

2003 Safety-Net Cost Recovery Adjustment Clause Initial Proposal

Study

Chapter 1 – Overview and Management Direction

SN-03-E-BPA-01

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CHAPTER 1: OVERVIEW AND MANAGEMENT DIRECTION

1.1 Purpose

On September 28, 2001, the Federal Energy Regulatory Commission (FERC) granted interim approval to Bonneville Power Administration's (BPA) 2002 WP-02 power rate filing. That rate filing included base power rates and, among other rate features, three separate Cost Recovery Adjustment Clauses (CRAC). The CRACs allowed BPA to keep base rates low and to address financial shortfalls through the variable CRACs, rather than institute higher base rates for the entire rate period. These tools also gave BPA the risk mitigation necessary to have a sufficiently high probability of repaying its obligations to the U.S. Treasury (as measured by Treasury Payment Probability or TPP). The three CRACs are the Load-Based (LB) CRAC, which is designed to cover augmentation costs, the Financial-Based (FB) CRAC, which is designed to help ensure sufficient net revenues, and the Safety-Net (SN) CRAC, which is available if the likelihood of missing a Treasury payment or payment to any other creditor is 50 percent or greater despite the implementation of the LB and FB CRACs.

On February 7, 2003, the BPA Administrator determined that the SN CRAC had triggered, based on a forecast of a 50 percent or greater chance of missing a payment to the U.S. Treasury or another creditor during Fiscal Year (FY) 2003. The triggering of the SN CRAC initiates a hearing under section 7(i) of the Northwest Power Act. The purpose of the SN CRAC is to make an adjustment to the base rates, set in BPA's 2002 Wholesale Power Rate Case, in order to restore BPA's financial health. As provided in section II.F.3 of BPA's 2002 General Rate Schedule Provisions (GRSPs), the SN CRAC enables BPA to implement an upward adjustment to posted power rates subject to the FB CRAC by modifying the FB CRAC parameters. BPA is proposing changes to the FB CRAC parameters that, to the extent market and other risk factors allow, will achieve a high probability that the remaining Treasury payments during the

1 FY 2002-2006 rate period will be made in full. BPA's proposal includes, consistent with the
2 GRSPs, changes to the Maximum Planned Recovery Amount (the amount of revenues planned to
3 be recovered), the duration (the length of time the SN CRAC can be in place, which can be more
4 than one year), and the timing of collection.

5 6 **1.2 Background**

7 **1.2.1 Safety-Net Cost Recovery Adjustment Clause (SN CRAC).** The SN CRAC triggers
8 based on a forecast of a 50 percent or greater chance of missing a payment to the U.S. Treasury
9 or another creditor during the fiscal year. The SN CRAC is used to help recover from financial
10 losses and improve the financial health of BPA by increasing the probability that BPA will make
11 its Treasury payment and payments to all other creditors in full through FY 2006. The SN
12 CRAC will adjust rates to ensure payments to all of BPA's creditors by the end of FY 2006.

13
14 **1.2.2 Current Financial Situation.** In assessing its financial situation, BPA monitors three
15 important indicators: (1) financial reserves; (2) net revenues; and (3) the credit rating on BPA-
16 backed bonds.

17
18 **1.2.2.1 Financial Reserves.** BPA's financial reserves consist of cash in the Bonneville Fund,
19 including working capital, and any deferred borrowing balance. "Deferred borrowing balance"
20 refers to capital expenditures that will be funded by money borrowed from the U.S. Treasury, but
21 have been temporarily financed with revenues. Estimates of start-of-year reserves in this rate
22 proposal for FY 2004 reflect total BPA reserves. In modeling this initial proposal, all reserves
23 are projected as cash in the Bonneville Fund, with no reserves reflecting a deferred borrowing
24 balance.

1 Financial reserves are important in two ways. First, financial reserves serve as a buffer for
2 solvency from the cyclical and unanticipated impacts of conducting business in an uncertain
3 environment. BPA, like other hydroelectric utilities, forecasts a range of potential future
4 financial outcomes. High reserve balances can mitigate the financial risk of some of the bad
5 potential outcomes. The higher the reserve balances, the more potentially negative outcomes the
6 reserve balance can mitigate in terms of duration and/or magnitude. During FY 2001, the
7 reserve balance, combined with access to credits against payments to Treasury, helped BPA
8 remain solvent through a particularly difficult period both in terms of duration and magnitude.

9
10 The second reason reserves are important is that due to the financial “buffer” they provide, they
11 help maintain BPA’s TPP while minimizing rates.

12
13 **1.2.2.2 Net Revenues.** BPA ended FY 2002 with \$188 million of reserves, -\$53 million
14 attributed to the Power Business Line (PBL) and \$135 million attributed to the Transmission
15 Business Line (TBL). *See* SN-03-E-BPA-01, Chapter 7. This amount was a reduction from
16 agency reserves of \$625 million (\$496 million of which was attributed to PBL) at the end of
17 FY 2001. The drop in reserves during FY 2002 was related primarily to PBL’s net revenue loss
18 of \$87 million. Net revenues are defined as revenues minus expenses. When PBL net revenues
19 are adjusted consistent with the FB CRAC methodology, which uses the May 2002 Final
20 Proposal forecast of Energy Northwest (ENW) debt service and removes FAS 133 adjustments,
21 this -\$87 million becomes -\$390 million. During FY 2003, PBL’s net revenues have remained
22 negative, thereby continuing to impact agency reserves adversely.

23
24 On June 29, 2001, BPA filed a Supplemental Proposal with FERC. BPA’s proposed rates
25 received interim approval on September 28, 2001. In the Supplemental Proposal, PBL predicted
26 higher net revenues than in BPA’s May 2000 Final Proposal. There were two primary reasons

1 driving the expected relative increase in revenues: secondary sales and fish credits. BPA's
2 secondary sales are a function of both market prices and available hydro. Secondary sales were
3 forecasted to provide higher revenues due to BPA's expectation of continued high market prices.
4 At the time, the West Coast was experiencing very high electrical demand relative to supply.
5 The development of new resources, which BPA expected would help bring market prices down
6 eventually, was anticipated to take up to two years. BPA (and other utilities on the West Coast)
7 believed the high market prices would continue until those new resources came on line. Lower-
8 than-forecasted revenues for BPA in FY 2002 resulted from an unanticipated and rapid decline in
9 market prices.

10
11 The other variable in secondary sales revenues is how much hydro production is available for
12 BPA to sell. In BPA's Supplemental Proposal, BPA expected average hydro production for all
13 years of the rate period. However, actual hydro production in FY 2002 was lower than expected
14 Hydro conditions in FY 2003 are expected to be below average, thereby also contributing to the
15 decline in BPA's revenues. Although the hydro conditions appeared to be approximately normal
16 over the January-July 2002 period, BPA decided to store a significant amount of water to
17 partially replenish the low reservoirs resulting from the 2001 drought. This storage resulted in
18 less 2002 hydro production than forecasted in BPA's Supplemental Proposal. The net result of
19 these two factors (lower than expected prices and less than expected hydro production) is that
20 BPA sold less energy, and at lower prices, than forecasted in the Supplemental Proposal.

21
22 In addition to expecting revenue from secondary sales, the second source of the expected relative
23 increase in revenues in the Supplemental Proposal concerns credits toward BPA's Treasury
24 payments based on fish-related costs and impacts on operations (fish credits). These credits were
25 expected to contribute significantly to BPA's total revenues, in part due to expected high market
26 prices. Fish credits contribute to BPA's overall revenues through a credit against BPA's

1 payment to the U.S. Treasury. However, these credits now are expected to be substantially lower
2 over the rate period than previously forecasted. The reasons for the reduction include a
3 reallocation of project purposes at Grand Coulee, lower wholesale power prices, and reduced
4 availability of Fish Cost Contingency Fund (FCCF) credits that were all but exhausted at the end
5 of 2001 because of the severe drought.

6
7 In addition to lower-than-forecasted revenue credits, PBL cost increases of approximately
8 \$1.5 billion in total over the rate period have contributed to BPA's eroding financial condition
9 (not including [a] offsetting increases in revenue due to the increase in expenses and [b] the risk
10 to certain expense categories embedded in the Non-Operating Risk Model (NORM) assessment).
11 These increases include PBL Internal Operations, Corporate Overhead, Residential Exchange
12 Settlement Agreements, Power Generation, Renewable Projects, Transmission Acquisition, Civil
13 Service Retirement Payment, Terminated Projects, Fish and Wildlife, Conservation and
14 Renewable Discount, Other Public Benefits, Non-Federal Debt Service, Depreciation,
15 Amortization and Net Interest (not included are Power Purchases and Augmentation).

16 Associated with these expense items are approximately \$500 million of offsetting revenues, in
17 total over the rate period, such as increased generation from the hydro system and Columbia
18 Generating Station, and approximately \$120 million for non-operating risks. Because of the
19 energy crisis in 2001, BPA is still owed about \$80 million by the California Independent System
20 Operator and Power Exchange. Of this amount, BPA made an accounting adjustment to PBL net
21 revenues in 2002 of about \$25 million to reflect the risk that BPA may never be paid this
22 amount. Additionally, BPA has take-or-pay contracts that obligate the direct service industrial
23 customers (DSIs) to pay take-or-pay damages on IP power when such power is not purchased
24 (curtailed) and BPA must sell the curtailed amount in the surplus market when the market value
25 is less than the IP value. The DSIs are obligated to pay BPA the difference under those
26 circumstances so that BPA is made whole. BPA is at risk of not being paid about \$30 million of

1 FY 2002 take-or-pay damages due to DSI bankruptcies or other financial difficulties. The
2 portion of money at risk is \$58 million, which is reflected as a Bad Debt Expense in BPA's
3 income statement. Aside from the significantly decreased revenues PBL experienced during the
4 first two years of this rate period, PBL forecasts significant losses for the remainder of the rate
5 period. These losses are expected to be \$339 million for FY 2003-2006 even with maximum
6 contributions from the FB CRAC in each year. These losses are referred to as a "net revenue
7 gap."

8
9 **1.2.2.3 Credit Rating.** The credit ratings for BPA-backed bonds recently were downgraded
10 by Fitch Ratings to AA- as well as placed on "negative outlook" by Standard and Poor's
11 (AA-rating), even in view of the expectation that BPA will proceed with the SN CRAC process
12 and reinforce its TPP and liquidity positions. These credit concerns likely will reduce the
13 interest savings of the ENW April 2003 re-financings that BPA expected would reduce the
14 SN CRAC when incorporated into the Final SN-03 Rate Proposal. They will also affect future
15 refinancings of ENW and other BPA-backed bonds. The Standard and Poor's report states that a
16 downgrade could be prompted by "the use of any debt restructuring savings to offset current
17 operating expenses...", "failure to implement an adequate SN CRAC...", or "any restructuring
18 of federal Treasury obligations." See Attachment 1 at the end of this chapter.

19 20 **1.3 BPA's Response**

21 Faced with a deterioration of its overall financial condition, BPA sent a letter to its customers
22 (including power rate case parties) and other interested entities in the region on July 2, 2002.
23 The letter announced the beginning of a public comment process on BPA's financial condition,
24 referred to as "Financial Choices." The Financial Choices process examined a variety of
25 financial and program options for addressing PBL's FY 2003-2006 financial challenges. In this
26 process, BPA described those financial challenges, the actions BPA had already taken to address
27

1 the problem, and the financial outlook for the remainder of the rate period. Additionally, BPA
2 identified a variety of potential financial alternatives that, separately or in combination, could
3 form the basis of a solution to PBL's financial condition.

4
5 BPA received significant public comment during the Financial Choices process. As a result of
6 the process, BPA made decisions to reduce, eliminate, or defer certain expenses. BPA issued a
7 Financial Choices close-out letter to the region on November 22, 2002, outlining BPA's plan, in
8 part, for meeting PBL's financial challenges. The actions BPA has taken, and will take, include
9 the identification of \$350 million in expense savings, expense deferrals, and other actions for the
10 FY 2003-2006 period. These actions are reflected in this proposal. *See* Lefler, *et al.*,
11 SN-03-E-BPA-06, and SN-03 Study, SN-03-E-BPA-01, Chapter 3. As part of this effort, BPA
12 has requested, and ENW has implemented, a program to purchase surety bonds to release bond
13 reserve funds to pay for some near-term debt service costs at ENW. Also, ENW pursued and
14 won a \$23 million settlement with the Bank of America for the Bank's role as paying agent on
15 certain BPA-backed bearer bonds. ENW plans to provide the settlement proceeds to BPA. In
16 addition, BPA is pursuing settlement on power purchase augmentation contracts, which, if
17 achieved, would likely have the effect of reducing augmentation costs and increasing TPP.

18
19 BPA realizes that the practice of assuming significant cost cuts without a complete plan on how
20 to achieve them has contributed to BPA's current financial condition. BPA has been given
21 assurances by ENW, the U.S. Army Corps of Engineers (Corps), and the U.S. Bureau of
22 Reclamation (Reclamation) that each will rigorously manage its expense levels to the limits
23 established in the this initial proposal. The cost reductions agreed to by these entities in the
24 Financial Choices process are reflected in this initial proposal. The cost reductions associated
25 with BPA's internal operating expenses charged to power rates in the Financial Choices process
26 are largely reflected in the initial proposal.

1 However, approximately \$20 million of cost reductions were inadvertently omitted but will be
2 reflected in the final proposal. *See* Lefler, *et al.*, SN-03-E-BPA-06.

3
4 **1.3.1 Summary of Proposal.** BPA is proposing a 3-year, variable SN CRAC adjustment to
5 power rates, which has a cap limiting the amount of revenues that can be collected each year.
6 The proposed SN CRAC design is similar to the existing FB CRAC as described in BPA's 2002
7 GRSPs and is in addition to the FB CRAC. The proposed SN CRAC is a temporary, upward
8 adjustment to posted power rates based on the level of end-of-year Accumulated Net Revenue
9 (ANR) for PBL, as defined in the FB CRAC section in the 2002 GRSPs. The August forecast of
10 ANR for each fiscal year from 2003-2005 is compared to the SN CRAC threshold applicable to
11 that fiscal year. If the forecasted ANR is below the threshold, an SN CRAC rate adjustment will
12 be implemented to collect either the amount of the difference between the forecasted ANR and
13 the threshold, or an annual cap, whichever is smaller. The proposed SN CRAC rate adjustment
14 will be determined annually, go into effect October 1 of each year, and be in effect for the
15 remainder of that fiscal year. The adjustment will be applied to the appropriate rates for the
16 12-month fiscal year. The SN CRAC adjustment in a particular year could be as low as zero or
17 as high as 41 percent, depending on PBL's financial condition as reflected in BPA's forecasted
18 ANR.

19
20 **1.3.2 Criteria.** For the SN CRAC proceeding, three criteria were used to develop the SN
21 CRAC mechanism. First, section 7(a)(1) of the Northwest Power Act states, in part, that BPA
22 shall establish rates that recover, in accordance with sound business principles, the costs
23 associated with the acquisition, conservation, and transmission of electric power, and other cost
24 expenses incurred by the Administrator. Therefore, BPA will set rates sufficient to cover costs.
25 Second, BPA is concerned about the impact of any rate increase on the economy of the Pacific
26 Northwest, and so, to the extent possible, the rate design should mitigate the level of any rate

1 increase. Third, because the FB and SN CRACs apply to somewhat different customers and
2 involve different contractual provisions, and in order to simplify billing and accounting, the FB
3 CRAC will be left unchanged and a separate SN CRAC will be created. Chapter 7 of this Study
4 discusses each of these criteria and elaborates on how these criteria are met with the proposed
5 SN CRAC mechanism.

6 7 **1.4 Organization of Study**

8 This study contains several chapters, which together support BPA's SN CRAC proposal. The
9 organization of this study has changed slightly from the order described in the Federal Register
10 Notice. Chapter 2 describes the methodology for PBL's loads and sales forecasts. It also
11 includes assumptions used in the development of the hydro regulation study and other resource
12 forecasts. Chapter 3 contains BPA's generation revenue recovery, including a forecast of
13 generation expenses. Chapter 4 describes the methodology and resulting forecast of PBL's
14 secondary revenues. Chapter 5 contains PBL's revenue forecast at current and proposed rates.
15 Chapter 6 describes the analysis that quantifies PBL's net revenue risk. Chapter 7 describes the
16 Tool Kit model, the proposed SN CRAC design, and the associated GRSPs.

Bonneville Power Administration

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Rationale

The outlook on the 'AA-' rating on Energy Northwest's debt, secured by payments from the Bonneville Power Administration, is revised to negative and the rating is affirmed. The outlook revision reflects the increasing likelihood that Bonneville and its customers will decide to use cash savings provided by the debt optimization program, specifically the \$315 million cash savings in fiscal year 2003 that is planned to be used for the prepayment of Treasury debt, to finance current operating expenses instead of using the money to pay down more expensive Treasury debt, as originally intended when the debt optimization plan was constructed. Financial pressures on Bonneville resulting from weak hydrology conditions and the high cost of replacement power have culminated in the deterioration of cash reserves to \$188 million at the end of fiscal 2002 from \$811 million at the end of fiscal 2000. Now that cash reserves have been depleted, ongoing cost pressures are prompting calls from Bonneville's customers to use debt optimization savings to offset the need for additional rate increases rather than to prepay Treasury debt, which would essentially hold the overall debt levels of Bonneville at a stable level. The decision to extend debt instead of using rate increases to cover costs through fiscals 2003-2006 is not reflective of a 'AA' category credit even with the structural advantages afforded to the Energy Northwest bonds by the net billing agreements, which allows for payment of the debt service before any and all operating expenses or other debt obligations of Bonneville.

The preservation of the 'AA-' rating will depend on successful implementation of the Safety-Net Cost Recovery Adjustment Clause (SN CRAC) in the summer of 2003, which is expected to provide additional revenues through a 16% rate increase. This rate increase, in conjunction with approximately \$300 million of identified cost reductions and deferrals through fiscal 2006 and the use of cash tools such as the \$250 million line of credit, should allow Bonneville to end fiscal 2003 with between \$100 million and \$200 million in cash reserves. In addition, Bonneville has revised its projections of revenues from wholesale power sales down by \$650 million during fiscals 2003-2006, as it had been optimistic due to high projected wholesale prices that were above actual prices being achieved in the market. Although Bonneville's liquidity will remain seriously constrained in fiscal 2003 even with the achieved cost cuts, Bonneville is exploring the optional use of a \$250 million federal line of credit to manage its immediate cash flow needs.

The 'AA-' rating on the Energy Northwest debt reflects the following credit strengths:

- Legal payment of the \$5.9 billion in Energy Northwest (formerly the Washington Public Power Supply System) obligations as an operating expense of Bonneville

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- through the net billing agreements, which are senior to approximately \$7 billion in outstanding Treasury debt and federal obligations. This offers bondholders the assurance of over 2.0x coverage as long as sufficient revenues are collected to meet all of Bonneville's debt obligations, including the Treasury debt;
- Structural advantages offered by the net billing agreements provide that, beginning on July 1 of each year, cash to pay each Bonneville wholesale power bill is sent directly from approximately 100 Energy Northwest participants (all Bonneville customers) to Energy Northwest to pay operating expenses and debt service on the Energy Northwest debt. Only once the Energy Northwest obligations are met do participants begin sending payments to Bonneville to fund Bonneville's operating and remaining debt obligations.
 - The presence of rate setting authority in Bonneville's existing contracts, including three separate Cost Recovery Adjustment Clauses (CRACs), and political support to use those CRAC mechanisms that should allow Bonneville to maintain strong debt service coverage on the Energy Northwest debt as well as meet its scheduled Treasury repayments;
 - Generation rates remain reasonable and competitive at approximately 3.0-3.4 cents per kilowatt-hour (kWh) as of April 1, 2003, despite low hydrology and the high cost of replacement power. The anticipated SN CRAC increase will raise rates to between 3.2-3.6 cents/kWh as of Oct. 1, 2003;
 - Successful implementation of the "Slice" product that allocates 22% of the federal system to purchasers who are obligated to pay a percentage of the system costs in return for a percentage of system output, reducing Bonneville's exposure to low water flow, although Bonneville retains full operational authority over the system. This benefit is mitigated by the increased operating and financial risk that it places on Bonneville's customers who select this product;
 - Limited exposure to low water levels, currently around 70% of normal, in the 2003 water year because of Bonneville's current long position resulting from the economic recession in the region and the shutdown of approximately 1,500 MW of industrial load at the aluminum smelters. Lower water is resulting in higher market energy prices in the Northwest, which is increasing the amount of revenues Bonneville receives from wholesale sales.

Rating concerns that could prompt a downgrade include:

- The use of any debt restructuring savings to offset current operating expenses, which would constitute a deferral of the cost recovery needed into future years;
- Failure to implement an adequate SN CRAC, which is needed at 16% absent any additional cost cuts, to keep cash reserves at a minimum operating level; or
- Any "restructuring" of federal Treasury obligations, although Bonneville does have the legal flexibility to "restructure" its federal obligations at any time with minimal financial penalties.

Although Standard & Poor's Ratings Services realizes that Bonneville is under intense financial pressure and that deferring some costs into years beyond 2006, when the "augmentation costs" and the responsibility to serve approximately 1,500 MW of Direct Service Industrial (DSI) load go away, is an attractive option to customers, the use of these short-term solutions are not reflective of a 'AA' credit.

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Liquidity.

As mentioned above, Bonneville's liquidity of only \$188 million at the end of fiscal 2002 remains seriously constrained, and it has limited liquidity tools available--primarily the \$250 million federal line of credit that is not intended to be used for ongoing operations and the anticipated \$315 million in cash savings that is expected to be produced by this \$1.2 billion debt restructuring. Although the use of the \$315 million in 2003 provides some liquidity flexibility, its use would be at the cost of extending existing debt obligations and would be viewed as a negative credit factor. Offsetting liquidity concerns is the real ability of Bonneville to reschedule payments related to its federal obligations, which account for over half of Bonneville's \$13 billion in total outstanding debt obligations.

Outlook

The negative outlook reflects concern that the stringent effects of prior rate increases coupled with ongoing revenue shortfalls have prompted Bonneville and its customers to consider solutions to its financial challenges that will avoid rate increases. The solutions under consideration, however, are not supportive of credit quality at the current rating level. Bonneville has announced its intent to trigger the SN CRAC and is proceeding with a rate case that will require final FERC approval. Ongoing revenue shortfalls from wholesale revenues, despite higher prices due to low water conditions, have prompted a discussion of reducing the probability of Treasury repayment, which was previously considered unthinkable by both Bonneville and its customers. Although no party is encouraging missing a payment to Treasury, Bonneville's decimated cash reserves, limited liquidity options, and the time lag between the implementation of the SN CRAC and the collection of the additional revenues make the non-payment of Treasury a real possibility in the next two years. The use of debt restructuring savings for current operations or any delay in the repayment of scheduled Treasury payments would prompt a rating downgrade, even though bondholders have a priority lien on revenues through the net billing agreements.