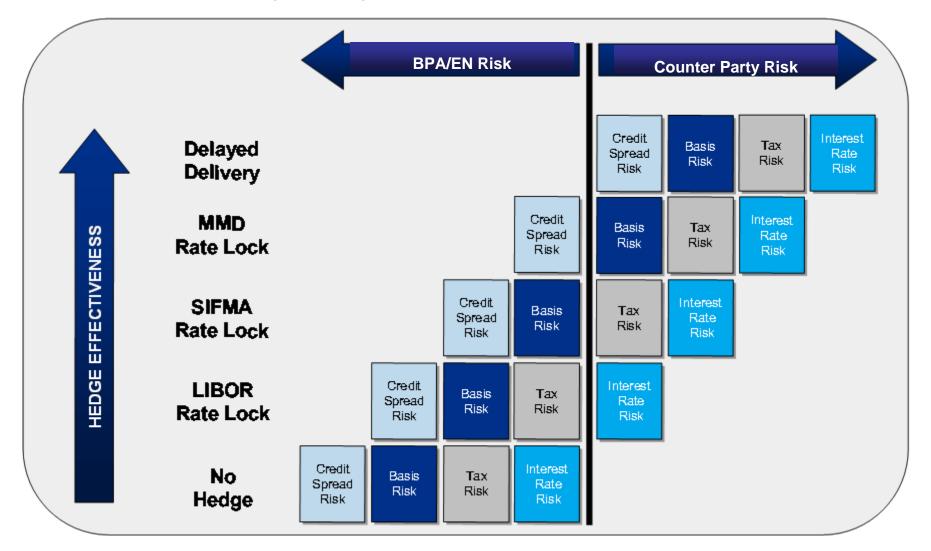
- BPA or EN can enter into a hedging product to increase the probability of achieving a particular all-in interest rate in 2012, at some cost.
- A hedge will not necessarily guarantee a rate, just increase the probability of the expected value.
- A hedge does not remove "market access" risk which could occur if, for whatever reason, BPA/EN was unable to access the market.
- Interest rate hedges are currently expensive when compared to historical prices due to the steepness of the yield curve, the length of the hedge and the recent credit crisis (interest rates are extremely low right now; most forecasts anticipate an increase in rates).
- Through hedging, BPA would be protecting itself against an interest rate increase. Due to the low interest rate environment, there is a higher likelihood that interest rates will go up, and therefore, the counterparty will want to be compensated adequately for that risk.
- Not all hedging products are available right now for the 2012 transaction.

Hedging Concepts

- Interest rates are determined by three components
 - Index Rate
 - Municipal Market Data (tax-exempt) rate
 - Treasury Rate (taxable)
 - Credit spread above the index rate
 - Cost of the hedge (if one is in place)
- Most interest rate hedges only hedge the index portion of the final interest rate.
- Depending on the type of hedging product, the counterparty assumes more or less risk. The more risk a counterparty takes the more expensive the hedge becomes.
- Hedging may offer different products but they all have similar characteristics and most use an interest rate derivative product.
- Interest rate hedges require <u>cash payments to or from the counterparty</u> to lock in an "effective rate".
- Cash payments to the counterparty is typically financed.

Hedging Risk

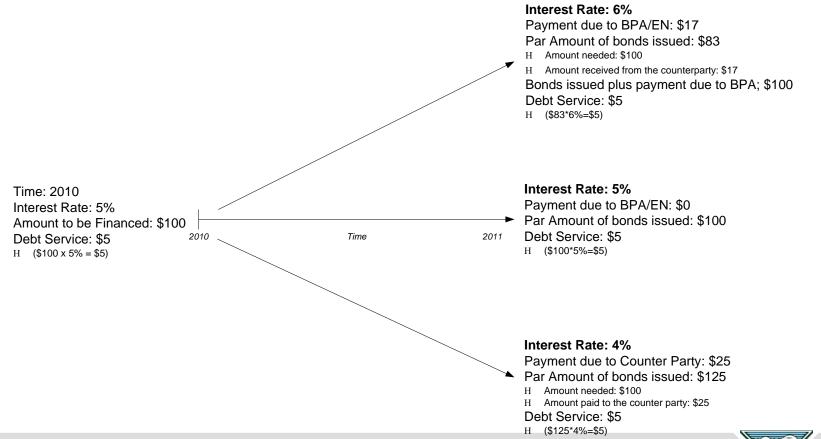
The more effective the hedge, the higher the cost



Interest Rate Hedges

Scenario	New Cost of Debt	Interest Rate Lock Results	Overall Result
Rates Rise	Higher Than Today	BPA/EN Receives Termination Payment	Higher costs offset by payment
Rates Fall	Lower Than Today	BPA/EN Makes Termination Payment	Lower costs offset by payment

Interest rate hedges make BPA/EN indifferent to movements in interest rates between the time the hedge transaction occurs and the bond financing date



Debt Restructuring and Extension Risks

- These scenarios have two major forms of risk
 - Market Access Risk
 - Interest Rate Risk
- Market Access Risk:
 - It is not hard to imagine further erosion of BPA's financial condition, making it difficult/costly to conduct a bond sale.
 - Since the bonds are not callable until April 1, 2012, the 2012 debt transaction cannot be completed until after the final proposal.
 - Assuming a future transaction for the 2012 bond sale in the final proposal would expose BPA/EN to market access risk.
- Interest Rate Risk
 - The benefits of debt restructuring are not dependent on interest rates, but the benefits can be reduced with an increase in interest rates.
 - It may be prudent to hedge interest rates in 2010 and/or 2011 to gain more certainty around the all-in-rate on the restructured and extended debt even though it does not mitigate market access risk.

EN Fuel Procurement

- Nuclear fuel inventory needs are increasing in order to maintain target inventory levels. The purchase of additional spent fuel storage casks and enrichment costs that were deferred from EN FY 2011 into EN FYs 2012 and 2013 is part of this rate period increase over the prior rate period.
- Near term planned fuel purchases:

BPA Fiscal Year	Amount (\$ in Millions)	
2010	13*	
2011	45*	FY10-11 Average: 29
2012	64 [#]	
2013	90#	FY12-13 Average: 77

^{*} From the WP-10 Rate Case

^{*}From the May 2010 IPR

Fuel Financing Policy

- In an April letter to Energy Northwest and its Executive Board, the Public Power Council and Northwest Requirements Utilities made observations about the increase in fuel expense in FY12-13 when compared to FY10-11. They requested that EN and BPA work together to look at recovering the cost over the burn period (amortization period) rather than expensing the nuclear fuel in the year of purchase.
- In a June letter to BPA, Energy Northwest described its desire to take advantage of current uranium prices and pre-purchase fuel that is currently scheduled to be purchased in 2017, which may cause additional rate pressure in the FY12-13 rate period.

Current Accounting Treatment for Fuel

- EN Accounting EN is the owner/operator of the plant and its accounting is directed by its industry and accounting standards.
- According to the EN Annual Report, all expenditures related to the purchase of nuclear fuel for the Columbia Generating Station (CGS), including interest, are capitalized and carried at cost. When the fuel is placed in the reactor; the fuel cost is amortized to operating expense on the basis of quantity of heat produced for generation of electric energy. EN prepares two budgets, one on a cost basis for internal use, and another on a cash basis for the Statement of Funding Requirements provided to BPA which becomes the basis of BPA's accounting entries.
- BPA Accounting BPA accounting is based on the Net Billing agreements which obligate BPA to meet all of EN's annual funding requirements.
- The Net Billing Agreements provide for the adoption by EN of an Annual Budget, which includes all Project costs for debt service, operations and maintenance, and all other purposes. The Annual Budget also includes the source of funds proposed to be used. BPA is obligated to meet all EN funding requirements which have not been met by alternate sources (such as bond financing). BPA uses the CGS cash budget to recognize monthly debt service and O&M expense evenly. These expenses are reflected in BPA's Combined Statement of Revenues and Expenses.

Current Accounting Treatment for Fuel cont.

- In general, BPA satisfies EN budget requirements for the Columbia Generating Station through direct funding (cash) or in the case of capital projects through debt financing (bonds).
 - Cash: Future fuel purchases funded by BPA direct payments (Cash) are recorded as O&M expense in the year of purchase.
 - Bonds: Future fuel purchases funded through debt financing (bonds) are recorded as debt service expense to mirror the amortization of the bonds. An example of this was the Uranium Tails project.
- BPA provides for recovery in rates of these costs over the same manner they are being expensed.
- BPA/EN have only bonded for nuclear fuel once. On an ongoing basis, since the plant started operation, BPA has paid for fuel for each year as EN makes purchases.

Next Steps

- The comment period will run through July 29th we invite you to give us your feedback.
- BPA hopes to meet with the Energy Northwest Participants Review Board in early July.
- Debt management decisions will be communicated to the region during the IPR closeout process in September.
- Another customer meeting will be held July 8th to discuss financing fuel and related fuel issues.
- A draft Debt Management close out letter will be discussed at the July 13th General Manager meeting.

Comments

Submitting Comments:

- The Debt Management process includes a public comment period which began June 8th 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