

BPA Financial Reserves

July 16, 2014

9 a.m. – 12 p.m.

BPA Rates Hearing Room, 1201 Lloyd Blvd, Suite 200, Portland, OR

Phone Bridge: 1-866-901-8645, passcode 5491871

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Current Policies Regarding Reserves

- BPA's TPP standard is the only major policy in place with respect to reserves levels.
- The Treasury Payment Probability (TPP) standard was set in the 10-Year Financial Policy adopted in the 1993 rate case:
 - “BPA will set rates in each 2-year rate period to maintain a level of reserves sufficient to assure a 95 percent probability of meeting its U.S. Treasury payments in full and on time.”
- Reserves are a key factor for determining TPP. The TPP policy defines a floor level of reserves, but there may be reasons for higher levels of reserves that are not reflected in any current policies.
- BPA has previously considered reserve levels separately for its two business lines (because it calculates TPP by business line).

Other Reserves Policy Concerns

- Reserves targets and reserves policies looking over a longer horizon are common among peer entities. BPA-supported Non-Federal Debt often competes for investors with these entities' debt.
- Since the Financial Crisis (2007), rating agencies have been increasingly scrutinizing entities' financial positions and metrics, and in particular, cash positions (financial reserves positions).
- The security for BPA's Non-Federal Debt is BPA commitments for payment and related financial support. All BPA revenues are available to pay all of BPA costs; therefore, the rating agencies rate BPA as a whole and do not separately rate Power Services and Transmission Services.
- It is in BPA's and customers' interests to review BPA's reserves practices in response to developments of the last few years, and perhaps to develop a policy on acceptable and desirable levels of reserves.

What Are BPA's Financial Reserves?

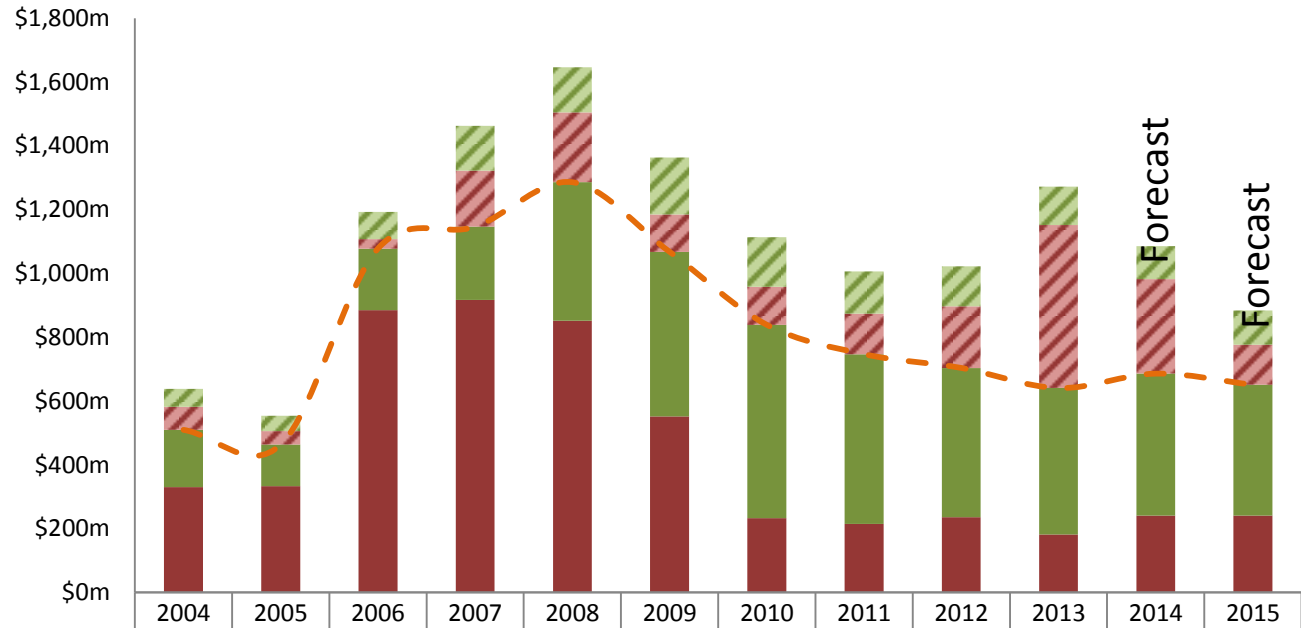
- Financial Reserves Defined
 - 2006 and earlier:
 - Cash in the BPA Fund plus deferred borrowing (deferred borrowing: cash used for capital spending which qualifies for borrowing from the U.S. Treasury, but the borrowing hasn't taken place yet; convertible to cash very quickly);
 - 2007 and later:
 - Cash and market-based special investments (U.S. Treasury investments) in the BPA Fund plus deferred borrowing.

How Has BPA Used Financial Reserves?

- BPA has for many years relied on reserves for liquidity (the availability of cash on hand to meet current obligations)
 - Reserves are BPA's primary tool for mitigating financial risk. BPA establishes rates for cost recovery, so that expected net cash flow is zero unless PNRR is required or reserves are used to finance capital or reduce rates. However, because BPA establishes rates prospectively, actual costs and revenues can vary from rate case forecasts. In some rate periods, reserves can increase and in some rate periods reserves can decrease.
 - Within each year, BPA needs reserves for liquidity in situations when disbursements outpace receipts, receipts are lower than anticipated, or disbursements are higher than anticipated.
- Since 2006, BPA has also used reserves
 - As a source of funding transmission capital projects (\$15 million per year from FY 2006 through present). This use reduces future interest expense by avoiding capital projects borrowing.
 - To eliminate or moderate Transmission rate increases for the 2010-2011, 2012-13 and 2014-15 rate periods. This use provides an immediate, one-time rate effect.

Levels of Financial Reserves over Time

BPA Historical and Projected Reserves for Risk



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Transmission Reserves not for Risk	\$56m	\$49m	\$85m	\$140m	\$142m	\$178m	\$156m	\$132m	\$125m	\$120m	\$104m	\$107m
Power Reserves not for Risk	\$72m	\$42m	\$30m	\$176m	\$219m	\$118m	\$119m	\$127m	\$193m	\$511m	\$296m	\$126m
Transmission Reserves for Risk	\$179m	\$131m	\$193m	\$229m	\$434m	\$516m	\$606m	\$532m	\$468m	\$459m	\$445m	\$410m
Power Reserves for Risk	\$330m	\$333m	\$885m	\$917m	\$852m	\$552m	\$233m	\$215m	\$236m	\$182m	\$241m	\$241m
Agency Reserves for Risk	\$510m	\$463m	\$1,078m	\$1,147m	\$1,286m	\$1,068m	\$839m	\$747m	\$704m	\$641m	\$686m	\$651m

- Agency reserves for risk have declined since 2008.
- Reserves for risk attributed to Power have decreased.
- Declining reserves for risk have been identified by certain bond ratings agencies as a credit strength issue.
- It may be appropriate for Transmission Services and Power Services to have different levels of reserves for risk given the different levels of financial uncertainty they face.

Recent Developments in TPP & Liquidity

- 2007 rate case: BPA and the U.S. Treasury agreed to establish a \$300 million line of credit (the Treasury Facility) that BPA can access to pay certain FCRPS operating expenses. Amounts drawn can have a term up to one year and can be extended one year. BPA concluded that for TPP purposes, the Treasury Facility is equivalent to reserves. Use of the Treasury Facility counts against BPA's statutory borrowing authority cap; BPA holds out an amount of Borrowing Authority equal to the Treasury Facility to ensure that the Treasury Facility could be used if needed.
- 2007 Supplemental rate case (covering rates for FY 2009): the Treasury Facility was increased to \$750 million; that remains the limit.
- Availability of the Treasury Facility has reduced the need for reserves to support TPP in Power rate cases.
- Market prices for electricity have been trending downwards, reducing the magnitude of the financial risk BPA faces from the natural variability of its supply of hydro power.
- Power TPP has been above 95% since the 2007 supplemental rate case.
- Transmission TPP has been above 99% since 2002.
- Because TPP has been above 95%, the TPP standard has not required that downward deviations due to chance in reserves attributed to Power be counteracted with PNRR (Planned Net Revenue for Risk). Had TPP been below 95%, PNRR would have worked to replenish reserves for risk.
- BPA has not had any other policy that required replenishing reserves for risk.

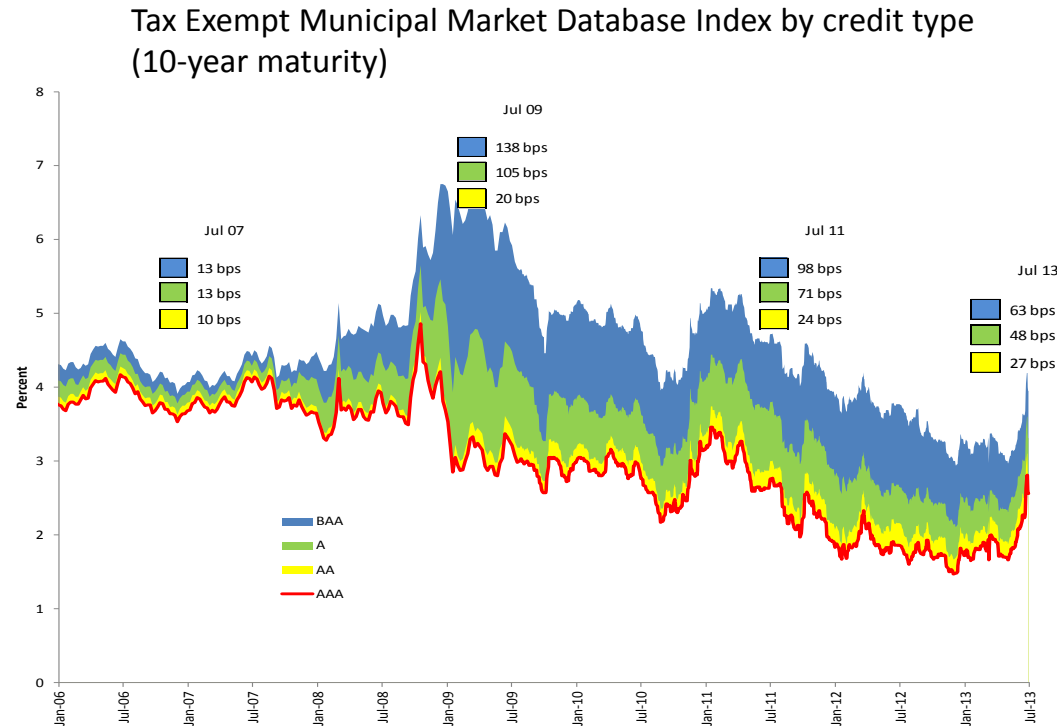
The Rating Agency Perspective

Rating agencies consider many factors, but do not reveal their relative weights:

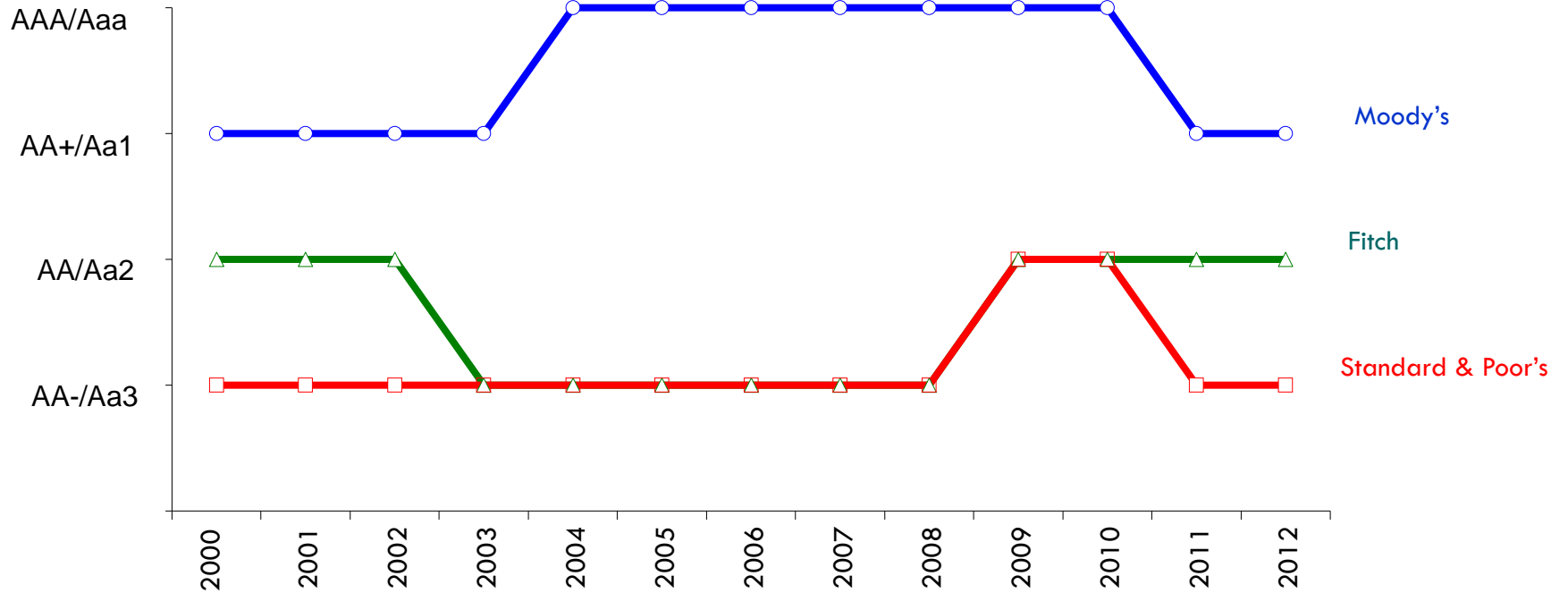
- Management's commitment to financial integrity;
- Days' cash on hand (a metric used in rating all entities): the number of days' worth of operating expenses that could be covered by an entity's cash on hand (financial reserves). BPA's total reserves available for risk do not provide the number of days' cash that other AA rated entities typically hold;
- The Treasury Facility is a credit positive but is not considered cash on hand;
- Reserves Available for Risk (reserves not accrued or derived to meet specific costs): the rating agencies understand that some of BPA's reserves are not available for risk and in effect are held for specific costs or uses;
- BPA's total reserves for risk have been declining since 2008; and
- Use of reserves to reduce short-term rates in light of "low" reserve levels is viewed negatively.

Credit Rating and Cost of Borrowing Over Time

- The value of a higher credit rating in terms of cost of borrowing is greater than before the recession. BPA-supported Non-Federal Debt continues to be issued, leading to frequent ratings of BPA's creditworthiness.
- Prior to the financial crisis, the average spread between "AA" and "A" rated 20 year tax-exempt municipal debt was .17%. Now it is .63%, even though borrowing costs are now lower.



BPA's Credit Rating



AA	AA	AA	AA-	AA-	AA-	AA-	AA-	AA-	AA	AA	AA	AA	Fitch
AA-	AA-	AA-	AA-	AA-	AA-	AA-	AA-	AA-	AA	AA	AA-	AA-	Standard & Poor's
Aa1	Aa1	Aa1	Aa1	Aaa	Aaa	Aaa	Aaa	Aaa	Aaa	Aaa	Aa1	Aa1	Moody's

How Much Does BPA’s Credit Rating Matter?

- BPA has direct and indirect responsibility for paying debt service on \$14.6 billion of principal outstanding.
- \$6.8 billion of such debt has been issued by third parties in the municipal bond market and carry BPA’s underlying credit rating (Non-Federal Debt).
- BPA forecasts that in the next 10 years, starting in 2015, ~\$7.0 billion of Non-Federal Debt will be issued, carrying BPA’s underlying credit rating. Of this, \$2.3 billion will be attributed to Transmission and \$4.7 billion will attributed to Power.
- A 50 basis point^{1/} interest rate increase (+0.50%) today would result in ~\$377 million^{2/} PV increase in interest costs on the ~\$7.0^{3/} billion Non-Federal Debt forecast to be issued over the next 10 years. This equates to an average annual interest expense increase of ~\$25 million per year over the 20 year life of the debt.
- *Supporting BPA’s credit rating with additional financial metrics (reserves, debt ratio, & coverage ratio) may be worth the investment and an advantage for both Power and Transmission.*

Comparison of Debt Outstanding to Credit Rating for U.S. Public Power Utilities with Generation Ownership Exposure		
# of Entities	Avg. Debt Outstanding	Average Credit Rating
4	3.3B	Aa1
10	1.4B	Aa2
12	1.3B	Aa3
38	0.3B	A1
35	0.2B	A2
23	0.8B	A3
2	0.3B	Ba1

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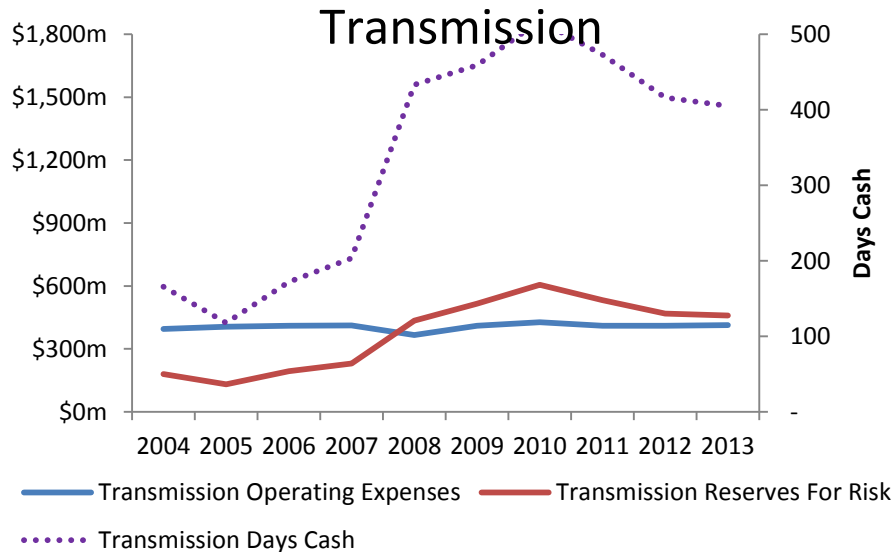
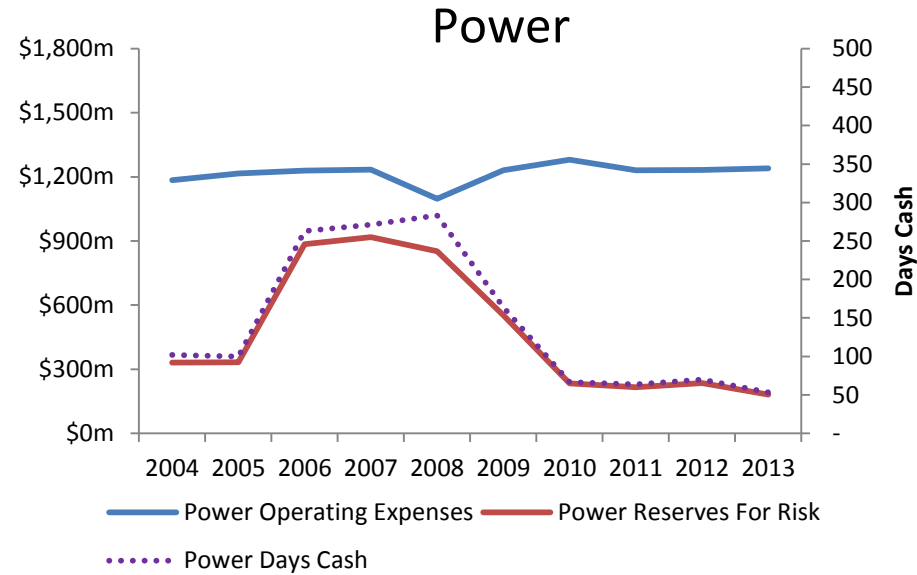
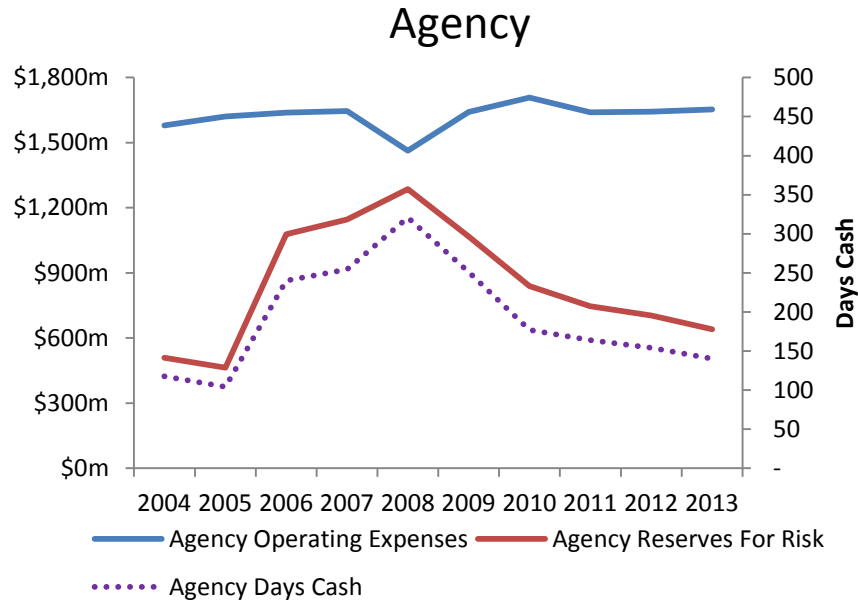
- The table above shows the average debt outstanding for all U.S. Public Power Utilities with Generation Ownership Exposure grouped by credit rating.
- On average, utilities with more debt have a higher credit rating likely because of their reliability on debt, size of their economic base and their increased focus on maintaining credit ratings.

^{1/} Possible impact of taxable and tax-exempt interest rate increase between AA and A credit since the financial crisis. Estimate based on municipal market data from 12/7/2007 to 2/7/2013.

^{2/} Assumes average 20 year maturity, discounted at BPA’s weighted average cost of capital (4.7% as of 9/30/2013). At a 9% discount rate, PV is \$235m.

^{3/} Estimate is \$4.7 billion issued taxable (\$2.4B for P & \$2.3B for T) and \$2.3 billion tax-exempt (all P).

Historical Reserves Relative to Operating Expenses



- Graphs show reserves for risk and approximate operating expenses for the Agency and by business line.
- This view does not reflect any values for revenue or expense uncertainty, which differ by business line.
- This view is a common liquidity measure used by the rating agencies.

Days Cash Comparables

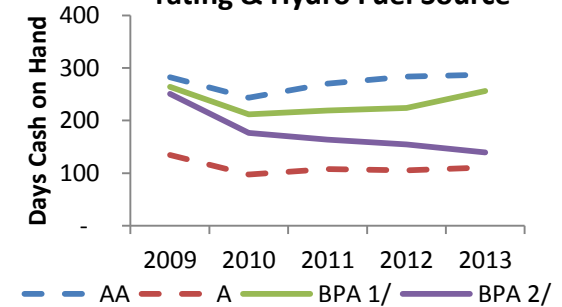
Days Cash On Hand

Utility	Fuel Supply	Type	Rating	2009	2010	2011	2012	2013
Benton PUD	Hydro	Retail	A+	251	177	164	154	140
Boise Kuna Irr. Dist.	Hydro	Retail	A-	143	39	53	38	38
Bonneville Power Administration ^{1/}	Hydro	Wholesale	AA	264	212	219	224	256
Bonneville Power Administration ^{2/}	Hydro	Wholesale	AA	251	177	164	154	140
Chelan PUD	Hydro	Retail	AA+	521	499	494	564	496
Clark PUD	Hydro	Retail	A+	16	11	46	74	103
Cowlitz PUD	Hydro	Retail	A	95	66	77	110	144
Eugene Electric	Hydro	Retail	A+	161	103	103	109	105
Grant PUD	Hydro	Retail	AA	321	255	247	346	464
Grays Harbor PUD	Hydro	Retail	A	81	82	84	69	69
Hydro Quebec	Hydro	Retail	AA-	201	102	205	220	246
Klickitat PUD	Hydro	Retail	A-	205	180	183	165	165
New York Power Authority	Hydro	Wholesale	AA	155	187	206	232	195
Pend Oreille PUD	Hydro	Retail	A-	123	122	154	125	125
Snohomish PUD	Hydro	Retail	AA-	207	233	280	193	183
Tacoma Power	Hydro	Retail	AA-	341	283	348	335	318
Average				208	170	189	195	199

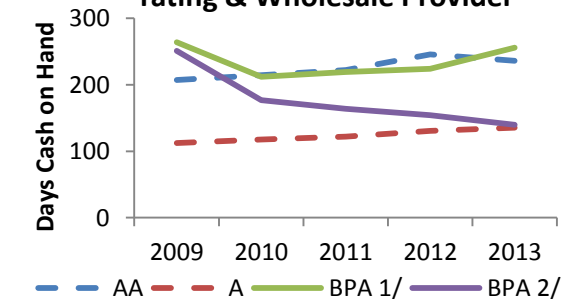
Days Cash On Hand

Utility	Fuel Supply	Type	Rating	2009	2010	2011	2012	2013
Bonneville Power Administration ^{1/}	Hydro	Wholesale	AA	264	212	219	224	256
Bonneville Power Administration ^{2/}	Hydro	Wholesale	AA	251	177	164	154	140
Connecticut Muni Coop	Gas	Wholesale	A+	57	48	81	111	73
Delaware Muni Coop	Gas	Wholesale	A-	8	11	5	57	57
Florida Muni Power Agency	Gas	Wholesale	A+	50	94	84	120	91
Grand River Dam Authority	Coal	Wholesale	A	179	152	201	138	151
Illinois Muni Electric Agency	Coal	Wholesale	A+	106	78	84	58	77
Indiana Muni Power Agency	Coal	Wholesale	A+	43	49	90	96	99
Lower Colorado River Authority	Coal	Wholesale	A	87	130	119	127	189
Massachusetts Muni Wholesale Electric Co.	Nuclear	Wholesale	A+	124	107	124	150	94
Minnesota Muni Power Agency	Gas	Wholesale	A	85	78	101	160	191
Muni Electric Authority of Georgia	Coal/Nuclear	Wholesale	A+	110	107	91	126	138
Muni Gas Authority of Nebraska	Coal	Wholesale	A	106	120	131	67	75
Muni Gas Authority of Georgia	Gas	Wholesale	A+	127	91	86	122	113
Nebraska Public Power District	Coal	Wholesale	A+	108	130	173	178	212
New York Power Authority	Hydro	Wholesale	AA	155	187	206	232	195
North Carolina Eastern Muni Power Agency	Nuclear/Coal	Wholesale	A-	151	166	218	275	251
North Carolina Muni Power Agency	Nuclear	Wholesale	A	272	307	263	248	220
Oklahoma Muni Power Agency	Coal/Gas	Wholesale	A	180	161	128	125	102
Piedmont Muni Power Agency	Nuclear	Wholesale	A-	250	263	224	177	193
Platte River Power Authority	Coal	Wholesale	AA	165	142	147	196	200
South Carolina Public Service Authority	Coal	Wholesale	A-	55	99	97	144	197
Texas Municipal Power Agency	Coal	Wholesale	A+	46	62	56	61	109
Western Minnesota Muni Power Agency	Coal	Wholesale	AA-	245	317	316	331	293
WPPI Energy	Coal	Wholesale	A+	103	95	81	70	76
Average				133	135	140	150	152

Days Cash on hand given credit rating & Hydro Fuel Source



Days Cash on hand given credit rating & Wholesale Provider



- Graphs show days' cash relative to peers, given credit rating and fuel supply or wholesale/retail status.
- BPA reserves for risk (2/) relative to operating expenses continue to trend downward.

^{1/} Fitch calculation of Days Cash - includes reserves for risk and also reserves not for risk

^{2/} BPA calculation of Days Cash - includes only reserves for risk ("unrestricted")

*data from 2014 Fitch U.S. Public Power Peer Study

Objectives of a Reserves Policy

- The importance to BPA of refining its practices regarding the level of reserves has grown in recent years. BPA has no policy on reserves level other than the TPP standard. Given the large amount of expected future incremental Non-Federal Debt issuances, bond ratings can have substantial annual financial impacts.
- BPA is not currently considering augmenting business line reserve levels by generating cash flow with higher rates in the BP-16 rate.
- BPA is considering developing a policy for determining when reserves are minimally sufficient and when they may be considered robust enough to allow reserves to be used for purposes other than liquidity and risk (e.g., for capital financing, early debt retirement or rate relief).
- BPA is proposing these objectives for a policy framework:
 1. Assure adequate cash flow for liquidity
 2. Support a strong credit rating
 3. Take an Agency view, while remaining sensitive to business line-specific issues

* Any policy would be compatible with the Treasury Payment Probability standard

Looking Ahead

- BPA would like stakeholder feedback to help shape the development of a financial reserves policy or [reserves practice]. BPA specifically seeks written suggestions:
 1. For changes to the draft Policy Objectives included above, with supporting explanations and rationales; and
 2. For a policy [or practice] that meets the previously described Policy Objectives.
 - Please submit comments/suggestions by Wednesday July 30, 2014 to <http://www.bpa.gov/applications/publiccomments/OpenCommentListing.aspx> under 2014 Financial Reserves Workshop
- BPA will use stakeholder feedback and BPA's own internal analysis to develop a draft position.
- BPA would like to propose an interim reserves policy [or reserves practice] in time for the BP-16 rate case. (By "practice" we mean a draft policy that has not had sufficient vetting to be adopted as a policy.)

- Questions/Comments?

Financial Disclosure

- This information has been made publicly available by BPA on July 11, 2014 and contains information not reported in agency financial statements.