factsheet

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Big changes in liquidity – how they affect power rates

With a lot of help from its customers, BPA was able to reduce its FY 2007-2009 power rates from those in the prior rate period while still meeting its financial standards and legal obligations.

The "how" of this rate reduction is a multifaceted story that has elements that are easy to understand as well as a few that are more difficult to understand.

The easy ones are that, through the Power Function Review process, BPA was able to cut its projected costs. Also, because of the first average water year in seven years and sustained high power prices, BPA's revenues from its sale of surplus power in FY 2006 exceeded all previous records and expectations, resulting in FY 2007-2009 having the highest start-of-rate-period reserves ever.

Risk and power rates

The more difficult elements relate to BPA's risks

BPA's financial condition is variable. Much of this is attributable to the extreme variability in the amount of water available each year to generate power. A complementary factor is the market price for any surplus power the agency may have to sell or to buy.

Because both price and inventory are highly variable, the agency has developed mechanisms to allow it to adjust rates for changing circumstances. The mechanism that power customers are most familiar with is the Cost Recovery Adjustment Clause (CRAC) that allows BPA to increase its rates to cover financial changes. The advantage of a CRAC is that it allows BPA's base (before any CRAC) power rates to be set lower than they could without the CRAC because they can be adjusted, annually if necessary, to adapt to changing circumstances.

The other way BPA compensates for uncertainty is by maintaining substantial financial reserves that act as a financial buffer. When projected financial reserves are not high enough to manage the financial risk BPA anticipates, the agency includes additional contributions to reserves in its rates to cover some of the risk that uncertainty creates. This is called planned net revenues for risk (PNRR). It differs from a CRAC in that PNRR is included in base rates and cannot change until they are reset in the next rate case. Once it is included in the rate structure, it is collected regardless of BPA's financial need. The more PNRR the agency includes to manage variability, the higher the base rates, which results in reduced need for a CRAC.

In the last two rate cases, BPA has balanced CRACs and PNRR to keep base rates as low as possible while allowing for a greater degree of potential rate variability through CRACs. Alternatively, BPA could have relied more on reserves and PNRR, which would produce much more stable rates but at a much higher rate overall.

In looking for more ways to reduce BPA's base rate, the agency and its customers looked closely at the roles that reserves play. BPA's financial reserves not only support the agency's year-end Treasury payment and its Treasury payment probability (TPP), but they are also BPA's primary source of liquidity during the fiscal year. The more BPA has to rely on its reserves for liquidity during the year, the less those reserves can support TPP at the end of the year.



Conversely, if BPA had other sources of liquidity, the agency would not have to rely as much on reserves for liquidity, which would make more reserves available for risk. This would lessen the need for planned net revenues for risk in power rates. BPA and its customers have implemented two liquidity tools that allow base rates to be lower in FY 2007-2009 rate period than they would be without the tools.

For more information on the relationship between risk and BPA's power rates, see the risk backgrounder at www.bpa.gov/corporate/pubs/backgrounder/05/bg111505.pdf.

Liquidity tools

Liquidity is all about when cash is available. Liquidity tools don't generate new cash or reflect any change in BPA's financial condition; they only change the timing of when cash is available. But that timing can make a lot difference.

BPA has adopted the Direct Pay program (with the help of customers and Energy Northwest) and the Customer Flexible PF Rate Program (with the help of customers) to help keep power rates down. Direct Pay results in more cash being available in September (relative to net billing, which is explained below) when BPA must make a substantial yearend payment to the U.S. Treasury (\$447 million in September in 2005). This is very helpful in meeting BPA's Treasury payment probability standard. The Customer Flexible PF Rate Program allows BPA to change the shape of its PF revenues, which helps the agency meet its within-year financial obligations in the event that BPA faces a short-term cash crisis

Direct Pay

Direct Pay changes the timing of when Energy Northwest and BPA have cash. The total amount of money involved remains the same and, in both cases, BPA is responsible for the bills of both agencies.

Under net billing, at the beginning of each Energy Northwest fiscal year, which begins on July 1, participants in the three Energy Northwest nuclear projects sent their power and transmission payments to Energy Northwest to cover their share of Energy Northwest's annual operating and debt service costs. These payments continued until each participant's costs for the year were completely covered. At that time, the payments reverted back to BPA. In oversimplified terms, this meant that Energy Northwest received almost a year's worth of revenue in less than six months. As a consequence, it had more cash on hand for much of the year than it needed.

In essence, under the Direct Pay program, the net billing utilities send their Energy Northwest payments directly to BPA. Then BPA makes monthly payments directly to Energy Northwest for its operating and debt service expenses as the cash is needed. This better matches Energy Northwest's cash needs. The Direct Pay program results in an increase in BPA's cash balance at the end of the fiscal year because the agency is holding the cash previously held by Energy Northwest at that time of year.

The Direct Pay program adds a bit of complexity to BPA's cash flow because Energy Northwest has large debt service payments due in December and June of each year in addition to its normal monthly obligations. To deal with these two large payments, BPA raised its minimum required start-of-year reserve level from \$50 million to \$175 million.

It may appear that Direct Pay does not have much of an impact on rates if BPA has about \$200 million more in reserves at the end of its fiscal year than under net billing but has to increase its minimum start-of-year reserve level by \$125 million. But, because of the more constant cash flow, the agency is able to lower its planned net revenue for risk, which does reduce rates.

There is one more bit of complexity. Remember that BPA has chosen to make base rates as low as possible, which increases the potential for volatility. By reducing planned net revenue for risk to keep the base rate as low as possible, the agency has to change the threshold

for the CRAC in order to preserve its Treasury payment probability. The CRAC will now trigger when Power has \$750 million in reserves instead of when it has \$500 million in reserves. This results in a very low PNRR of only \$11 million. This is the lowest the agency has ever had.

2. The Flexible PF Rate Program

The Flexible PF Rate Program is another new and creative tool BPA is relying on to help keep the cost of risk mitigation down. It grew out of ideas customers provided in the Customer Collaborative process and in the risk workshops that preceded the 7(i) portion of the rate case. The program creates an additional source of short-term liquidity for BPA to

draw on by giving BPA the ability to change the shape of its revenues in the event of a cash crunch. Doing so allows BPA to rely less on other risk mitigation measures such as PNRR.

In the final published rate calculations, BPA assumed participation in the program would total \$125 million, but actual participation in the Flexible PF Rate Program exceeded that amount. Participation was sufficiently high that BPA will lower its start-of-year liquidity reserve level down to the \$50 million level established as a minimum. This helps lower the effective rate by changing the CRAC threshold to make it less likely to trigger.