

January 2013

Access to Capital Strategy

Introduction

The energy industry is very capital intensive. BPA's success in delivering public benefits to its ratepayers hinges greatly on sufficient access to low cost sources of capital. The Federal Columbia River Power System's (FCRPS) capital requirements have grown to unprecedented levels in order to replace and modernize aging infrastructure, add capacity to integrate renewable resources and fulfill regional commitments for energy efficiency and fish and wildlife restoration.

BPA's Financial Plan (published July 2008) established three goals that remain relevant today and provide the context for this strategy.

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

This overarching strategic plan has been informed by input from stakeholders. It integrates the various aspects of a highly complex program with identified timeframes and milestones. It also describes an implementation plan for funding capital investment needs for the next 10 years and a process for reassessment of the strategy.

BPA will be taking action on several fronts to best ensure the Agency will have reliable access to capital that is low cost. These actions include:

- Prioritizing proposed capital investments to help inform decisions on capital investment levels.
- Expanding transmission lease financing.
- Implementing a customer prepayment program.
- Beginning discussions about a long-term, phased-in revenue financing strategy.
- Pursuing opportunities to increase total Treasury borrowing authority.

As much as everyone would like complete certainty, the tools described in detail in the Appendix all come with uncertainty in different forms and to varying degrees. BPA has publicly shared the estimated rate impacts of the access to capital tools, which are in various stages of maturity, and believes the proposed plan strikes a balance between ensuring sustainable access to capital and low rates for customers.

Objective

Develop a comprehensive Access to Capital Strategy that will provide reliable access to cost-effective sources of capital over a rolling 10-year period. Ensure that the costs of these sources are prudent and well controlled, as well as reliable and sufficient to meet the Agency's investment priorities.



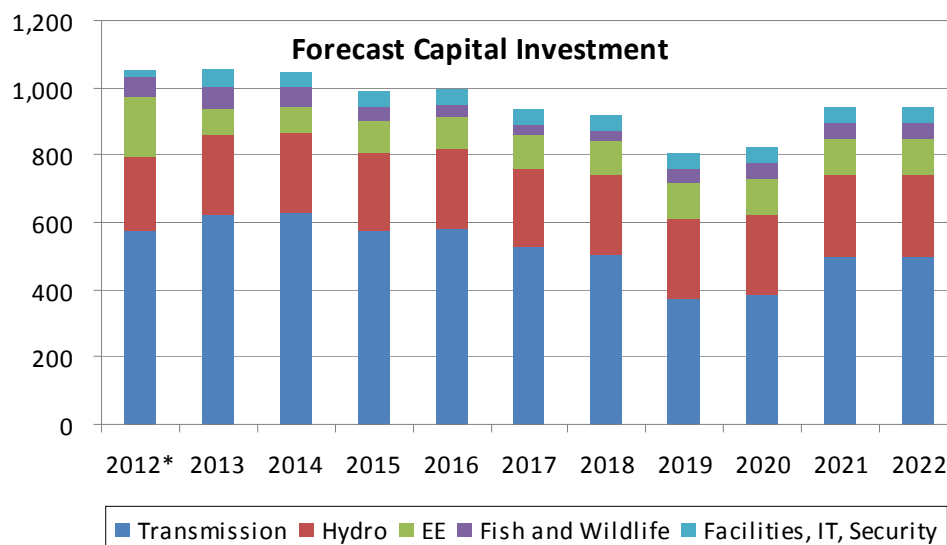
Capital Forecasts

BPA's current forecast of capital spending is informed by asset management strategies that set the direction for maintaining, replacing and adding capabilities for each of the seven asset categories. BPA's goal is to maximize the long-term operational and economic value of assets within capital, rate and other constraints. The asset strategies cover a 10-year planning horizon, and consist of

- asset performance objectives and targets,
- assessment of asset health and risks,
- evaluations of alternative courses of action and
- recommendations for a program of investment and maintenance.

Replacements are prioritized within each asset category based on the importance and condition of the assets. These asset strategies have been shared with regional stakeholders and have received broad support. They provide the basis for the current forecast of capital investment used in assessing whether BPA has adequate access to capital.

The following chart and table show capital investment amounts as forecast by fiscal year in the asset strategies.



*FY 2012 is based on the borrowing plan

(FY 2013-2022 capital investment forecast, with 5% lapse, in \$ millions as of June 2012)

	2012*	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
Transmission	576	625	629	577	584	529	506	376	386	502	502	5,791
Hydro	222	236	237	233	236	232	237	238	239	241	241	2,592
EE	175	75	75	92	95	98	101	104	107	110	110	1,140
Fish and Wildlife	60	67	60	42	37	31	29	45	45	44	44	502
Facilities, IT, Security	18	56	45	46	47	48	48	48	48	48	48	499

(Totals may not add due to rounding)

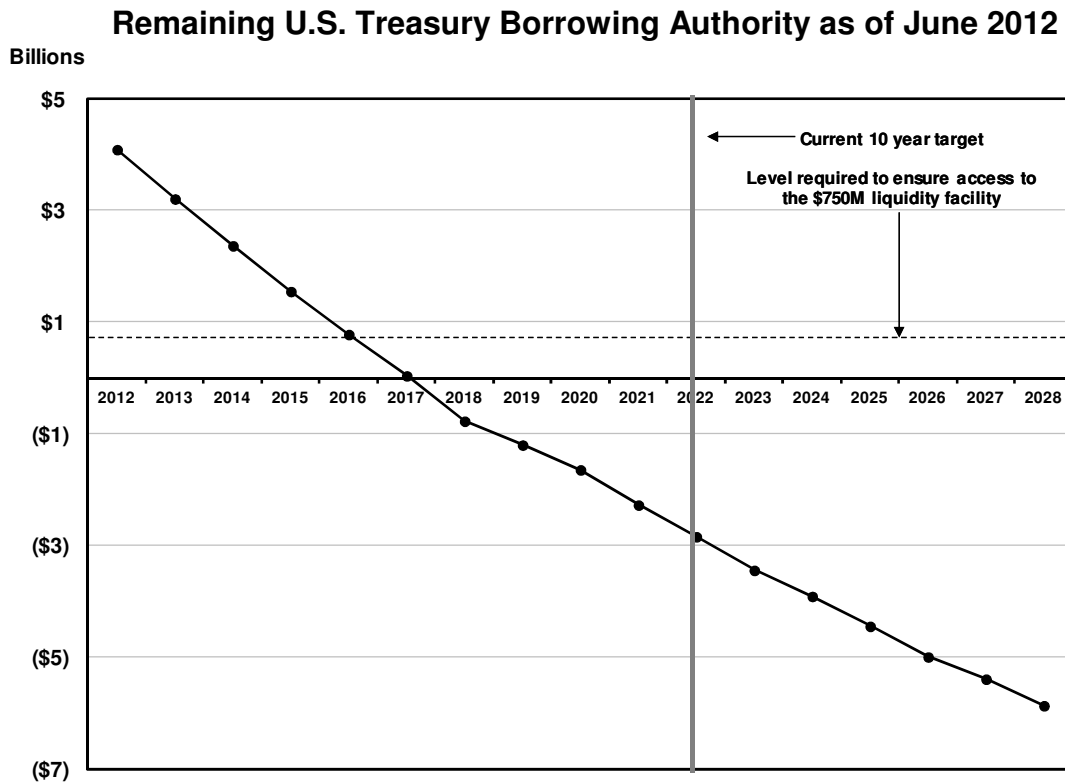
(\$ millions)

(Information above was presented at the July 2012 Access to Capital workshop but has a different shape from the final 2012 IPR Report due to modeling of capital tools)



The Problem

FCRPS capital requirements have grown to unprecedented levels in order to replace and modernize aging infrastructure, add capacity to integrate renewable resources and fulfill regional commitments for energy efficiency and fish and wildlife restoration. Traditionally, BPA has relied on its authority to borrow from the U.S. Treasury to finance FCRPS investments, but this source of capital is capped by law and may be fully depleted as early as 2017 absent other sources of financing. BPA will continue to look for opportunities to pursue additional borrowing authority but does not think it is likely in the next few years. Therefore, BPA must develop other funding sources if investment in the power and transmission systems is to meet future needs.



Each alternative source of capital has its limitations and uncertainties. Each source also has its costs; most alternatives to Treasury borrowing will have a higher financing cost and a higher long-term impact on rates.

BPA's challenge is to manage its investment costs and develop a financing strategy to ensure that capital will be sufficient and that the cost of capital will be held low over the long term.

Background

In the fall of 2011, BPA conducted a public forum entitled Strategic Capital Discussions. During those sessions, BPA discussed its concerns about capital access stemming from



the large increase in expected spending levels in future years. We initially identified alternative solutions and indicated that we would pursue some of those initiatives.

During the spring of 2012, BPA conducted the Capital Investment Review, which, for the first time, presented a comprehensive, long-term view of the complete suite of draft asset strategies for BPA's asset categories. With minor adjustments, BPA reflected the near-term capital spending levels in the summer 2012 Integrated Program Review.

Throughout these processes BPA heard repeated comments from stakeholders that the draft asset strategies appear reasonable and sound but that proposed spending levels were high. Stakeholders also expressed a healthy dose of skepticism about the agency's need for additional financing tools. These comments were somewhat general. They did not suggest levels of spending reductions or identify programs for reductions. Likewise, no expectations were expressed that BPA assure adequate capital access with spending reductions alone. BPA received several comments indicating that, before the Agency pursues additional tools, it needs to focus on prioritizing capital projects, which could result in reduced spending.

BPA heard and understands the reasons for these concerns – proposed budgets are large and long-term rate effects are uncertain. While BPA is developing a methodology for prioritizing capital projects across the agency, we have concerns about delaying development of additional financing tools until after capital prioritization results are available. Developing and implementing sustainable alternate financing capabilities is a multi-year process. The Agency believes the capital access problem is acute, so approaching possible solutions independently and sequentially does not seem prudent. This plan endorses a multipronged approach that is already underway. Throughout a continued access to capital process, regular check-ins and discussion with stakeholders will be imperative while implementing new and progressive actions.

In July 2012, BPA held an Access to Capital workshop that laid out possible actions to achieve the initial target. Assumptions and analysis in this strategy are consistent with information used and presented at this workshop. At this session, BPA communicated its major goals regarding access to capital:

- Maintain continued access to capital on a rolling 10-year basis using a mix of Federal and non-Federal sources.
- Reserve \$750 million of Treasury borrowing authority for a Treasury line of credit to provide for risk mitigation in lieu of holding equivalent financial reserves.
- Ensure capital financing requirements are met at low overall costs.

The financing tools discussed included those listed below (defined and described in detail in the Appendix).

- Transmission lease financing
- Power prepayment agreement
- Conservation non-Federal financing
- Power and transmission revenue financing



- Cash flows from power revenue requirements (Anticipated Accumulation of Cash [AAC]), which occurs when depreciation of assets exceeds the amortization of the associated debt in any rate period
- Transmission reserve financing

Summary of Available Financing Tools and Cost Comparison

	Lease Financing	Prepay - high	Prepay - low	Conservation	Revenue Financing
Description*	50% of Transmission's capital program is third-party financed	Customer prepayment of a portion of their Power Sales Agreement 2014-21	Customer prepayment of a portion of their Power Sales Agreement 2014-15	70% of the Conservation budget is third-party financed starting in 2015	No greater than a 2% Power and 5% Transmission rate impact. Includes 50% Lease Financing.
Program Size	\$2,508 million	\$1,700 million	\$500 million	\$570 million	\$844 million: Power: \$417 Transmission: \$427
Business Line	Transmission	Power	Power	Power	Both
Risks	<ul style="list-style-type: none"> •Access to lines of credit •BPA internal infrastructure restrictions 	<ul style="list-style-type: none"> •Initial Execution •Program sustainability •Market risk •Customer Participation 	<ul style="list-style-type: none"> •Initial Execution •Program sustainability •Market risk •Customer Participation 	<ul style="list-style-type: none"> •Need a third-party issuer •Modification of current contracts 	<ul style="list-style-type: none"> •Higher initial cost •Challenge to achieve
Advantages	<ul style="list-style-type: none"> •Tested and used tool •Can be increased over time 	<ul style="list-style-type: none"> •Currently have regional momentum •Provides new access to capital financing tool. 	<ul style="list-style-type: none"> •Currently have regional momentum •Provides new access to capital financing tool. 	<ul style="list-style-type: none"> •Feasible, cost-effective tool •Successfully used in the mid 90's 	Tested and used tool
Costs Compared to US Agency Rate	Currently 100 bps higher	Tax-exempt - 75 bps higher** Taxable – 140 bps higher**	Tax-exempt - 75 bps higher** Taxable – 140 bps higher**	Tax-exempt – 10-35 bps higher Taxable – 100-125 bps higher	Higher initial cost but lower over time

*All scenarios include base case assumptions

**Dependent on customer incentive

(Tools are described in greater detail in the Appendix to this document)

In the above table, two items from the previous listing of financing tools are not included, AAC and transmission reserve financing. The above table, which was discussed in a workshop with stakeholders, was created specifically to show comparative cost information for either new financing tools or significant changes to currently utilized financing tools (e.g. lease financing). BPA chose not to include transmission reserve financing because it has been consistently utilized at only a minimal level (\$15 million per year) for the past several years. The AAC was not included because it is hypothetical, highly variable, and very dependent on the use of other tools and current circumstances. Depending upon a variety of factors, it may or may not be available and determining a “cost” relative to the US Agency Rate would be highly challenging and not considered value-added for the intent of the above table.

Setting Capital Investment Level Targets

Changing the levels of proposed capital investment is one tool for extending access to capital. Typically, capital investment levels have been determined based on an assessment of risks and program needs balanced by impacts to rates and access to capital. BPA recognizes that we need a principled, more standardized approach to determining the level of capital the Agency can afford, given its rates, access to capital



and other constraints. Prior to the next Capital Investment Review (CIR) process, BPA intends to set targets for capital investment levels on an annual basis for FY 2015-2017 and on an aggregate basis for FY 2015 to FY 2024. While the process for determining targets for capital program levels has not been fully defined, we can describe it conceptually. In general, we expect this to be an iterative process among at least three major variables: investment needs, power and transmission rate levels, and capital funding availability.

If rate impacts or access to capital impacts are unacceptable, the prioritization process will be used to decide where and how to target reductions in capital spending.

Prioritizing Capital Investments

BPA is developing an agency wide method to prioritize diverse investments. A systematic, value-based method for prioritizing capital investments across business units is a leading practice among top performing utilities. During the 2012 CIR process, BPA proposed developing a method for prioritizing investments and introduced the process in a workshop. Stakeholders submitted comments and recommendations for BPA's use in developing its methodology. BPA carefully reviewed stakeholder comments and is considering them as it develops an agency wide prioritization process. The process is being developed in three phases, with implementation to begin in the spring of 2013.

Goals of the new process include the following.

- Advancing the Agency's strategic priorities/objectives.
- Providing a "level playing field" for projects from various asset categories with different risk/cost/benefit characteristics.
- Optimizing the Agency's investment portfolio within capital, labor, rate and other constraints.
- Ensuring decision making is risk-informed and supported by thorough analysis.
- Providing transparency both internally and externally.
- Enabling efficient, timely decision making.

The prioritization methodology and process will be directed at maximizing the long-term operational and economic value of assets.

BPA is concerned that reductions in discretionary, but high value, investments may lead to a suboptimized system and less long-term value for stakeholders. Currently, the Agency uses its extensive knowledge of system requirements and increasingly sophisticated planning tools to determine the timing and level of needed investments. Making changes to investment plans could introduce more risk, such as unplanned outages and other reliability related problems, for ratepayers. Additionally, insufficient investment in the federal system may limit BPA's ability to meet statutory requirements. While, BPA will begin prioritizing capital investment across programs, the Agency does not know yet what actions it will take based on that prioritization process. The results will, however, enable better-informed decisions on capital investments.



Other Potential Solutions and Related Effects

Each financing tool has limitations, uncertainties, advantages and disadvantages. No single approach will have all the features needed to provide sufficient, low-cost capital to meet FCRPS investment needs over a rolling 10-year planning horizon. For example, lease financing is only available for transmission assets and only for a subset of those assets. Therefore, BPA is taking a multipronged approach and is pursuing several actions that are low cost, provide the highest likelihood of success and assure the highest potential for capital access. Those actions are:

- Expanding transmission lease financing.
- Implementing the customer prepayment program.
- Implementing conservation third-party financing.
- Discussing with stakeholders a long-term, phased-in revenue financing strategy.
- Prioritizing proposed capital investments to help inform decisions on reductions or delays in capital investment to the extent needed.

The tools, if implemented in alignment with expectations, would provide adequate assurance of sufficient capital access on a rolling 10-year basis. Some of the financing tools, such as prepays and conservation third-party financing, are less mature so estimated benefits for them are less precise than for other, more established tools. Please see the Appendix for more specifics about the tools and associated risks.

All of the combinations described below achieve the access to capital target for the initial 10 years. The combination scenarios all feature increased lease financing from prior levels of 30 percent of Transmission's program to 50 percent and continuation of \$15 million per year of Transmission reserves financing. The base case and all five combination scenarios assume extension of the scheduled principal payments for the Energy Northwest Columbia Generating Station for FY 2014-2015.



	Combination #1	Combination #2	Combination #3	Combination #4	Combination #5
Lease Financing	Lease Financing 50% of Transmission's capital program beginning in 2013	Lease Financing 50% of Transmission's capital program beginning in 2013	Lease Financing 50% of Transmission's capital program beginning in 2013	Lease Financing 50% of Transmission's capital program beginning in 2013	Lease Financing 50% of Transmission's capital program beginning in 2013
Prepay	\$1,700 million in prepayment of customer power purchase agreements in 2014-21		\$500 million in prepayment of customer power purchase agreements in 2014-15	\$1,700 million in prepayment of customer power purchase agreements in 2014-21	
Conservation	3rd Party Financing 70% of the Conservation capital program beginning in 2015	3rd Party Financing 70% of the Conservation capital program beginning in 2015	3rd Party Financing 70% of the Conservation capital program beginning in 2015		
AAC	Not available	Remaining AAC is used to repay US Treasury debt	Remaining AAC is used to repay US Treasury debt	Not available	Remaining AAC is used to repay US Treasury debt
Transmission Reserve Financing	\$15 million each year	\$15 million each year	\$15 million each year	\$15 million each year	\$15 million each year
Revenue Financing					Revenue finance up to annual rate impacts of 2% for Power and 5% for Transmission

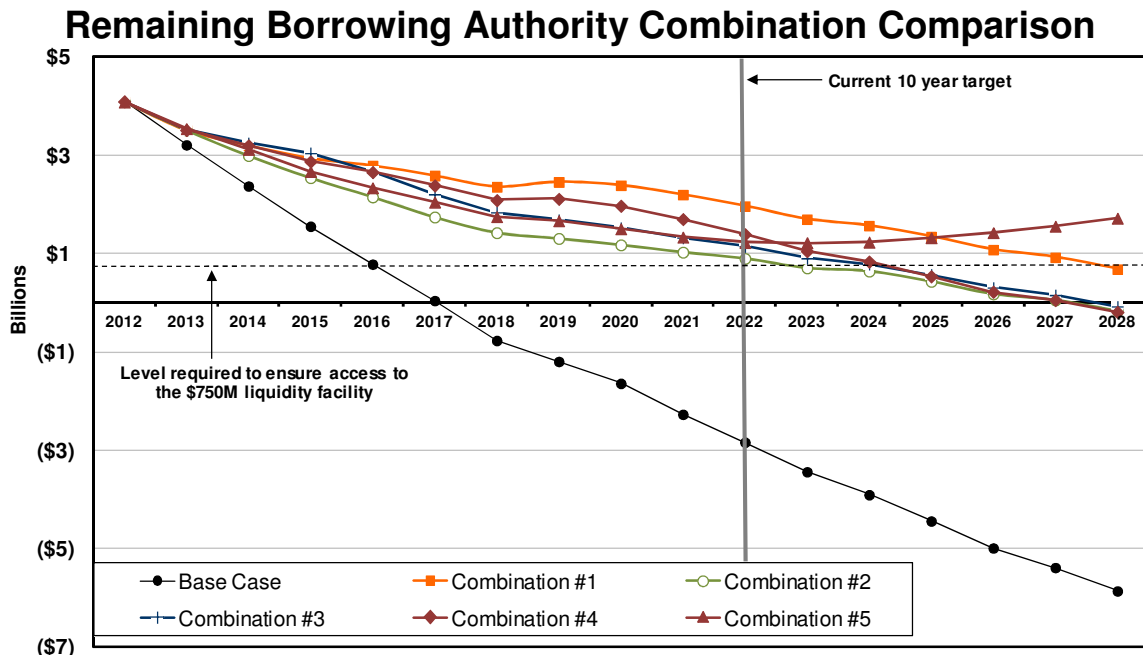
The above table describes the assumed amount of each financing tool under each of the five combinations. There is some interplay between the tools. For example, combinations with larger prepay assumptions result in no AAC being available. This occurs because the AAC, as manifest under the base case assumptions, is consumed in some degree or entirely by the prepay credits provided over time to customers. Similar information is presented in the following Combination Scorecard in numeric terms.



Combination Scorecard

(millions)	Combination # 1	Combination # 2	Combination # 3	Combination # 4	Combination # 5
Capital Program	Total FY 2012-22	Total FY 2012-22	Total FY 2012-22	Total FY 2012-22	Total FY 2012-22
1 Transmission	(\$5,791)	(\$5,791)	(\$5,791)	(\$5,791)	(\$5,791)
2 Hydro	(\$2,592)	(\$2,592)	(\$2,592)	(\$2,592)	(\$2,592)
3 EE	(\$1,140)	(\$1,140)	(\$1,140)	(\$1,140)	(\$1,140)
4 Fish and Wildlife	(\$502)	(\$502)	(\$502)	(\$502)	(\$502)
5 Facilities, IT, Security	(\$499)	(\$499)	(\$499)	(\$499)	(\$499)
6 Total Capital	(\$10,524)	(\$10,524)	(\$10,524)	(\$10,524)	(\$10,524)
US Treasury borrowing authority					
7 Available Borrowing Authority (9/30/2011)	\$4,757	\$4,757	\$4,757	\$4,757	\$4,757
8 Treasury amortization	\$2,788	\$2,905	\$2,910	\$2,784	\$2,948
9 Total BPA US Treasury borrowing authority	\$7,545	\$7,662	\$7,667	\$7,541	\$7,705
Access to Capital Tools					
10 Transmission Reserve Financing (\$15m/year)	\$165	\$165	\$165	\$165	\$165
11 50% Lease Financing	\$2,508	\$2,508	\$2,508	\$2,508	\$2,508
12 Prepay	\$1,700		\$500	\$1,700	
13 70% Conservation	\$570	\$570	\$570		
14 Revenue Financing					\$844
15 Total Tools	\$4,943	\$3,243	\$3,743	\$4,373	\$3,517
16 AAC		\$517	\$258		\$523
17 Total Remaining Capacity	\$1,964	\$898	\$1,144	\$1,390	\$1,221

Although all five combinations achieve 10-year access to capital, they leave varying residual amounts of U.S. Treasury borrowing authority by the end of the 10-year period, 2022. The Remaining Borrowing Authority Combination Comparison graph illustrates the annual effect each of the combinations has on remaining U.S. Treasury borrowing authority.



Potential Power and Transmission Rate Effects

The following rate tables show the percentage difference in each rate period from the forecast rate for the base case. These percentages reflect the cumulative rate impact related to each scenario. The rate analysis is highly dependent on the assumptions used. As a result, the analysis is not intended to be a forecast of the actual rate impact in a future rate period. Instead, it was designed to compare the effect of various financing tools given a common set of assumptions.

Incremental Rate Effects Relative to Base Case

Power Rate Effects	2014/15	2016/17	2018/19	2020/21	2022/23	2024/25	2026/27
Combination # 1	50% LF, \$1.7b prepay, 70% Conservation financing						
Change from Base Case	0.0%	2.7%	0.5%	0.2%	0.4%	2.6%	3.8%
Combination # 2	50% LF, 70% Conservation financing, Use AAC						
Change from Base Case	0.0%	0.0%	(0.6%)	(1.0%)	(1.7%)	(2.3%)	(1.9%)
Combination # 3	50% LF, \$500m prepay, 70% Conservation financing, Use AAC						
Change from Base Case	0.0%	0.6%	(0.3%)	(0.3%)	(0.5%)	0.4%	1.4%
Combination # 4	50% LF, \$1.7b prepay						
Change from Base Case	0.0%	2.6%	0.5%	0.2%	0.3%	2.5%	3.6%
Combination # 5	50% LF, Use AAC, Revenue Financing						
Change from Base Case	1.5%	1.4%	1.3%	1.3%	1.3%	1.3%	1.4%

Transmission Rate Effects*	2014/15	2016/17	2018/19	2020/21	2022/23	2024/25	2026/27
Combinations # 1-4	50% LF						
Change from Base Case	2.6%	3.7%	4.1%	4.0%	3.9%	2.9%	3.8%
Combination # 5	50% LF, Revenue Financing						
Change from Base Case	5.4%	6.4%	6.6%	6.4%	6.2%	6.1%	5.9%

*The same 50% Lease Financing scenario was used in all combinations.

The potential Power rate impacts reflect alternative financing combinations and associated assumptions about timing and costs and do not model the other rate drivers such as the unpredictability of hydro conditions and market prices. The Power rate effects feature interplay between the AAC and the other tools used in the scenarios. As modeled here, the large \$1.7 billion prepayment program has flat blocks of credits that accumulate over FY 2014-2021. The AAC serves as a buffer, dampening the impact of growing credits, particularly in the FY 2018-2024 period. However, BPA does not currently anticipate the AAC to continue past FY 2024 so the full effect of the prepayment program may affect rates starting in FY 2025, as seen in Combinations #1 and #4 in FY 2026-2027, due to amortization exceeding depreciation.



In the \$500 million prepayment program scenario, Combination #3, the same pattern is seen but to a lesser degree because the prepayment credits are much smaller. In scenarios that do not rely on the prepayment program, Power rates either decline because the AAC is assumed to be used to pay for capital investments, resulting in lower interest expense, or increase at a fairly steady pace from rate period to rate period because revenue financing was added to produce such a result.

The potential Transmission rate effects reflect alternative financing combinations and do not model other rate drivers. For Transmission rates, lease financing in this table produces higher rates. Some increase would be expected since lease financing tends to be a higher cost financing tool. As with Power, the revenue financing scenario produces higher rates.

Profiles of Power Services and Transmission Services

FY 2012 marked the beginning of service under the long-term power purchase contracts known as the Regional Dialogue contracts. The contract period extends through FY 2028 and identifies the power available for sale at Tier 1 rates as, essentially, the output from the Federal Base System. The annual Power debt service is associated with the assets that define the Federal Base System, including the Columbia Generating Station. In addition, Power debt service includes debt service for regulatory assets, which include the terminated nuclear plants WNP-1 and -3, as well as energy efficiency, fish and wildlife investments and other regulatory assets. BPA believes the following Power debt service forecast is consistent with the overall Power Services business profile of a mature entity – minimal expansion and contraction – at least with respect to Tier 1.

The challenge for Power Services will be to maintain a flat or downward trending debt service forecast. Future capital investment levels, timing of investments and interest rates can influence this trend but only in an incremental way. Much of this debt service is for past investments. BPA will continue to manage this debt service to minimize costs over the long term and shave peaks to avoid rate fluctuations from rate period to rate period. The Power-related capital programs have reached maturity. Therefore, the current projections of Power's capital program remain fairly flat over the foreseeable future, which indicates that the Agency may be able to achieve its goal of flat or downward trending debt service for the long term. Power Services is balancing meeting its mission for the region with setting capital budgets at levels that can be effectively executed.

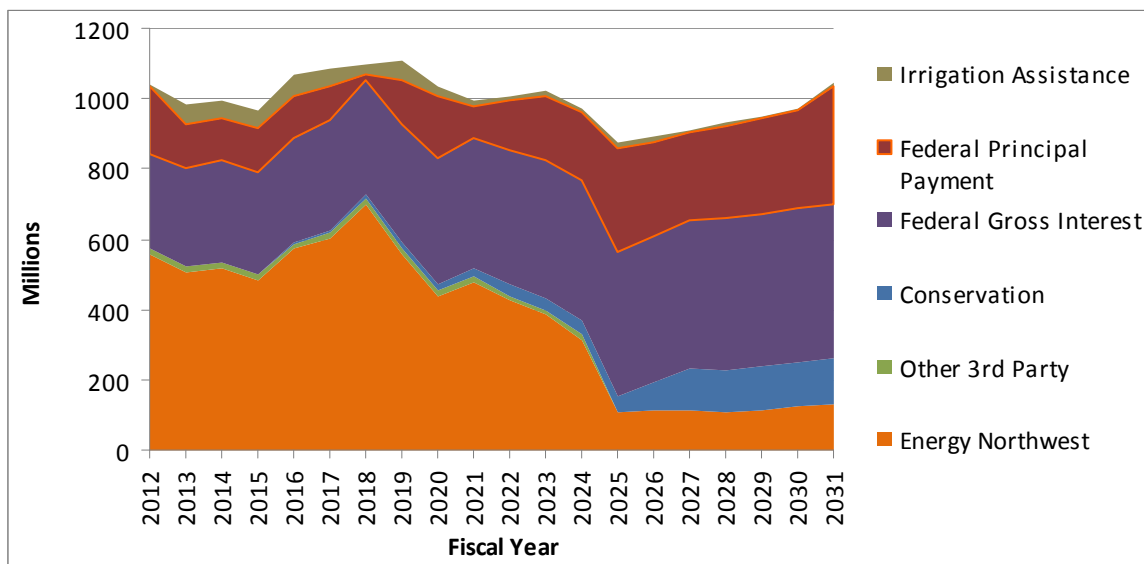
The chart below illustrates the expected total Power Services debt service associated with the forecast of capital investments under Combination #3. Total debt service hovers around \$1 billion per year for the next 20 years, with a range of about \$900 million to \$1.1 billion per year. Estimated debt service after 2018 is greater than debt service from previous repayment studies that portrayed a more significant "WPPSS valley", which is a phrase commonly used to describe the expected decline in debt service after 2018 when most Energy Northwest debt service was expected to be paid



off. Some of the major variables that contributed to filling in the WPPSS valley include debt restructuring from FY11 (CGS debt was pushed out within the limitations of the then-existing license) and the currently planned 2014/2015 CGS debt extension. Additionally, significant debt service associated with the Depleted Uranium Enrichment Program (FY12) contributes to filling in the WPPSS valley. Much of that debt service is offset by receipts from the Tennessee Valley Authority (TVA), but the repayment study only shows gross debt service. The overall somewhat higher level of forecast capital spending (Bonneville, Columbia River Fish Mitigation, Columbia Generating Station), including capitalizing all conservation acquisition, also contributes to reducing the WPPSS valley, but not substantially.

It is important to note that the composition of BPA's debt obligations is changing significantly. This results in important implications for access to capital, namely that Energy Northwest debt and federal appropriations, which do not count against BPA's Treasury borrowing authority, are being retired and predominantly replaced by Treasury debt that does count against BPA's Treasury borrowing authority.

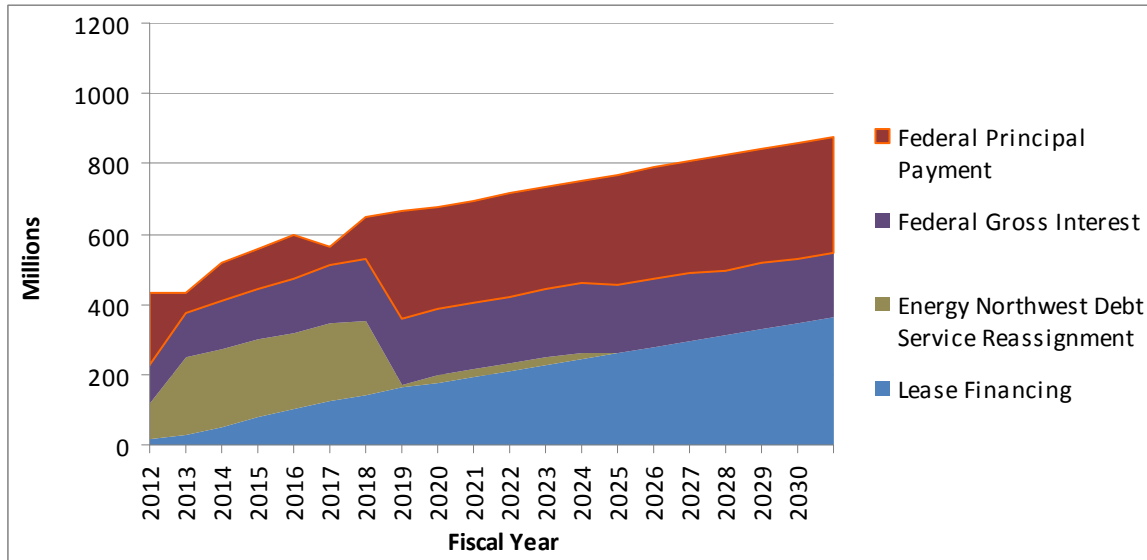
Total Power Debt Service



Transmission's high level of forecast investment relates to expanding customer expectations and the need to sustain the existing asset base to address reliability. The Transmission business profile is quite different from the power business. The high investment level forecast results in a potential doubling of debt service costs in the next 20 years. The challenge for Transmission Services will be to invest in the system at the right time to match expected growth while minimizing rate effects over time. Maintaining reliability and meeting commercial needs will require investments that sustain and expand the system. System expansion projects will continue to be matched whenever possible with expanding revenue sources. Sustain programs will look to maintain the current system's capabilities and possibly add capacity through minimum incremental investments.

BPA seeks to minimize the total economic costs over the long-term while maximizing the long-term operational and economic value of the assets. Transmission’s asset management strategy consists of a prioritized set of “core sustain” and expand investments. This focus allows Transmission to manage the risks of an aging infrastructure and technological obsolescence while improving reliability and meeting load growth. The chart below illustrates the expected total Transmission debt service associated with the forecast of capital investments under Combination #3.

Total Transmission Debt Service



Strategic Plan Implementation

Based on the results from these scenarios, BPA plans to aggressively pursue the following strategy, which is consistent with Combination #3, while seeking low-cost alternatives. To meet the goal, all of the following tools will be necessary:

- Lease financing of at least 50 percent of planned Transmission capital investments.
- Power prepayments up to \$500 million for FY 2013-2015.
- Third-party conservation financing of about 70 percent of the Conservation capital program beginning in FY 2015.
- Reserve financing through the AAC to the extent it is available in any given year
- Revenue financing.
- Transmission reserve financing of \$15 million per year.

Currently, BPA views revenue financing as the lowest priority of the currently identified tools. Additionally, the Agency does not plan to approve more than \$350 million in prepays without further exploration of the rate impact of continuing the program.

This strategy will require periodic course correction as results play out over time. At a minimum, BPA will review progress on an annual basis to determine whether

corrections to this strategic plan are needed. If any of the targets are not met, the Agency will reassess the target and its impact on the overall strategy. Experience has shown that it takes several years to establish low cost, enduring, non-Federal sources of capital. Likewise, project prioritization is not easily or quickly implemented due to the need to establish a defensible and sustainable process. As BPA approaches the \$750 million level of remaining Treasury borrowing authority, managing adequate capital access will become more difficult. The Agency wants to avoid both 1) disruptive stopping and restarting of capital projects and 2) Power and Transmission rate volatility as a means to balance availability of capital sources and uses. To have several low-cost alternatives available when taking a strategic approach to balancing capital sources and uses, BPA chose the following financing options.

Lease Financing of Transmission Capital: Lease finance a minimum of 50 percent of transmission capital consistent with sound business principles and diligent management of program costs. In order to maximize use of lease financing, all transmission projects are screened and, if eligible, are lease financed. BPA stakeholders universally support expansion of the Lease Financing Program provided borrowing costs remain reasonable. BPA continually monitors market conditions to ensure that it does not enter into lease financing transactions if costs significantly exceed Treasury borrowing.

Power Prepayment Program: In December 2012, BPA announced that it had accepted offers from four customers to prepay portions of their power bills for the remaining term of their Regional Dialogue power sales agreements. The participating customers agreed to pay BPA nearly \$350 million in lump-sum payments by the end of March 2013. In exchange, BPA will reflect the value of the prepayments as a stream of credits on their power bills through FY 2028. BPA has accepted offers for 51 separate blocks of prepurchased electric power. By purchasing a block, a participant has prepurchased a variable amount of electric power from April 2013 through September 2028 in exchange for scheduled monthly \$50,000 per block credits through the end of the participant's power sales agreement.

BPA's goal was to initiate a program using a collaborative process, and the agency is pleased with participant response to the Request For Offers. This initial response establishes the program and will allow BPA to fund approximately one and one-third years of hydro investments.

We plan to reassess the program after this first offering and continue addressing issues such as the size of the bill credit blocks, the effect on power rates, and the overall size of the program.

Current analysis indicates that achieving as much as \$1.7 billion from customer prepays may have some unintended rate effects unless the Agency is able to better shape the program credits in subsequent opportunities. In future offerings, BPA may consider shaping credits related to future requests to avoid power rate effects. Some features of the program, for example, flat credits (equal credits each year), may lead to rate increases if not designed differently.



BPA believes that funding through tax-exempt bonds may lead to a lower cost program in future solicitations (if any) and expects to work with one or more customers to seek an Internal Revenue Service private letter ruling confirming that the prepay model that BPA has developed would enable a qualifying bond issuer to issue tax-exempt debt obligations to fund its prepayment. Such an approach could lower the cost to BPA and the region under future solicitations.

We are appreciative of the input received from stakeholders regarding the Power Prepayment Program both as part of collaborative regional team discussions and Access to Capital Strategy development.

Conservation Third-Party Financing: Beginning in FY 2015, a minimum of 70 percent of conservation capital could be third-party financed. BPA plans to develop an implementation schedule by March 2013 in order to assure financing readiness at the beginning of FY 2015.

Some customers have suggested that BPA's role in energy efficiency going forward should be evaluated and that BPA should allow customers to fund their own conservation programs. Others have suggested an ongoing discussion of these and other issues. BPA intends to hold public meetings in FY 2013 to discuss conservation issues.

BPA recognizes customers' concerns and monitors the impact of third-party financing on Agency creditworthiness. Because potential additional conservation third-party debt is projected to represent only a small portion of BPA's total non-Federal debt, BPA does not expect these planned financings to negatively affect the Agency's creditworthiness. As BPA has done in the past, it plans to capitalize conservation acquisition in order to recover the costs of the program over time and minimize the effects on power rates.

Anticipated Accumulation of Cash (AAC) - Power: If available, the AAC will be used to finance power-related capital investments, allowing BPA to utilize an additional portion of its most flexible and economical source of capital. In combinations that utilize the AAC, incremental increases in available Treasury borrowing authority are reflected in charts and analysis because the AAC is used to repay federal debt. Such an approach eliminates the possibility of Slice customers subsidizing non-Slice customers' risk mitigation through the buildup of financial reserves that would otherwise occur with the cash flows. This would be an equitable disposition of these funds, benefiting customers of both power products.

The value of the AAC has dropped from the fall 2011 estimate when BPA expected the amount could be \$1.1 billion. Current projections are \$665 million. That these projections can swing by \$400 million based on a few changed assumptions, indicates that the AAC is an incredibly uncertain tool. Part of this swing is due to the repayment study responding to the Columbia Generating Station debt extension for FY 2014-2015. As Energy Northwest debt declines in some periods, the study reacts by scheduling



federal amortization in its place. This is desirable because it means the cash that would otherwise produce the AAC is instead consumed by the repayment of federal debt. On the other hand, some of the reduction in the AAC is due to reductions in capital spending forecasts, which results in lower depreciation expense and less cash generation. These changes not only reduce the AAC but often also result in lower rates for power ratepayers, which is the case in the proposed CGS debt extension in FY 2014-2015. It seems likely that the AAC will shrink as BPA devises strategies to balance rate effects and capital access, which will mean that this may never be a viable financing alternative. Therefore, the Agency will plan to implement the program as described above. However, the AAC will not be relied on as a long-term financing tool because BPA has reason to believe that, as each rate period approaches, the available AAC will be significantly less than currently contemplated because it may be used for rate relief actions.

Transmission Reserve Financing: BPA balances the use of reserve financing with current and projected reserve for risk levels. Given the current Transmission Services reserve level, BPA believes continuing with \$15 million per year of reserve financing is prudent in the near term.

Currently, the assumed transmission reserve financing for the next 11 years is \$165 million rather than the \$300 million outlined in the fall of 2011. BPA has changed this assumption for the following reasons. First, it is unlikely the Agency will have \$300 million in excess transmission reserves after the use of reserves for several purposes in the FY 2012-2013 rate period. Second, if the full range of tools in this strategy is successfully implemented, the remaining borrowing authority problem becomes less immediate, calling for less urgent actions.

Power and Transmission Revenue Financing: In a time of constrained borrowing, revenue financing represents a direct form of investment in assets. All large utilities similar to BPA, such as BC Hydro and Tennessee Valley Authority, make significant use of this source of capital funding. Although including revenue financing in revenue requirements directly increases rates in the short run, it eases rate pressure in the long run by reducing the amount of debt service to be repaid.

BPA plans to develop a proposal to gradually implement revenue financing while minimizing power and transmission rate effects. It is important to recall that the rate impacts of the revenue financing scenarios were by design. This does not mean that revenue financing could not be designed to minimize rate effects. BPA believes the long-term benefits of revenue financing are noteworthy, but we very much acknowledge the unresolved issues. BPA intends to work with regional stakeholders in FY 2013 and FY 2014 to evaluate alternatives and resolve policy issues so that revenue financing could be introduced in the FY 2016-2017 rate period.

Due to outstanding issues with revenue financing, BPA is not currently anticipating significant contributions from the mechanism, although, in the long run, revenue financing could provide a low cost, reliable and easy to implement method of financing.



One comment suggested a better definition of the scope of revenue financing. Other comments focused on rate pressure, intergenerational equity and the appropriate balance between debt and revenue financing. BPA will address these and other concerns through future public meetings.

Reductions/Delays in Capital Investment: BPA intends to develop targets for capital investment levels for the individual years covered by the next IPR as well as for the 10-year period covered by the next updated asset strategies. These targets will be informed by an assessment of the agency's available capital, among other things. BPA is currently developing a framework for prioritizing capital projects, other than "core sustain" projects, across the Agency. While the framework is still being designed, expectations are that, by March 2013, BPA will have a workable construct to prioritize these projects across the Agency. This prioritization would be used to inform capital reductions to the extent needed.

"Core sustain" investment is fundamental to BPA's ability to provide reliable power and transmission. While BPA will continue to scrutinize all asset strategies and the associated investments, at this point it is not endorsing or developing a particular methodology for reducing "core sustain" investment.

Most of the comments on capital investment levels focused on prioritization. The prioritization methodology is being developed in a separate forum. Therefore, the prioritization comments, which can be found at: <http://www.bpa.gov/Finance/AssetMgmt/Pages/Capital-Project-Prioritization.aspx>, will be deferred to the prioritization process itself. Once this process is developed and is being implemented, BPA intends to use the Quarterly Business Review (QBR) meetings to provide updates.

Milestones

The following initial milestones represent decision points for re-evaluation of this strategic plan and its ability to achieve the rolling 10-year access to capital target.

FY 2013 Quarter 2

- Develop updated projection of Power Prepayment Program indicating feasible total program size and cost.
- Implement a process for capital prioritization of expansion-related projects.
- Adopt a schedule for implementing a third-party conservation financing program.

FY 2013 Quarter 4

- Evaluate the effectiveness of capital prioritization and revise capital spending assumptions, as appropriate.
- Adjust lease financing expectations based on FY 2013 results.



- Assess the viability and size of third-party conservation financing program.
- Determine if some level of revenue financing should be included in the 10-year forward looking assessment based on subjective view of stakeholder concerns.

FY 2014 Quarter 1

- Assess the viability and define the size and methodology for an initial revenue financing program for FY 2016-2017 as well as the planned gradual ramp-up covering future years.

FY 2014 Quarter 4

- Adjust lease financing expectation based on FY 2014 results.

In addition to the above milestones, BPA's overall access to sufficient capital will be evaluated at least annually in relation to the rolling 10-year goal. If BPA projects insufficient capital access during the 10-year window, BPA will reassess the overall strategy.

Strategy Reassessment

The ultimate goal is to provide reliable access to cost-effective capital for a rolling 10-year period. BPA plans to diligently balance capital investment needs with available capital funding by improving our ability to determine appropriate and affordable capital spending levels while having a variety of cost-effective funding sources to achieve our business objectives. When this balance is not achieved, BPA will take corrective action as part of future reassessment of the overall strategy. This could include any or all of the following options:

- Determine if any of the other tools can compensate for a shortfall from an underperforming tool. If this is possible, assess the timing and the likelihood of success.
- If analysis shows that one or more other tools cannot fill the gap, introduce available cash tools such as revenue financing and/or reserve financing.
- Based on agency capital prioritization principles and guidelines, consider reducing or delaying spending for capital projects other than "core sustain" projects.
- Based on agency capital prioritization principles and guidelines, consider reducing or delaying spending for "core sustain" capital projects.

Some of the corrective actions could be used for short intervals to help keep BPA on track to meet the rolling 10-year goal, but they are not necessarily practical or even desired long-term solutions. However, these tools are generally available and will be included as options to consider in meeting the rolling 10-year goal. For example, the delay or suspension of funding "core sustain" capital investments in BPA's aging infrastructure can provide temporary relief to access to capital challenges but is not likely to be a prudent business decision for the long term.



Another tool, extension of Energy Northwest project 1 and 3 debt, is available only for the next five-to-six years. Currently, the projects' maturing debt is scheduled to be paid annually and fully repaid in July 2017 and July 2018, respectively. BPA is not currently making assumptions about debt extension for these projects in this strategy and would prefer not to utilize this option. However, we will be constantly assessing the implementation of this strategy while simultaneously assessing the costs and benefits of project 1 and 3 refinancing. If refinancing would have substantial benefit to ratepayers, we will want to revisit the discussion because our priority is keeping rates as low as possible for the short and long term. In the recent overall restructuring of all Energy Northwest debt for the purpose of obtaining debt service cost reductions for the FY 2012-2013 rate period, the Agency actually accelerated the repayment of a portion of the debt for projects 1 and 3.

Due to the recent license extension of CGS to 2044, debt extension is already proposed for the portion of its debt that is currently maturing in FY 2014-2015. During FY 2013, BPA is planning a more comprehensive analysis of the impacts of extending CGS debt maturing after FY 2015.

BPA has considered joint transmission financing with non-Federal partners for mutually beneficial projects. However, unless such projects are determined to be as cost effective as other available opportunities described in this document, joint transmission financing is not being counted on as a financing tool. As stated in the July Access to Capital workshop, BPA is open to considering alternative transmission financing structures that meet certain guidelines. Each particular project and financing method must be evaluated as it is submitted for potential use. BPA will consider repeatability, alignment of costs with the beneficiaries of the investment, cost effectiveness and likelihood of success as the Agency assesses these potential alternatives.

Meeting the Rolling 10-Year Target

A comprehensive strategic plan is necessary to ensure sustainable capital from all sources. As the Remaining Borrowing Authority Combination Comparison graph reflects, five combinations can achieve the initial 10-year target; however, BPA will be continually challenged by insufficient access to capital. The Agency is mindful of the rolling target and interested in finding sustainable, low cost and repeatable solutions for both investment and funding decisions. An annual evaluation will assess the success of the prior year and the improved sustainability or certainty of each action, which could result in a different focus and a revised implementation plan.

Summary

In summary, the strategic plan:

- (1) Incorporates the development, expansion and consideration of available and viable investment reduction and funding mechanisms identified to date.



- (2) Recognizes that most actions on this list take several years to develop fully and anticipates implementation over a multi-year horizon.
- (3) Sets milestones for implementation and outlines actions to be considered during a reassessment process.
- (4) Views the initial 10-year target as a rolling target within the greater context of developing a more sustainable longer term access to capital outlook for the Agency.
- (5) Plans to include expectations for capital reductions and other emerging opportunities as the outcomes become clearer.
- (6) Requires an annual review to determine whether corrections to the strategic plan are needed.



APPENDIX

Description and Details of Individual Financing Tools

Revenue Financing

Description:

Since 1983 BPA has, at various times, included cash considerations in revenue requirements to raise cash. This cash is used to fund capital investments in lieu of borrowing from the U.S. Treasury, to directly finance capital from revenues. Revenue financing requires funds to be realized as the Agency planned before they can be used.

Availability:

- Revenue Financing can be applied as a policy choice in any power or transmission rate case.

Cost:

- Revenue financing would have an immediate upward pressure on rates, but interest expense and repayment obligations would decline over time.

Risks:

- Since any revenue financing would need to be realized as the Agency planned, it is uncertain unless covered in risk mitigation.
- Revenue financing raises an issue of double-recovery to some extent when the same assets are depreciated and that depreciation affects revenue requirements. However, it can also be viewed as continually reinvesting in an on-going system.
 - Measures could be implemented to address this concern.
 - BPA would like to explore this effect more thoroughly and discuss options with stakeholders.

Anticipated Accumulation of Cash (AAC)

Description:

Power revenue requirements in the FY 2016-2024 period are expected to provide cash flows from non-cash expenses exceeding cash requirements (the Anticipated Accumulation of Cash [AAC]) or in other words, depreciation of assets exceeding amortization of the associated debt. This AAC could be used to fund capital investments or repay additional debt. Prior to using the AAC, funds must to be realized as the Agency planned.



Availability:

- The AAC is highly uncertain, but its availability is forecasted as up to \$665 million under the base case, as of the July 2012 Access to Capital workshop.

Cost:

- Although the AAC would accumulate with no change to projected rates, there is an opportunity cost associated with the AAC because the cash could be used to meet a variety of Agency needs.

Risks:

- The potential difference between non-cash elements and cash requirements is highly uncertain and highly sensitive to both repayment study results and the forecasts of depreciation and amortization (particularly related to short-lived investments). Actions BPA may take could make the AAC disappear altogether in favor of rate relief (as is the potential in the 2014-2015 time period).
- Since the AAC would need to be realized as the Agency planned, it is uncertain unless covered in risk mitigation.

Reserves Financing

Description:

In recent years Transmission's cash reserves have been more than sufficient for risk mitigation and have been drawn down annually to provide funds in lieu of borrowing. Unlike both the AAC and revenue financing which require funds be realized as the Agency planned prior to use, the use of existing reserves for capital funding draws from an immediately available source of cash.

Availability:

- Transmission reserves have been drawn down to provide rate relief for rate case settlements, and only small amounts of excess reserves may be available in future rate periods to fund capital.

Cost:

- Use of non-required transmission reserves provides interest expense reduction as well as a decrease to future repayment obligations, partially offset by decreased interest earnings.

Risks:

- Reserve financing could simply stop at the point reserves are drawn down to levels required for risk mitigation.



Lease Financing Program (LFP)

Description:

Under the LFP, BPA enters into umbrella agreements with third-party entities. Each lease commitment entered into is associated with a transmission project that is identified to be lease eligible. BPA retains full benefit and use of the leased assets while the third-party owns title and receives fixed rental payments for the assets it leases. Due to the needed flexibility around construction project timing and cost, there are two main steps the third-party entities take to finance the transmission projects. The first step is obtaining a short-term (7 year) Line of Credit (LOC) with a bank to finance the transmission projects through completion. The second step is issuing long-term (up to 30 year) bonds that match the life of the built assets.

Availability:

- The size of the LFP is primarily limited by the amount of eligible projects in BPA's work plan, but external limiting factors include:
 - Line of Credit availability to support the LFP construction model.
 - Sufficient investor interest in purchasing lease financing bonds at competitive interest rates (based on BPA's credit rating).
- Under current processes, procedures, and regulations the LFP appears to be limited to financing about 50% of BPA's projected Transmission capital, or approximately \$250 million per year on average over the next ten years.
- Historically, the LFP has been able to finance about 30% of Transmission capital. The target is to increase LF to at least 50% beginning in FY 2013 and continue to lease finance Transmission capital, possibly at levels greater than 50%.

Cost:

- All-in interest rates associated with the LFP are often calculated by melding borrowing rates and program/lease operating costs.
- Borrowing spreads were estimated for the July 2012 Access to Capital Workshop and a taxable borrowing is projected to be approximately 100 basis points above the Agency borrowing rate for similar maturities.

Risks:

- The call for aggressive use of lease financing may increase the risk that BPA will not be able to deliver on expectations.
- Lease financing interest rate spreads will increase if BPA creditworthiness worsens or if external credit markets become volatile for any reason, such as the European financial crises or a domestic financial crisis. This could constrain access to lines of credit, or it could make them much more costly.
- An expanded LFP may contribute to decreased perceived creditworthiness or credit rating due to decreased debt coverage ratios, increasing the cost of all BPA non-Federal financing programs.



Prepayment of Power Bills

Description:

The Power Prepayment Program gives customers the option to prepay a portion of their existing Power Sales Agreements through purchasing \$50,000 blocks of credits from BPA. BPA would target the proceeds from the prepayment to fund Hydro-related investments. The transactions will be consistent with existing Regional Dialogue contracts because they do not constitute an “assignment” of power sold at a Tier 1 rate.

Availability:

- Limited primarily by rate impacts and the diminishing term remaining on the Regional Dialogue contracts. Estimates of program capacity range from \$500 million to \$1.7 billion.

Cost:

- A major driver of Prepayment costs is the customers’ incentive, which is unknown at this time.
- Interaction between the future power bill credits and the AAC have significant impact on power rates over the long term. To the extent there are sufficient power bill credits, the AAC goes away and is no longer available for capital financing.
- Future prepay bonds have the potential to be partially tax-exempt, which could allow BPA to take advantage of lower interest rates.
- Borrowing spreads were estimated for the July 2012 Access to Capital Workshop
 - Tax-exempt borrowing is projected to be approximately 75 basis points above the Agency borrowing rate for similar maturities.
 - Taxable borrowing is projected to be approximately 140 basis points above the Agency borrowing rate for similar maturities.

Risks:

- Two primary risks to a successful Power Prepay Program are the level of customer participation, and the customer incentive required to achieve a sufficient level of customer participation.
- The level of the power rate impact is also a concern and may be mitigated to some extent by shaping the credits over the term of the regional dialogue contracts.



Conservation Financing

Description:

Financing conservation investments would employ a BPA-backed financing construct which is similar to Energy Northwest and other non-Federal financings in which BPA is obligor and pledges to pay debt service on the bonds issued. A consolidating, third-party acts as issuer of the municipal bonds (tax-exempt to the extent possible) and the bond proceeds flow to the Energy Efficiency Incentive customers for their EE investments. New EEI contracts that begin in 2015 and span the Council's 7th Power Plan provide the opportunity to introduce this financing method. Customers could sign a new EEI agreement with BPA and the third-party financier. BPA would retain program management as is currently in place.

Availability:

- Some development work has been done in this area although making this financing mechanism usable would take up to two years of further development. The Energy Efficiency Program is estimated to average \$75 – 100 million per year over the next ten years. About 70% of the total capital investment may be eligible for third-party non-Federal financing.

Cost:

- Borrowing spreads were estimated for the July 2012 Access to Capital Workshop.
 - Tax-exempt borrowing is projected to be approximately 10 – 35 basis points above the Agency borrowing rate for similar maturities.
 - Taxable borrowing is projected to be approximately 100 – 125 basis points above the Agency borrowing rate for similar maturities.

Risks:

- Contracts must be flexible enough to incorporate third-party financing.
- There could be some modifications in the amount of capital needed for conservation if BPA's energy-efficiency incentive funding model changes in the future.
- Issues with the bond proceeds connected to the 2003 refinancing of the Conservation and Renewable Energy System (CARES) bonds created some concerns for BPA regarding the implementation and management of third-party financing transactions for conservation investments.



Alternate Transmission Financing

Description:

For Transmission only, BPA has the ability to partner with other entities to finance transmission assets through various arrangements, including:

- Prepay for capacity / capacity ownership (3rd AC model)
- Segmented physical ownership
- Jointly owned facilities
- Prepaid transmission service
- BPA purchase of capacity

Availability:

- BPA is currently investigating the availability of alternate transmission financing, but viability of any solution will be evaluated on an individual project basis. The characteristics of the project determine viable financing alternatives.

Cost:

- BPA will always look for the least cost alternative.
- Costs will be aligned with the beneficiaries of the investment.
- It is uncertain whether bond financing will be available, especially relying on BPA's credit rating, for these arrangements.

Risks:

- The risks to alternate transmission financing cover a wide range due to the uncertainty associated with numerous potential structures, but they include:
 - Cost risk due to required rates of return.
 - Political risk from sharing ownership of the Federal Transmission System
 - Operational risk from contracts potentially expiring while transmission needs persist.
 - Alternate transmission financing arrangements may be structured in such a way that eliminates the possibility of lease financing BPA's portion of costs.
 - Exploring these alternatives can take a large amount of subject matter expert time to reach a possible solution. BPA intends to evaluate the feasibility of a potential solution before investing valuable subject matter expert time.

