## 2008 Initial Transmission Proposal

Revenue Requirement Study

TR-08-E-BPA-01

February 2007


Bonneville Power Administration Transmission Services

2008 INITIAL TRANSMISSION PROPOSAL REVENUE REQUIREMENT STUDY

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## REVENUE REQUIREMENT STUDY

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## 1. INTRODUCTION

### 1.1 Purpose and Development of the Revenue Requirement Study

The purpose of the Revenue Requirement Study (Study) is to establish the level of revenues needed from rates for Bonneville Power Administration’s (BPA's) transmission and ancillary services to recover, in accordance with sound business principles, costs associated with the transmission of electric power over the Federal Columbia River Transmission System (FCRTS). The FCRTS is part of the larger Federal Columbia River Power System (FCRPS) which also includes the hydroelectric, multipurpose facilities constructed and operated by the U.S. Army Corps of Engineers and the Bureau of Reclamation in the Pacific Northwest. The FCRPS costs that are not included in the FCRTS costs are funded and repaid through BPA power rates. The transmission revenue requirements herein include: recovery of the Federal investment in transmission and transmission-related assets; the operations and maintenance (O\&M) and other annual expenses associated with the provision of transmission and ancillary services; the cost of generation inputs for ancillary services and other interbusiness-line services necessary for the transmission of power; and all other transmission-related costs incurred by the Administrator.

The cost evaluation period for this rate proposal includes Fiscal Years (FYs) 2007-2009, the period extending from the last year for which historical information is available through the proposed rate test period. The Study includes the transmission revenue requirements for the rate test period, FYs 2008 - 2009 and the results of transmission repayment studies.

This Study outlines the policies, forecasts, assumptions, and calculations used to determine BPA's transmission revenue requirements. Legal requirements are summarized in Chapter 5 of this Study. The Revenue Requirement Study Documentation (Documentation), TR-08-E-BPA01A, contains key technical assumptions and calculations, the results of the transmission repayment studies, and a further explanation of the repayment inputs and its outputs.

The revenue requirements that appear in this Study are developed using a cost accounting analysis comprised of multiple steps. See Figure 1, Transmission Revenue Requirement Process. The primary features of the Study include repayment studies, transmission operating expenses, and risk analysis. First, repayment studies for the transmission function are prepared to determine the amortization schedule and to project annual interest expense for bonds and appropriations that fund the Federal investment in transmission and transmission-related assets. Repayment studies are conducted for each year of the rate test period, and cover a 35-year repayment period. Second, transmission operating expenses, debt service reassignment, and minimum required net revenues (if needed) are projected for each year of the rate test period. Third, the necessity for including annual planned net revenues for risk is determined by taking into account Transmission's business risks, BPA's cost recovery goals, and risk mitigation measures. From these three steps, revenue requirements are set at the revenue level necessary to fulfill BPA's cost recovery requirements and objectives.

BPA conducts a current revenue test to determine whether revenues projected from current rates meet its cost recovery requirements and objectives for the rate test and repayment period. If the current revenue test indicates that cost recovery and risk mitigation requirements can be met,
current rates could be extended. The current revenue test, discussed in Chapter 4.2, demonstrates that current revenues are sufficient to meet cost recovery requirements and objectives for the rate test period and the repayment period.

Consistent with Department of Energy Order RA 6120.2 and the Federal Energy Regulatory Commission (FERC) rate review standards applicable to BPA, BPA must demonstrate the adequacy of the proposed rates to recover its costs. The revised revenue test determines whether projected revenues from proposed rates will meet cost recovery requirements and objectives for the rate test and repayment periods. The revised revenue test, discussed in Chapter 4.3, demonstrates that revenues from the proposed transmission and ancillary services rates will recover transmission costs in each year of the rate test period and over the ensuing 35-year repayment period. Consistent with the Treasury Payment Probability (TPP) standard that BPA adopted as a long-term policy in 1993, the costs are projected to be recovered through the transmission and ancillary services rates with a greater than 95 percent probability that associated United States (U.S.) Treasury payments will be made on time and in full over the twoyear rate period. See Chapter 2.2.

Table 1 shows projected net revenues from proposed rates and summarizes the revised revenue test over the two-year rate period. In combination with other risk mitigation tools, these net revenues are set at the lowest level necessary to achieve BPA's cost recovery objectives in the face of transmission-related risks. Table 2 shows planned transmission amortization repayments to the U.S. Treasury for each year of the rate test period.

### 1.2 Public Involvement Process

Concurrent with, but independent of preparing this rate proposal, BPA conducted a public process for customers and constituents to comment on planned capital spending and the expenses associated with supporting a reliable and safe transmission system. The results of these public meetings contributed to the Administrator's decisions on TS expense and capital spending levels for the FYs 2008-2009 rate period. See Chapter 2.1. The Administrator’s decisions have been reflected in the revenue requirements, including repayment studies, in this rate proposal.

## 2. SPENDING LEVEL DEVELOPMENT AND FINANCIAL POLICY

### 2.1 Development Process for Spending Levels

In May 2006, BPA began a public involvement process entitled "Programs in Review" (PIR). The purpose of PIR was to review and discuss transmission program spending levels for FYs 2008 and 2009. The PIR process was designed to provide the region an overview of, and context for, major policy issues surrounding BPA's Transmission Services's (TS's) expense and capital programs.

BPA conducted five regional workshops, in May and June 2006, to ask for customer input during the PIR public process. The public process solicited customer comments on TS’s proposed FYs 2008 and 2009 program spending levels for transmission system operations, maintenance, and construction. This forum included a detailed discussion of transmission capital spending levels and planned transmission system improvements, upgrades and reinforcement projects. An additional technical workshop was held in Portland in July 2006 so staff could provide additional information regarding the transmission capital program.

PIR workshop participants were advised that public comments and concerns offered during the process would be considered in the Administrator's close-out letter providing his decision with regard to spending levels. The Administrator's spending level decisions in the PIR process then serve as the basis for the revenue requirements in this Study. Notices of the workshops were distributed widely to TS's customers and interested parties and posted on TS's website.

Workshop participants provided substantial oral and written comments with regard to TS's planned transmission capital spending and program expenditures.

The Administrator signed a letter on January 26, 2007, closing out the public process and including the Administrator’s decisions on TS program levels for FYs 2008 and 2009. See Appendix B. The Administrator's decisions have been reflected in the revenue requirements, including repayment studies, in this rate proposal.

### 2.2 Financial Risk and Mitigation

BPA adopted a long-term policy in its 1993 Final Rate Proposal that called for setting rates that build and maintain financial reserves sufficient for the agency to achieve a 95 percent Treasury Payment Probability (TPP) of making the end-of-year U.S. Treasury payments in full and on time during the rate period. See 1993 Final Rate Proposal, Administrator’s Record of Decision, WP-93-A-02, p. 72.

In this rate proposal, BPA has analyzed its transmission risks and has determined that this rate proposal achieves the 95 percent probability standard for the transmission function for the twoyear rate period. To achieve this level of TPP, the following risk mitigation "tools" are considered in the rate proposal.
(1) Starting financial reserves Starting financial reserves include cash and the deferred borrowing balance attributed to the transmission function as of the beginning of the rate period. BPA's risk analysis uses a Monte Carlo model to simulate FY 2007
reserves separately for each of 5000 games. The most-likely value from the resultant distribution for the starting FY 2008 reserves is $\$ 287$ million.
(2) Planned Net Revenue for Risk (PNRR) PNRR is a component of the revenue requirement that is added to annual expenses if reserves are not sufficient for risk mitigation purposes. PNRR adds to cash flows so that financial reserves are sufficient to mitigate short-run volatility in expenses and revenues and achieve the TPP goal. No PNRR is required to meet the TPP standard in this rate proposal.
(3) Two-Year Rate Period BPA is proposing to adopt rates for a two-year rate period. The ability to revise rates after two years, or more frequently if need be, serves as an important risk mitigation tool for BPA's transmission function. By adopting a twoyear rate period, BPA limits the amount of risk that must be covered by financial reserves and PNRR.

### 2.2.1 Transmission Risk Analysis

To quantify the effects of risk on the finances of BPA's transmission function, BPA analyzes the effects of uncertainty in expenses and revenues on transmission cash flows using a Monte Carlo simulation method. See Figure 2. The analysis is used to estimate the probability of successful Treasury payment (on time and in full) for both years of the rate period. Successful Treasury payment is deemed to occur when the end-of-year financial reserves for the transmission function, after Treasury payments are made, are sufficient to cover the transmission function's liquidity reserves (formerly termed "working capital") requirement of \$20 million. The liquidity
reserves threshold in the amount of $\$ 20$ million is based on the historical monthly net cash flow patterns and monthly cash requirements for the transmission function.

The risk analysis covers the period FYs 2007 through 2009. Using this time frame permits analysis of the change in revenues, expenses, and accrual-to-cash adjustments that are expected to occur by the end of the rate period. The advantage to this approach is that financial reserves at the start of the next rate period (FYs 2008-2009) may be simulated, including the effects of uncertainty in current rate period cash flows, thus helping define the starting conditions for the next rate period.

The risk analysis model simulates financial reserves at the beginning of the FYs 2008-2009 rate period and estimates PNRR if reserves are not sufficient to meet BPA's TPP standard. Initial input values for point estimates of expenses come from the Study and the revenue inputs are from the revenue forecast and, when combined with inputs describing uncertainty in expenses and revenues, provide the basis for the initial estimate of PNRR. The PNRR, in turn, is provided as an input to the Study, raising the transmission revenue requirement and transmission rates if needed to raise TPP. This iterative process is continued until successive estimates of PNRR converge. See Documentation, TR-08-E-BPA-01A, Chapter 9.

### 2.2.2 Transmission Risk Analysis Model

The foundation of the risk analysis is a transmission financial spreadsheet model. Id. This model was developed to estimate the effects of risk and risk mitigation on end-of-year financial reserves and the likelihood of successful Treasury end-of-year payment for each year during the
rate period. Financial reserve levels at the end of each fiscal year determine whether BPA is able to meet its Treasury payment obligation. The model contains individual work sheets including: an input matrix of revenues and expenses, an income statement, a cash flow statement, accrual-to-cash adjustments, and individual work sheets for variables specified with uncertainty in the model. Parameters for the probability distributions were developed from historical data when available. When historical data were not available, or when the future is expected to be different from the past, BPA relied on the judgment of technical staff familiar with specific areas of transmission risk as the basis for forecasting the uncertainty in those risks.

### 2.3 Capital Funding

BPA transmission capital outlay projections for this proposal, based on Appendix B, are
$\$ 585.3$ million for the FY 2008-2009 rate period. These investments are:

- transmission programs (\$551.9 million);
- environmental program ( $\$ 10.6$ million);
- information technology projects (\$22.8 million).


### 2.3.1 Bonds Issued to the Treasury

Bonds issued to the U.S. Treasury will be the primary source of capital used to finance projected FYs 2008-2009 transmission capital program investments. Interest rates on bonds issued by BPA to the U.S. Treasury are set at market interest rates comparable to securities issued by other agencies of the U.S. Government. Interest rates on bonds projected to be issued are included in the Documentation, TR-08-E-BPA-01A, Chapter 6.

### 2.3.2 Federal Appropriations

This Study includes the original capital investments in the Federal transmission system that were financed by Congressional appropriations. Transmission investments were no longer funded by appropriations after the full implementation of BPA's self-funding authority under the Federal Columbia River Transmission System Act (the Transmission System Act). The Bonneville Appropriations Refinancing Act (Refinancing Act) was enacted in April 1996. This Refinancing Act reset the unpaid principal of all outstanding BPA appropriations and reassigned current market interest rates. New principal amounts were established at the beginning of FY 1997 at the present value of the principal and annual interest payments BPA would make to the Treasury for these obligations in the absence of the Refinancing Act, plus $\$ 100$ million. Before implementation of the Refinancing Act there was $\$ 1,461.9$ million in BPA appropriations outstanding. After the implementation of the Refinancing Act, $\$ 1,075.4$ million in BPA appropriations was outstanding. The Refinancing Act restricted prepayment of the new principal to $\$ 100$ million in the FY 1997-2001 period. Other repayment terms were unaffected.

### 2.3.3 Use of Reserves

In this rate period, BPA will rely on $\$ 15$ million per year from Transmission cash reserves to fund capital investments. This amount will be drawn from reserves projected to be available in the Rate Period.

### 2.3.4 Non-Federal Payment Obligations

The transmission revenue requirements reflect two forms of non-Federal payment obligations. The first form is a lease-purchase arrangement for capitalized asset purchases. BPA entered into
a transaction in 2004 with the Northwest Infrastructure Financing Corporation (NIFC), a subsidiary of JH Management, to provide for the construction of the 500 kV Schultz-Wautoma transmission line. BPA will make semi-annual lease payments for thirty years, concluding with a single payment for the principal due on the bonds issued by NFIC. BPA will have the option of purchasing the line at the end of the lease. During the term of the lease, TS will operate the Schultz-Wautoma line and provide transmission and ancillary services over the facilities. Additional lease transactions are not forecast for the Rate Period.

The second form of non-Federal payment obligations included in the revenue requirements consists of the functional reassignment to TS of debt service (interest and principal) payment obligations associated with non-Federal Energy Northwest (EN) bonds. This reassignment is a result of BPA's Debt Optimization Program, which refinances and repays existing EN bonds before they come due and uses the revenues made available from such refinancing to replenish or create opportunities to replenish BPA's Treasury borrowing authority by retiring additional Treasury obligations in amounts equal to the amount of principal of the new EN bonds. When Treasury obligations associated with transmission investments are repaid under the Debt Optimization Program, the debt service obligation associated with new EN debt in equivalent principal amounts is assigned to the TS. The revenue requirements reflect refinancing actions that have occurred through 2006. No additional future refinancing activities are forecast for the rate period in the study.

For specific calculations regarding non-Federal payment obligations, see the Documentation, TR-08-E-BPA-01A, Chapter 7.

### 2.3.5 Large Generator Interconnection Agreements (LGIA)

 BPA amended its Open Access Transmission Tariff by adopting the LGIA in voluntary compliance with FERC Orders 2003 and 2003A. Under the LGIA, interconnection customers finance the cost of Network Upgrades needed to interconnect their generating facilities to BPA's transmission system, if BPA, as the transmission owner/provider, does not provide the funding. BPA requires the interconnection customer to provide upfront payments in an amount sufficient to cover the cost of construction. These up-front payments are then returned to the interconnection customer in the form of transmission credits, which are used to offset charges for eligible transmission service in a customer's bill. This Study includes a forecast of the transmission credits and interest expense associated with each LGIA project, as well as the one non-LGIA transmission project. See Documentation, TR-08-E-BPA-01A, Chapter 13 for detail on the associated transmission credits.
## 3. DEVELOPMENT OF REPAYMENT STUDIES

Repayment studies are performed as the first step in determining revenue requirements. The studies establish the schedule of annual U.S. Treasury amortization for the rate test period and the resulting interest payments.

In this Study, as in the previous transmission rate filing, the repayment period has been set at 35 years. This study horizon reflects the fact that bonds are not issued for terms longer than 35 years and that the outstanding appropriations and bonds in the transmission system are fully repaid within this period. It also is consistent with the estimated average service life of transmission system plant (40 years) in that it does not exceed that average lifetime. The Revenue Requirement Study includes the results of transmission repayment studies for each year in the rate test period, FYs 2008 and 2009. In conducting the repayment studies, BPA includes outstanding and projected transmission repayment obligations for Congressional appropriations and bonds issued to the U.S. Treasury. Funding for replacements projected during the repayment period also is included in the repayment study, consistent with the requirements of RA 6120.2. See Chapter 5.

Historical BPA appropriations are scheduled to be repaid within the expected useful life of the associated facility or 50 years, whichever is less. Actual bonds issued by BPA to the Treasury may be for terms ranging from 3 to 40 years, taking into account the estimated average service lives for associated investments and prudent financing and cash management factors. In the repayment studies, all projected bonds have a term of 35 years for transmission investment and

15 years for environment investment. Some bonds are issued with a provision that allows the bond to be called after a certain time, typically five years. Bonds also may be issued with no early call provision. Early retirement of eligible bonds requires that BPA pay a bond premium to the Treasury. The premium that must be paid decreases with the age of the bond, and is equivalent, in total, to a fixed premium and a reduced interest rate. This reduced effective interest rate enters into the comparison with other Federal investments and obligations to determine which should be repaid first. Bonds are issued to finance BPA transmission and environment investments and are repaid within the provisions of each bond agreement with the Treasury.

The streams of annual debt service pertaining to non-Federal payment obligations also are included as fixed obligations that the repayment study takes into account in establishing the overall levelized debt service. This reflects the priority of revenue application in DOE Order RA 6120.2 in which these obligations have a higher priority of debt repayment. Therefore, the study scheduled the repayment of Federal debt around these obligations.

Based on these parameters, the repayment study establishes a schedule of planned Federal amortization payments and resulting gross Federal interest expense by determining the lowest levelized debt service stream necessary to repay all transmission obligations within the required repayment period. See repayment program tables in Appendix A. Further discussion of the repayment program is included in the Documentation, TR-08-E-BPA-01A, Chapter 12. Chapter 5 of this Study explains repayment policies and requirements.

## 4. TRANSMISSION REVENUE REQUIREMENTS

This chapter explains the cost accounting formats used to develop the revenue requirements for FYs 2006 and 2007. Section 4.1.1 provides a line-by-line description of the Revenue Requirement Income Statement and Section 4.1.2 provides a line-by-line description of the Revenue Requirement Statement of Cash Flows.

### 4.1 Revenue Requirement Format

For each year of a rate test period, BPA prepares two tables that reflect the process by which revenue requirements are determined. The Income Statement includes projections of Total Expenses, Planned Net Revenues for Risk, and, if necessary, a Minimum Required Net Revenues component. The Statement of Cash Flows shows the analysis used to determine Minimum Required Net Revenues and the cash available for risk mitigation.

The Income Statement (Table 3 of this Study) displays the components of the annual revenue requirements, which include Total Operating Expenses (Line 6), Net Interest Expense (Line 16), Minimum Required Net Revenues (Line 18), and Planned Net Revenues for Risk (Line 19). The sum of these four major components is the Total Revenue Requirement (Line 21) for each year of the rate period.

The Minimum Required Net Revenues (Table 3, Line 18) result from an analysis of the Statement of Cash Flows (Table 4 of this Study). Minimum Required Net Revenues may be necessary to ensure that revenue requirements are sufficient to cover all cash requirements,
|including annual amortization of the Federal investment as determined in the transmission repayment studies.

The Statement of Cash Flows (Table 4) analyzes annual cash inflows and outflows. Cash Provided by Current Operations (Line 10), driven by the Expenses Not Requiring Cash shown in Lines 4, 5 and 6, must be sufficient to compensate for the difference between Cash Used for Capital Investments (Line 14) and Cash From Treasury Borrowing (Line 20). If cash provided by Current Operations is not sufficient, Minimum Required Net Revenues (Line 2) must be included in revenue requirements to accommodate the shortfall, yielding at least a zero Annual Increase in Cash (Line 21). The Minimum Required Net Revenues shown on the Statement of Cash Flows (Line 2) then is incorporated in the Income Statement (Table 3, Line 18).

### 4.1.1 Income Statement

Below is a line-by-line description of the components in the Income Statement (Table 3). The Documentation, TR-08-E-BPA-01A, provides additional information on the development and use of the data contained in the tables.

Operation and Maintenance (Line 2). Operation and Maintenance represents FCRTS O\&M expenses incurred by BPA. Specific O\&M expenses include transmission scheduling, transmission marketing, transmission system operations, transmission system maintenance, transmission system development, environment, non-Federal transmission arrangements, leases, TS general and administrative, TS support services, Civil Service Retirement System pension
expense, and corporate administrative and support services. See Documentation, TR-08-E-BPA01A, Chapter 2.

Transmission Acquisition \& Ancillary Services (Line 3). Inter-business line expenses, resulting from functional separation, and ancillary services products, include the PBL generation inputs to ancillary services, station service and remedial action schemes, and the cost of Corps of Engineers and Bureau of Reclamation transmission facilities serving the network and utility delivery segments. See Documentation, TR-08-E-BPA-01A, Chapter 2.

Non-Federal Projects Debt Service (Line 4). Customer prepayments for Large Generator Interconnection Agreements (LGIA) are returned to customers through credits for transmission service. The amount returned is composed of the prepayment plus interest accrued on the outstanding credit balance. These projects also accrue Allowance for Funds Used During Construction (AFUDC). Non-Federal Projects Debt Service is the sum of the interest accrued during the year on all outstanding LGIA credit balances and AFUDC. See Documentation, TR-08-E-BPA-01A, Chapter 13.

Depreciation \& Amortization (Line 5). Depreciation is the annual capital recovery expense associated with FCRTS plant-in-service. BPA transmission and general plant are depreciated by the straight-line method of calculation, using the remaining life technique. Amortization refers to the annual capital recovery expense for other deferred Transmission assets. See Documentation, TR-08-E -BPA-01A, Chapter 3.

Total Operating Expenses (Line 6). Total Operating Expenses is the sum of the above expenses (Lines 2 through 4).

Debt Service Reassignment Interest (Line 8). Debt service reassignment interest consists of the interest component of the debt service reassigned to TS through the Debt Optimization Program. See Documentation, TR-08-E -BPA-01A, Chapter 7.

Interest on Appropriated Funds (Line 10). Interest on Appropriated Funds consists of interest on the appropriations BPA received prior to the full implementation of BPA's selffinancing authority and is determined in the transmission repayment studies. See Documentation, TR-08-E-BPA-01A, Chapter 2.

Interest on Long-Term Debt (Line 11). Interest on long-term debt includes interest on bonds that BPA issues to the Treasury to fund investments in transmission plant, environment, general plant supportive of transmission, and capital equipment. Such interest expense is determined in the transmission repayment studies. Any payments of call premiums for bonds projected to be amortized are included in this line. See Documentation, TR-08-E-BPA-01A, Chapter 2.

Interest Income (Line 12). Interest income also is computed on the projected year-end cash balances in the BPA fund attributable to the transmission function that carries over into the next year. It is credited against bond interest. Also included is an interest income credit calculated in the transmission repayment studies on funds to be collected during each year for
payments of Federal interest and amortization at the end of the fiscal year. A further explanation of the calculation of the interest credit computed within the transmission repayment studies is included in Appendix A. See Documentation, TR-08-E-BPA-01A, Chapter 4.

Amortization of Capitalized Bond Premiums (Line 13). When a bond issued to the Treasury is refinanced, any call premium resulting from early retirement of the original bond is capitalized and included in the principal of the new bond. The capitalized call premium then is amortized over the term of the new bond. The annual amortization is a non-cash component of interest expense. See Documentation, TR-08-E-BPA-01A, Chapter 2.

Capitalization Adjustment (Line 14). Implementation of the Refinancing Act entailed a change in capitalization on BPA's financial statements. Outstanding appropriations attributed to the transmission function were reduced by $\$ 470$ million as a result of the refinancing. The reduction is recognized annually over the remaining repayment period of the refinanced appropriations. The annual recognition of this adjustment is based on the increase in annual interest expense resulting from implementation of the Act, as shown in repayment studies for the year of the refinancing transaction (1997). The capitalization adjustment is included on the income statement as a non-cash, contra-expense. See Documentation, TR-08-E-BPA-01A, Chapter 2.

Allowance for Funds Used During Construction (AFUDC) (Line 15). AFUDC is a credit against interest on long-term debt (Line 10). This non-cash reduction to interest expense reflects an estimate of interest on the funds used during the construction period of facilities that
are not yet in service. AFUDC is capitalized along with other construction costs and is recovered through rates over the expected service life of the related plant as part of the depreciation expense after the facilities are placed in service.

Net Interest Expense (Line 16). Net Interest Expense is computed as the sum of Debt Service Reassignment Interest (line 8), Interest on Appropriated Funds (Line 10), Interest on Long-Term Debt (Line 11), Interest Income (Line 12), Amortization of Capitalized Bond Premiums (Line 13), Capitalization Adjustment (Line 14), and AFUDC (Line 15).

Total Expenses (Line 17). Total Expenses are the sum of Total Operating Expenses (Line 6) and Net Interest Expense (Line 16).

Minimum Required Net Revenues (Line 18). Minimum Required Net Revenues, an input from Line 2 of the Statement of Cash Flows (Table 4), may be necessary to cover cash requirements in excess of accrued expenses. An explanation of the method used for determining the Minimum Required Net Revenues is included in Section 4.1.2 below.

Planned Net Revenues for Risk (Line 19). Planned Net Revenues for Risk is the amount of net revenues, if any, to be included in rates for financial risk mitigation. There are no Planned Net Revenues for Risk included in the Final Rate Proposal. Starting TS reserves in FY 2008 are projected to be sufficient to mitigate risk in FYs 2008 and 2009.

Total Planned Net Revenues (Line 20). Total Planned Net Revenues is the sum of Minimum Required Net Revenues (Line 18) and Planned Net Revenues for Risk (Line 19).

Total Revenue Requirement (Line 21). Total Revenue Requirement is the sum of Total Expenses (Line 17) and Total Planned Net Revenues (Line 20).

### 4.1.2 Statement of Cash Flows.

Below is a line-by-line description of each of the components in the Statement of Cash Flows (Table 4). The Documentation, TR-08-E-BPA-01A, provides additional information related to the use and development of the data contained in the cash flow table.

Minimum Required Net Revenues (Line 2). Determination of this line is a result of annual cash inflows and outflows shown on the Statement of Cash Flows. Minimum Required Net Revenues may be necessary so that the Cash Provided By Current Operations (Line 10) will be sufficient to cover the planned amortization payments (the difference between Lines 14 and 20) without causing the Annual Increase (Decrease) in Cash (Line 21) to be negative. The Minimum Required Net Revenues amount determined in the Statement of Cash Flows is incorporated in the Income Statement (Table 3, Line 18).

Depreciation \& Amortization (Line 4). Depreciation is from the Income Statement (Table 3, Line 5). It is a negative item included in computing Cash Provided By Current Operations (Table 4, Line 10) because it is a non-cash expense of the FCRTS.

Non-Federal Projects Debt Service (Line 5). Non-Federal Projects Debt Service is from the Income Statement (Table 3, Line 4). It is a non-cash expense..

Amortization of Capitalized Bond Premiums (Line 6). Amortization of Capitalized Bond Premiums, from the Income Statement (Table 3, Line 13), is a non-cash expense.

Capitalization Adjustment (Line 7). The Capitalization Adjustment, from the Income Statement (Table 3, Line 14), is a non-cash (contra) expense.

Drawdown of Cash Reserves for Capital Funding (Line 8). The Drawdown of Cash Reserves for Capital Funding refers to the use of cash accumulated from transmission revenues in prior rate periods to fund capital expenditures in each year of the rate period.

Accrual Revenues (AC Intertie/Fiber) (Line 9). BPA accounts for the AC Intertie nonFederal capacity ownership lump-sum payments received in FY 1995 as unearned revenues that are recognized as annual accrued revenues over the estimated average service life of the associated transmission facilities. Similarly, some leases of fiber optic capacity have included up-front payments, the annual accrued revenues for which are being recognized over the life of the particular contract. The annual accrual revenues, which are part of the total revenues recovering the FCRTS revenue requirement, are included here as a non-cash adjustment to cash from current operations. In addition, LGIA capital projects are included in this category because customers provide an upfront payment for construction of transmission facilities that is returned to them through credits for transmission service.

Cash Provided By Current Operations (Line 10). Cash Provided By Current Operations, the sum of Lines $2,4,5,6,7,8$, and 9 is available for the year to satisfy cash requirements.

Investment in Utility Plant (Line 13). Investment in Utility Plant represents the annual increase in capital expenditures for additions and replacements to the transmission system funded by Treasury bonds or available cash reserves. See Chapter 2 of this Study.

Cash Used for Capital Investments (Line 14). Cash Used for Capital Investments is the sum of investments in utility plant.

Increase in Long-Term Debt (Line 16). Increase in Long-Term Debt reflects the new bonds issued by BPA to the U.S. Treasury to fund the construction and environmental capital equipment programs. Also included in this amount may be any notes issued to the U.S.

Treasury. See Documentation, TR-08-E-BPA-01A, Chapter 6.

Debt Service Reassignment Principal (Line 17). Debt Service Reassignment Principal is the principal component of the debt service obligation reassigned to TS through the Debt Optimization Program. See Chapter 2.3.4.

Repayment of Long-Term Debt (Line 18). Repayment of Long-Term Debt is BPA's planned repayment of outstanding bonds issued by BPA to the U.S. Treasury, as determined in the repayment studies. See Documentation, TR-08-E-BPA-01A, Chapter 2.

Repayment of Capital Appropriations (Line 19). Repayment of Capital
Appropriations represents projected amortization of outstanding BPA appropriations (pre-selffinancing) as determined in the repayment studies. See Documentation, TR-08-E-BPA-01A, Chapter 2.

Cash From Treasury Borrowing and Appropriations (Line 20). Cash From Treasury Borrowing and Appropriations is the sum of Lines 16 through 19. This is the net cash flow resulting from increases in cash from new long-term debt and decreases in cash from repayment of long-term debt and capital appropriations.

Annual Increase (Decrease) in Cash (Line 21). Annual Increase (Decrease) in Cash, the sum of Lines 10, 14, and 20, reflects the annual net cash flow from current operations and investing and financing activities. Revenue requirements are set to meet all projected annual cash flow requirements, as included on the Statement of Cash Flows. A decrease shown in this line would indicate that annual revenues are insufficient to cover the year's cash requirements. In such cases, Minimum Required Net Revenues are included to offset such decrease. See discussion above of Minimum Required Net Revenues (Line 2).

Planned Net Revenues For Risk (Line 22). Planned Net Revenues For Risk reflects the amounts included in revenue requirements to meet BPA’s risk mitigation objectives (from Table 3, Line 19.)

Total Annual Increase (Decrease) in Cash (Line 23). Total Annual Increase
(Decrease) in Cash, the sum of Lines 21 and 22, is the total annual cash that is projected to be available to add to BPA's cash reserves.

### 4.2 Current Revenue Test

Consistent with RA 6120.2, the continuing adequacy of existing rates must be tested annually. The current revenue test determines whether the revenues expected from current rates can continue to meet cost recovery requirements.

For the rate test period, the demonstration of the adequacy of current rates is shown on Tables 5 and 6. Table 5 is a pro forma income statement for each year. Table 6, Statement of Cash Flows, tests the sufficiency of the resulting Net Revenues from Table 5 (Line 17) for making the planned annual amortization payments. The Total Annual Increase (Decrease) in Cash (Table 6, Line 20) must be at least zero to demonstrate the adequacy of the projected revenues to cover all cash payment requirements. The current revenue test shows that current rates are sufficient to satisfy cost recovery requirements in the rate period.

Table 7 shows the adequacy of current rates to satisfy cost recovery requirements over the 35year repayment period. The focal point of this table is the Net Position (Column K), which is the amount of funds provided by revenues from current rates that remain after meeting annual expenses requiring cash for the rate period and repayment of the Federal investment. Thus, if the Net Position is zero or greater in each year of the rate approval period through the repayment period, the projected revenues from current rates demonstrate BPA's ability to repay the Federal
investment in the FCRTS within the allowable time. As shown in Column K, the Net Position results are positive for each year of the rate approval period and in each year of the repayment period.

### 4.3 Revised Revenue Test

Consistent with RA 6120.2, the adequacy of proposed rates must be demonstrated. The revised revenue test determines whether the revenues projected from proposed rates will meet cost recovery requirements as well as the Treasury Payment Probability risk goal for the rate approval period. The revised revenue test was conducted using the forecast of revenues under proposed rates. See Knudsen and Woerner, TR-08-E-BPA-04, for the revenue forecast under current and proposed rates. The results of the revised revenue test demonstrate that proposed rates are adequate to fulfill the basic cost recovery requirements for the rate test period of FYs 2006 and 2007.

For the rate test period, the demonstration of the adequacy of proposed rates is shown on Tables 8 and 9. Table 8 presents pro forma income statements for each year. Table 9, Statement of Cash Flows, tests the sufficiency of the resulting Net Revenues from Table 8 (Line 17) for making the planned annual amortization. This is demonstrated by the Total Annual Increase (Decrease) in Cash (Table 9, Line 20). The annual cash flow (Line 20) must be at least zero to demonstrate the adequacy of the projected revenues to cover all cash payment requirements.

### 4.4 Repayment Test at Proposed Rates

Table 10 demonstrates whether projected revenues from proposed rates are adequate to meet the
cost recovery criteria of RA 6120.2 over the repayment period. The data are presented in a format consistent with the revised revenue tests (Tables 8 and 9) and separate accounting analyses. The focal point of this table is the Net Position (Table 10, Column K), which is the amount of funds provided by revenues that remain after meeting annual expenses requiring cash for the rate period and repayment of the Federal investment. Thus, if the Net Position is zero or greater in each year of the rate approval period through the repayment period, the projected revenues demonstrate BPA's ability to repay the Federal investment in the FCRTS within the allowable time. As shown in Column K, the resulting Net Position is greater than zero for each year of the rate approval period and in each year of the repayment period.

The historical data on this table have been taken from BPA's separate accounting analysis. The rate test period data have been developed specifically for this rate filing. The repayment period data are presented in a manner consistent with the requirements of RA 6120.2

## 5. LEGAL REQUIREMENTS AND POLICIES

This chapter summarizes the statutory framework that guides the development of BPA's transmission revenue requirement and the recovery of BPA's transmission costs and expenses among the various users of the FCRTS, and the repayment policies that BPA follows in the development of its revenue requirement.

### 5.1 Development of BPA's Revenue Requirements

BPA's revenue requirements are governed by three main legislative acts: the Flood Control Act of 1944, P.L. No. 78-534, 58 Stat. 890, amended 1977; the Federal Columbia River Transmission System Act (Transmission System Act) of 1974, P.L. No. 93-454, 88 Stat. 1376; and the Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power Act), P.L. No. 96-501, 94 Stat. 2697. Other statutory provisions that guide the development of BPA's revenue requirements include the Federal Power Act, as amended by the Energy Policy Act of 1992 (EPA-92), P.L. No. 102-486. 106 Stat. 2776; and the Omnibus Consolidated Rescissions and Appropriations Act of 1996, P.L. No. 104-134, Stat. 132.

DOE Order "Power Marketing Administration Financial Reporting", RA 6120.2, issued by the Secretary of Energy provides guidance to Federal power marketing agencies regarding repayment of the Federal investment. In addition, policies issued by the FERC provide guidance on transmission pricing.

### 5.1.1 Legal Requirement Governing BPA's Revenue Requirement.

BPA constructs, operates, and maintains the FCRTS within the Pacific Northwest and makes improvements or replacements thereto as are appropriate and required to: (a) integrate and transmit electric power from existing or additional Federal or non-Federal generating units; (b) provide service to BPA customers; (c) provide inter-regional transmission facilities; and (d) maintain the electrical stability and reliability of the Federal system. Section 4 of the Federal Columbia River Transmission System Act (Transmission System Act), 16 U.S.C. §838b. The transmission system is built to encourage the widest possible use of all electric energy. Section 5, Flood Control Act, 16 U.S.C. §825s.

BPA's rates must be set in a manner that ensures revenue levels sufficient to recover its costs. This requirement was first set forth in Section 7 of the Bonneville Project Act, 16 U.S.C. § 832 f (as amended 1977) which provided that:

Rate schedules shall be drawn having regard to the recovery (upon the basis of the application of such rate schedules to the capacity of the electric facilities of the Bonneville project) of the cost of producing and transmitting such electric energy, including the amortization of the capital investment over a reasonable period of years.

This cost recovery principle was repeated for Army reservoir projects in Section 5 of the Flood Control Act of 1944, 16 U.S.C. 825s (as amended 1977). In 1974, Section 9 of the Transmission System Act, 16 U.S.C, § 838g, expanded the cost recovery principle so that BPA's rates also would be set to recover:
payments provided [in the Administrator's annual budget], and (3) at levels to produce such additional revenues as may be required, in the aggregate with all other revenues of the Administrator, to pay when due the principal of, premiums, discounts, and expenses in connection with the issuance of and interest on all bonds issued and outstanding pursuant to [this Act,] and amounts required to establish and maintain reserve and other funds and accounts established in connection therewith.

The Northwest Power Act reiterates and clarifies the cost recovery principle. Section 7(a)(1) of the Northwest Power Act, 16 U.S.C. § 839e(a)(1), provides that:

The Administrator shall establish, and periodically review and revise, rates for the sale and disposition of electric energy and capacity and for the transmission of non-Federal power. Such rates shall be established and, as appropriate, revised to recover, in accordance with sound business principles, the costs associated with the acquisition, conservation, and transmission of electric power, including the amortization of the Federal investment in the Federal Columbia River Power System (including irrigation costs required to be repaid out of power revenues) over a reasonable period of years and the other costs and expenses incurred by the Administrator pursuant to this Act and other provisions of law. Such rates shall be established in accordance with Sections 9 and 10 of the Federal Columbia River Transmission System Act (16 U.S.C. § 838), Section 5 of the Flood Control Act of 1944, and the provisions of this Chapter.

The Northwest Power Act also provides that FERC's confirmation and approval of BPA rates shall assure that the revenue requirement is adequate to recover BPA's costs and ensure timely
U.S. Treasury repayments. Section 7(a)(2), 16 U.S.C. § 839e(a)(2), provides:

Rates established under this section shall become effective only, except in the case of interim rules as provided in subsection (i)(6), upon confirmation and approval by the Federal Energy Regulatory Commission upon a finding by the Commission, that such rates:
(A) are sufficient to assure repayment of the Federal investment in the Federal Columbia River Power System over a reasonable number of years after first meeting the Administrator's other costs.
(B) are based upon the Administrator's total system costs; and
(C) insofar as transmission rates are concerned, equitably allocate the costs of the Federal transmission system between Federal and non-Federal power utilizing such system.

In October 1992, Congress amended the Federal Power Act to allow FERC to order a transmitting utility, including BPA, to provide transmission services (including the enlargement of transmission capacity necessary to provide such services) to an applicant. Section 211(a) of the Federal Power Act, 16 U.S.C. § 824j(a). In applying the Federal Power Act provisions to FERC-ordered transmission service on the FCRTS, section 212(i), 16 U.S.C. § $824 \mathrm{k}(\mathrm{i})(1)(\mathrm{B})$, provides that FERC shall assure that
(I) the provisions of otherwise applicable Federal laws shall continue in full force and effect and shall continue to be applicable to the system; and
(ii) the rates for the transmission of electric power on the system shall be governed only by such otherwise applicable provisions of law and not by any provision of section 824i of this title, 824j of this title, this section, and section 8241 of this title, except that no rate for the transmission of power on the system shall be unjust, unreasonable, or unduly discriminatory or preferential , as determined by the Commission

In its final rule, Promoting Wholesale Competition Through Open Access non-Discriminatory transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, Order No. 888 (Order 888), FERC Stats. \& Regs. Par.31,036 (1996), FERC established safe harbor protections for non-public utilities like BPA from FERC ordered transmission service under the Federal Power Act. See 18 CFR §35.28(e). The safe harbor provisions apply if FERC finds the non-public utility's open access transmission tariff is an acceptable reciprocity tariff. In determining whether the non-public utility's tariff is consistent with FERC's comparability standards, FERC requires sufficient information to conclude that the non-public utility's rates associated with tariff service are comparable to the rates it charges others, and also requires separate rates be established for transmission and ancillary services. FERC Stats. \& Regs. Par.31,036, 31,761 (1996),

Development of the revenue requirement is a critical component of meeting the statutory cost recovery principles. The costs associated with FCRTS and associated services and expenses, as well as other costs incurred by the Administrator in furtherance of BPA's mission, are included in the Study.

### 5.1.2 The BPA Appropriations Refinancing Act.

As in the prior rate period, BPA's transmission rates for the FYs 2006-2007 rate period will reflect the requirements of the Refinancing Act, part of the Omnibus Consolidated Rescissions and Appropriations Act of 1996, P.L. No. 104-134, 110 Stat. 1321, enacted in April 1996. The Refinancing Act required that unpaid principal on BPA appropriations ("old capital investments") at the end of FY 1996 be reset at the present value of the principal and annual interest payments BPA would make to the U.S. Treasury for these obligations absent the Refinancing Act, plus $\$ 100$ million. 16 U.S.C. § 838l(b). The Refinancing Act also specified that the new principal amounts of the old capital investments be assigned new interest rates from the Treasury yield curve prevailing at the time of the refinancing transaction. 16 U.S.C. §8381(a)(6)(A).

The Refinancing Act restricts prepayment of the new principal for old capital investments to \$100 million during the first five years after the effective date of the financing. 16 U.S.C. § 8381(e). The Refinancing Act also specifies that repayment periods on new principal amounts may not be earlier than determined prior to the refinancing. 16 U.S.C. §8381(d).

The Refinancing Act also directs the Administrator to offer to provide assurance in new or existing power, transmission, or related service contracts that the Government would not increase the repayment obligations in the future. 16 U.S.C. §8381(i).

### 5.2 Repayment Requirements and Policies

### 5.2.1 Separate Repayment Studies.

Section 10 of the Transmission System Act, 16 U.S.C. §838h, and section 7(a)(2)(C) of the Northwest Power Act, 16 U.S.C. §839e(a)(2)(C), provide that the recovery of the costs of the Federal transmission system shall be equitably allocated between Federal and non-Federal power utilizing such system. In 1982, FERC first directed BPA to provide accounting and repayment statements for its transmission system separate and apart from the accounting and repayment statements for the Federal generation system. See 20 FERC $\mathbb{1} 61,142$ (1982). FERC required BPA to establish books of account for the FCRTS separate from its generation costs; explained that the FCRTS shall be comprised of all investments, including administrative and management costs, related to the transmission of electric power; and directed BPA to develop repayment studies for its transmission function separate from its generation function that set forth the date of each investment, the repayment date and the amount repaid from transmission revenues. See 26 FERC 【 61,096 (1984). FERC approved BPA’s methodology for separate repayment studies in 1984. 28 FERC 961,325 (1984).

BPA has prepared separate repayment studies for its transmission and generation functions since 1984. BPA therefore has developed the transmission revenue requirement with no change in this repayment policy.

### 5.2.2 Repayment Schedules.

The statutes applicable to BPA do not include specific directives for scheduling repayment of old capital appropriations and bonds issued to Treasury other than a directive that the Federal investment be amortized over a reasonable period of years. BPA's repayment policy has been established largely through administrative interpretation of its statutory requirements, with Congressional encouragement and occasional admonishment.

There have been a number of changes in BPA's repayment policy over the years concurrent with expansion of the Federal system and changing conditions. In general, current repayment criteria first were approved by the Secretary of the Interior on April 3, 1963. These criteria were refined and submitted to the Secretary and the Federal Power Commission (the predecessor agency to FERC) in support of BPA's rate filing in September 1965.

The repayment policy was presented to Congress for its consideration for the authorization of the Grand Coulee Dam Third Powerhouse in June 1966. The underlying theory of repayment was discussed in the House of Representatives’ Report related to authorization of this project, H.R. Rep. No. 1409, $89^{\text {th }}$ Cong., 2d Sess. 9-10 (1966). As stated in that report:

Accordingly, in a repayment study there is no annual schedule of capital repayment. The test of the sufficiency of revenues is whether the capital investment can be repaid within the overall repayment period established for each power project, each increment of investment in the transmission system, and each block of irrigation assistance. Hence, repayment may proceed at a faster or slower pace from year-to-year as conditions change.

This approach to repayment scheduling has the effect of averaging the year-to-year variations in costs and revenues over the repayment period. This results in a uniform cost per unit of power sold, and permits the maintenance of stable rates for extended periods. It also facilitates the orderly marketing of power and permits BPA's customers, which include both electric utilities and electro-process industries, to plan for the future with assurance.

The Secretary of the Interior issued a statement of power policy on September 30, 1970, setting forth general principles that reaffirmed the repayment policy as previously developed. The most pertinent of these principles was set forth in the Department of the Interior Manual, Part 730, Chapter 1:
A. Hydroelectric power, although not a primary objective, will be proposed to Congress and supported for inclusion in multiple-purpose Federal projects when . . . it is capable of repaying its share of the Federal investment, including operation and maintenance costs and interest, in accordance with the law.
B. Electric power generated at Federal projects will be marketed at the lowest rates consistent with sound financial management. Rates for the sale of Federal electric power will be reviewed periodically to assure their sufficiency to repay operating and maintenance costs and the capital investment within 50 years with interest that more accurately reflects the cost of money.

To achieve a greater degree of uniformity in repayment policy for all Federal power marketing agencies, the Deputy Assistant Secretary of the Department of the Interior (DOI) issued a memo on August 2, 1972, outlining:(1) a uniform definition of the commencement of the repayment
period for a particular project; (2) the method for including future replacement costs in repayment studies; and (3) a provision that the investment or obligation bearing the highest interest rate shall be amortized first, to the extent possible, while still complying with the prescribed repayment period established for each increment of investment.

A further clarification of the repayment policy was outlined in a joint memo of January 7, 1974, from the Assistant Secretary for Reclamation and Assistant Secretary for Energy and Minerals. This memo states that in addition to meeting the overall objective of repaying the Federal investment or obligations within the prescribed repayment periods, revenues shall be adequate, except in unusual circumstances, to repay annually all costs for $\mathrm{O} \& \mathrm{M}$, purchased power, and interest.

On March 22, 1976, the Department of the Interior issued Chapter 4 of Part 730 of the DOI Manual to codify financial reporting requirements for the Federal power marketing agencies. Included therein are standard policies and procedures for preparing system repayment studies.

BPA and other Federal power marketing agencies were transferred to the newly established Department of Energy (DOE) on October 1, 1977. See DOE Organization Act, 42 U.S.C. § 7101 et seq. (1994). The DOE adopted the policies set forth in Part 730 of the DOI Manual by issuing Interim Management Directive No. 1701 on September 28, 1977, which subsequently was replaced by RA 6120.2 issued on September 20, 1979, as amended on October 1, 1983.

The repayment policy outlined in DOE Order RA 6120.2, paragraph 12, provides that BPA's total revenues from all sources must be sufficient to:

1. Pay all annual costs of operating and maintaining the Federal system;
2. Pay the cost each fiscal year of obtaining power through purchase and exchange agreements, the cost for transmission services, and other costs during the year in which such costs are incurred;
3. Pay interest expense each year on the unamortized portion of the Federal investment financed with appropriated funds at the interest rates established for each Federal generating project and for each annual increment of such investment in the BPA transmission system, except that recovery of annual interest expense may be deferred in unusual circumstances for short periods of time;
4. Pay when due the interest and amortization portion on outstanding bonds sold to the U.S. Treasury; and
5. Repay:
a. each dollar of power investments and obligations in the Federal generating projects within 50 years after the projects become revenue producing, except as otherwise provided by law;
b. each annual increment of Federal transmission investments and obligations within the average service life of such transmission facilities or within a maximum of 50 years, whichever is less; and
c. the cost of each replacement of the Federal system within its service life up to a maximum of 50 years.
| While RA 6120.2 allows repayment period of up to 50 years, BPA has set due dates at no more than 40 years to reflect expected service lives of new transmission investment. The Refinancing Act overrides provisions in RA 6120.2 related to determining interest during construction and assigning interest rates to Federal investments financed by appropriations. This Act also contains provisions on repayment periods (due dates) for the refinanced appropriations investments. The Refinancing Act is discussed in section 5.1.2 of this Study. In addition, other sections within RA 6120.2 require that any outstanding deferred interest payments must be repaid before any planned amortization payments are made. Also, repayments are to be made by amortizing those Federal investments and obligations bearing the highest interest rate first, to the extent possible, while still completing repayment of each increment of Federal investment and obligation within its prescribed repayment period.

## TABLES

TABLE 1
PROJECTED NET REVENUES FROM PROPOSED RATES
(\$000s)

| Fiscal Year |  | Transmission |
| :---: | :--- | ---: |
| $\mathbf{2 0 0 8}$ | Projected Revenues From Proposed Rates | $\$ 765,703$ |
|  | Projected Expenses | $\$ 699,795$ |
|  | Net Revenues | $\$ 65,908$ |
| $\mathbf{2 0 0 9}$ | Projected Revenues From Proposed Rates | $\$ 775,819$ |
|  | Projected Expenses | $\$ 736,753$ |
|  | Net Revenues | $\$ 39,066$ |
|  | Average |  |
| FYs 2008-2009 | Projected Revenues From Proposed Rates | $\mathbf{\$ 7 7 0 , 7 6 1}$ |
|  | Projected Expenses | $\mathbf{\$ 7 1 8 , 2 7 4}$ |
|  | Net Revenues | $\mathbf{\$ 5 2 , 4 8 7}$ |

The TPP for the two year rate period is greater than 95\%.

Table 2

PLANNED REPAYMENTS TO U.S. TREASURY FYs 2008-2009 TRANSMISSION REPAYMENT STUDIES (\$000s)

| Fiscal <br> Year | Annual <br> Amortization |
| :---: | :---: |
| 2008 | $\$ 167,781$ |
| 2009 | $\$ 172,659$ |
| Total | $\$ 340,440$ |

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TABLE 3

## TRANSMISSION REVENUE REQUIREMENT INCOME STATEMENT (\$000s)



1/ SEE NOTE ON CASH FLOW TABLE.

TABLE 4

## TRANSMISSION REVENUE REQUIREMENT STATEMENT OF CASH FLOWS (\$000s)

|  | $\begin{gathered} \text { A } \\ \text { FY } 2008 \end{gathered}$ | $\begin{gathered} \text { B } \\ \text { FY } 2009 \end{gathered}$ |
| :---: | :---: | :---: |
| 1 CASH FROM CURRENT OPERATIONS: |  |  |
| 2 MINIMUM REQUIRED NET REVENUES 1/ | 29,301 | 31,335 |
| 3 EXPENSES NOT REQUIRING CASH: |  |  |
| 4 DEPRECIATION \& AMORTIZATION | 190,229 | 198,535 |
| 5 NON-FEDERAL PROJECTS DEBT SERVICE | 6,064 | 11,544 |
| 6 AMORTIZATION OF CAPITALIZED BOND PREMIUMS | 1,489 | 1,051 |
| 7 CAPITALIZATION ADJUSTMENT | $(18,968)$ | $(18,968)$ |
| 8 DRAWDOWN OF CASH RESERVES FOR CAPITAL FUNDING | 15,000 | 15,000 |
| 9 ACCRUAL REVENUES (AC INTERTIE/FIBER) | $(35,824)$ | $(43,390)$ |
| 10 CASH PROVIDED BY CURRENT OPERATIONS | 187,291 | 195,107 |
| 11 CASH USED FOR CAPITAL INVESTMENTS: |  |  |
| 12 INVESTMENT IN: |  |  |
| 13 UTILITY PLANT | $(305,318)$ | $(279,982)$ |
| 14 CASH USED FOR CAPITAL INVESTMENTS | $(305,318)$ | $(279,982)$ |
| 15 CASH FROM TREASURY BORROWING AND APPROPRIATIONS: |  |  |
| 16 INCREASE IN LONG-TERM DEBT | 290,318 | 264,982 |
| 17 DEBT SERVICE REASSIGNMENT PRINCIPAL | $(4,510)$ | $(7,449)$ |
| 18 REPAYMENT OF LONG-TERM DEBT | $(137,119)$ | $(128,480)$ |
| 19 REPAYMENT OF CAPITAL APPROPRIATIONS | $(30,662)$ | $(44,178)$ |
| 20 CASH FROM TREASURY BORROWING AND APPROPRIATIONS | 118,027 | 84,875 |
| 21 ANNUAL INCREASE (DECREASE) IN CASH | 0 | 0 |
| 22 PLANNED NET REVENUES FOR RISK | 0 | 0 |
| 23 TOTAL ANNUAL INCREASE (DECREASE) IN CASH | 0 | 0 |

1/ Line 21 must be greater than or equal to zero, otherwise net revenues will be added so that there are no negative cash flows for the year.

TABLE 5
CURRENT REVENUE TEST INCOME STATEMENT (\$000s)

|  | A | B |
| :--- | ---: | ---: |
|  | F | F 2008 | FY 2009

TABLE 6
CURRENT REVENUE TEST STATEMENT OF CASH FLOWS (\$000s)

|  | $\begin{gathered} \text { A } \\ \text { FY } 2008 \end{gathered}$ | $\begin{gathered} \text { B } \\ \text { FY } 2009 \end{gathered}$ |
| :---: | :---: | :---: |
| 1 CASH FROM CURRENT OPERATIONS: |  |  |
| 2 NET REVENUES | 67,175 | 40,344 |
| 3 EXPENSES NOT REQUIRING CASH: |  |  |
| 4 DEPRECIATION \& AMORTIZATION | 190,229 | 198,535 |
| 5 NON-FEDERAL PROJECTS DEBT SERVICE | 6,116 | 11,736 |
| 6 AMORTIZATION OF CAPITALIZED BOND PREMIUMS | 1,489 | 1,051 |
| 7 CAPITALIZATION ADJUSTMENT | $(18,968)$ | $(18,968)$ |
| 8 DRAWDOWN OF CASH RESERVES FOR CAPITAL FUNDING | 15,000 | 15,000 |
| 9 ACCRUAL REVENUES (AC INTERTIE/FIBER) | $(33,987)$ | $(41,075)$ |
| 10 CASH PROVIDED BY CURRENT OPERATIONS | 227,054 | 206,623 |
| 11 CASH USED FOR CAPITAL INVESTMENTS: |  |  |
| 12 INVESTMENT IN: |  |  |
| 13 UTILITY PLANT | $(305,318)$ | $(279,982)$ |
| 14 CASH USED FOR CAPITAL INVESTMENTS | $(305,318)$ | $(279,982)$ |
| 15 CASH FROM TREASURY BORROWING AND APPROPRIATIONS: |  |  |
| 16 INCREASE IN LONG-TERM DEBT | 290,318 | 264,982 |
| 17 DEBT SERVICE REASSIGNMENT PRINCIPAL | $(4,510)$ | $(7,449)$ |
| 18 REPAYMENT OF LONG-TERM DEBT | $(137,119)$ | $(128,480)$ |
| 19 REPAYMENT OF CAPITAL APPROPRIATIONS | $(30,662)$ | $(44,178)$ |
| 20 CASH FROM TREASURY BORROWING AND APPROPRIATIONS | 118,027 | 84,875 |
| 21 ANNUAL INCREASE (DECREASE) IN CASH | 39,763 | 11,515 |

TABLE 7
transmission revenues from current rates
TRANSMISSION REVENUES FROM CURRENT RATES
REVENUE REQUIREMENT AND REPAYMENT STUDY RESULTS THROUGH THE REPAYMENT PERIOD


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|  | A | в | c | D | E | F | G | н | 1 | J | к |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | PURCHASE |  |  |  |  | FUNDS |  |  |  |
|  |  | OPERATION \& | ExChange |  | NET | NET | NONCASH | FROM | AMORTIZATION | IRRIGATION | NET |
| Repayment | Revenues | maintenance | POWER |  | Interest | revenues | EXPENSES $1 /$ | operation | (REV REQ STUDY | amortization | Position |
| PERIOD | (STATEMENT A) | (STATEMENT E) | (STATEMENT E) | depreciation | (STATEMENT D) | (F=A-B-C-D-E) | (COLUMN D) | ( $\mathrm{H}=\mathrm{F}+\mathrm{G}$ ) | DOC, $\mathrm{V} 2, \mathrm{C} 3)$ | (statement C) | (K=H-1-J) |
| 2010 | 777,039 | 366,991 | 46,867 | 198,535 | 123,457 | 41,189 | 150,662 | 191,851 | 176,688 |  | 15,163 |
| 2011 | 777,039 | 366,991 | 46,823 | 198,535 | 121,676 | 43,014 | 150,662 | 193,676 | 178,513 |  | 15,163 |
| 2012 | 777,039 | 366,991 | 79,082 | 198,535 | 120,602 | 11,829 | 150,662 | 162,491 | 147,328 |  | 15,163 |
| 2013 | 777,039 | 366,991 | 169,584 | 198,535 | 121,990 | $(80,061)$ | 150,662 | 70,601 | 55,438 |  | 15,163 |
| 2014 | 777,039 | 366,991 | 149,585 | 198,535 | 127,692 | $(65,763)$ | 150,662 | 84,899 | 69,736 |  | 15,163 |
| 2015 | 777,039 | 366,991 | 151,276 | 198,535 | 133,878 | (73,641) | 150,662 | 77,021 | 61,858 |  | 15,163 |
| 2016 | 777,039 | 366,991 | 154,468 | 198,535 | 140,276 | $(83,232)$ | 150,662 | 67,430 | 52,267 |  | 15,163 |
| 2017 | 777,039 | 366,991 | 164,385 | 198,535 | 148,631 | $(101,503)$ | 150,662 | 49,159 | 33,996 |  | 15,163 |
| 2018 | 777,039 | 366,991 | 159,713 | 198,535 | 157,255 | $(105,455)$ | 150,662 | 45,207 | 30,044 |  | 15,163 |
| 2019 | 777,039 | 366,991 | 14,042 | 198,535 | 169,455 | 28,016 | 150,662 | 178,678 | 163,515 |  | 15,163 |
| 2020 | 777,039 | 366,991 | 28,621 | 198,535 | 170,238 | 12,654 | 150,662 | 163,316 | 148,153 |  | 15,163 |
| 2021 | 777,039 | 366,991 | 28,629 | 198,535 | 172,172 | 10,712 | 150,662 | 161,374 | 146,211 |  | 15,163 |
| 2022 | 777,039 | 366,991 | 28,635 | 198,535 | 172,997 | 9,881 | 150,662 | 160,543 | 145,380 |  | 15,163 |
| 2023 | 777,039 | 366,991 | 28,658 | 198,535 | 174,183 | 8,673 | 150,662 | 159,335 | 144,172 |  | 15,163 |
| 2024 | 777,039 | 366,991 | 22,667 | 198,535 | 176,585 | 12,261 | 150,662 | 162,923 | 147,760 |  | 15,163 |
| 2025 | 777,039 | 366,991 | 3,996 | 198,535 | 179,879 | 27,638 | 150,662 | 178,300 | 163,137 |  | 15,163 |
| 2026 | 777,039 | 366,991 | 3,926 | 198,535 | 187,314 | 20,273 | 150,662 | 170,935 | 155,772 |  | 15,163 |
| 2027 | 777,039 | 366,991 | 3,865 | 198,535 | 189,745 | 17,903 | 150,662 | 168,565 | 153,402 |  | 15,163 |
| 2028 | 777,039 | 366,991 | 3,813 | 198,535 | 186,587 | 21,113 | 150,662 | 171,775 | 156,610 |  | 15,165 |
| 2029 | 777,039 | 366,991 | 3,774 | 198,535 | 196,473 | 11,266 | 150,662 | 161,928 | 146,765 |  | 15,163 |
| 2030 | 777,039 | 366,991 | 3,742 | 198,535 | 200,017 | 7,755 | 150,662 | 158,417 | 143,254 |  | 15,163 |
| 2031 | 777,039 | 366,991 | 3,726 | 198,535 | 199,796 | 7,991 | 150,662 | 158,653 | 143,490 |  | 15,163 |
| 2032 | 777,039 | 366,991 | 3,733 | 198,535 | 208,180 | (400) | 150,662 | 150,262 | 135,099 |  | 15,163 |
| 2033 | 777,039 | 366,991 | 32,839 | 198,535 | 210,737 | $(32,062)$ | 150,662 | 118,600 | 103,437 |  | 15,163 |
| 2034 | 777,039 | 366,991 | 89,424 | 198,535 | 216,884 | $(94,794)$ | 150,662 | 55,868 | 40,705 |  | 15,163 |
| 2035 | 777,039 | 366,991 | $(2,709)$ | 198,535 | 226,058 | $(11,836)$ | 150,662 | 138,826 | 123,660 |  | 15,166 |
| 2036 | 777,039 | 366,991 | $(2,656)$ | 198,535 | 234,445 | $(20,276)$ | 150,662 | 130,387 | 115,224 |  | 15,163 |
| 2037 | 777,039 | 366,991 | $(2,594)$ | 198,535 | 239,791 | $(25,684)$ | 150,662 | 124,978 | 109,815 |  | 15,163 |
| 2038 | 777,039 | 366,991 | $(2,520)$ | 198,535 | 245,734 | $(31,701)$ | 150,662 | 118,961 | 103,798 |  | 15,163 |
| 2039 | 777,039 | 366,991 | $(2,451)$ | 198,535 | 252,726 | $(38,762)$ | 150,662 | 111,900 | 96,737 |  | 15,163 |
| 2040 | 777,039 | 366,991 | $(2,386)$ | 198,535 | 259,657 | $(45,758)$ | 150,662 | 104,905 | 89,742 |  | 15,163 |
| 2041 | 777,039 | 366,991 | $(2,326)$ | 198,535 | 267,425 | $(53,586)$ | 150,662 | 97,076 | 81,913 |  | 15,163 |
| 2042 | 777,039 | 366,991 | $(2,271)$ | 198,535 | 275,746 | $(61,962)$ | 150,662 | 88,700 | 73,534 |  | 15,166 |
| 2043 | 777,039 | 366,991 | $(2,220)$ | 198,535 | 284,711 | $(70,978)$ | 150,662 | 79,684 | 64,515 |  | 15,169 |
| 2044 | 777,039 | 366,991 | $(2,181)$ | 198,535 | 294,958 | $(81,264)$ | 150,662 | 69,398 | 54,235 |  | 15,163 |
| TRANSMISSIO |  |  |  |  |  |  |  |  |  |  |  |
| totals | 42,831,188 | 19,643,186 | 1,401,555 | 10,695,643 | 11,507,527 | $(416,722)$ | 8,788,719 | 9,356,053 | 6,387,142 | 0 | 866,269 |

1/CONSISTS OF DEPRECIATION PLUS ANY ACCOUNTING WRITE-OFFS INCLUDED IN EXPENSES.
2/CONSISTS OF AMORTIZATION (\$1,650) AND DEFERRAL PAYMENT (\$2,760).
3/CONSISTS OF AMORTIZATION ( $\$ 1,342$ ) AND DEFERRAL PAYMENT ( $\$ 190,952$ )
4/INCREASED BY 156,000 AC INTERTIE CAPACITY OWNERSHIP PAYMENT
5/REDUCED BY \$15,000 OF REVENUE FINANCING.

TABLE 8
REVISED REVENUE TEST INCOME STATEMENT (\$000s)

|  | A | B |
| :--- | ---: | ---: |
|  | FY |  |
| 1 | REVENUES FROM PROPOSED RATES | FY 2008 | FY 2009

TABLE 9
REVISED REVENUE TEST STATEMENT OF CASH FLOWS (\$000s)

|  | $\begin{gathered} \text { A } \\ \text { FY } 2008 \end{gathered}$ | $\begin{gathered} \text { B } \\ \text { FY } 2009 \end{gathered}$ |
| :---: | :---: | :---: |
| 1 CASH FROM CURRENT OPERATIONS: |  |  |
| 2 NET REVENUES | 65,908 | 39,066 |
| 3 EXPENSES NOT REQUIRING CASH: |  |  |
| 4 DEPRECIATION \& AMORTIZATION | 190,229 | 198,535 |
| 5 NON-FEDERAL PROJECTS DEBT SERVICE | 6,064 | 11,544 |
| 6 AMORTIZATION OF CAPITALIZED BOND PREMIUMS | 1,489 | 1,051 |
| 7 CAPITALIZATION ADJUSTMENT | $(18,968)$ | $(18,968)$ |
| 8 DRAWDOWN OF CASH RESERVES FOR CAPITAL FUNDING | 15,000 | 15,000 |
| 9 ACCRUAL REVENUES (AC INTERTIE/FIBER) | $(35,824)$ | $(43,390)$ |
| 10 CASH PROVIDED BY CURRENT OPERATIONS | 223,898 | 202,838 |
| 11 CASH USED FOR CAPITAL INVESTMENTS: |  |  |
| 12 INVESTMENT IN: |  |  |
| 13 UTILITY PLANT | $(305,318)$ | $(279,982)$ |
| 14 CASH USED FOR CAPITAL INVESTMENTS | $(305,318)$ | $(279,982)$ |
| 15 CASH FROM TREASURY BORROWING AND APPROPRIATIONS: |  |  |
| 16 INCREASE IN LONG-TERM DEBT | 290,318 | 264,982 |
| 17 DEBT SERVICE REASSIGNMENT PRINCIPAL | $(4,510)$ | $(7,449)$ |
| 18 REPAYMENT OF LONG-TERM DEBT | $(137,119)$ | $(128,480)$ |
| 19 REPAYMENT OF CAPITAL APPROPRIATIONS | $(30,662)$ | $(44,178)$ |
| 20 CASH FROM TREASURY BORROWING AND APPROPRIATIONS | 118,027 | 84,875 |
| 21 ANNUAL INCREASE (DECREASE) IN CASH | 36,607 | 7,730 |

TABLE 10
FEDERAL COLUMBIA RIVER POWER SYSTEM
TRANSMISSION REVENUES FROM PROPOSED RATES


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1/CONSISTS OF DEPRECIATION PLUS ANY ACCOUNTING WRITE-OFFS INCLUDED IN EXPENSES
2/CONSISTS OF AMORTIZATION ( $\$ 1,650$ ) AND DEFERRAL PAYMENT ( $\$ 2,760$ ).
3/CONSISTS OF AMORTIZATION (\$1,342) AND DEFERRAL PAYMENT (\$190,952).
IINCREASED BY 156,000 AC INTERTIE CAPACITY OWNERSHIP PAYMENT
5/REDUCED BY $\$ 15,000$ OF REVENUE FINANCING.

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## FIGURES

## FIGURE 1 TRANSMISSION REVENUE REQUIREMENT PROCESS



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Figure 2

## TBL Rate Case Risk Analysis - Flow Diagram



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## APPENDIX A

## Repayment Program Tables

## DESCRIPTION OF REPAYMENT PROGRAM TABLES

Table A. 1 shows the amortization results from the Transmission revised repayment studies for FYs 2008 and 2009, summarized by year for both due and discretionary bonds and appropriations.

Tables A.2, A through E, and Tables A.3, A through E, show the results of the Transmission repayment studies for FYs 2008 and 2009, respectively, using revenues from current rates. Table A. 4 provides the application of amortization through the repayment period for transmission based upon the revenues forecast using revised rates.

Tables A.2A and A.3A display the repayment program results for transmission for FYs 2008 and 2009. The first column shows the applicable fiscal year. The second column shows the total investment costs of the transmission projects through the cost evaluation period. See Chapter 3 of the Documentation for the Revenue Requirement Study, TR-08-E-BPA-01A. In the third column, forecasted replacements required to maintain the system are displayed through the repayment period. See Chapter 8 of Documentation for Revenue Requirement Study, TR-08-E-BPA-01A. The fourth column shows the cumulative dollar amount of the transmission investment placed in service. This is comprised of historical plant-in-service, planned replacements and additions to plant through the cost evaluation period, and replacements from the end of the cost evaluation period to the end of the repayment study period. In these studies all additional plant is assumed to be financed by bonds.

The fifth column displays scheduled amortization payments for transmission for each year of the repayment period. Unamortized transmission obligations, shown in the last column, are determined by taking the previous year's unamortized amount, adding any replacements, and subtracting amortization.

Tables A.2B and A.3B display planned principal payments by fiscal year for Federal transmission obligations. Shown on these tables are the principal payments associated with appropriations and BPA bonds.

Tables A.2C and A.3C show the planned interest payments by fiscal year for Federal transmission obligations. Shown on these tables are the interest payments associated with appropriations and BPA bonds.

Tables A.2D and A.3D show a summary of the Federal transmission principal and interest payments through the repayment period.

Tables A.2E and A.3E compare the schedule of unamortized Federal transmission obligations resulting from the transmission repayment studies to those obligations that are due and must be paid for each year of the repayment period. The Unamortized Investment column shows remaining obligations for each year of the repayment period and is identical to the data shown in the last column of Tables A.2A and A.3A. The Term Schedule column shows obligations that are due for each year. It should be noted that unamortized obligations are always less than the term schedule, indicating that planned repayments are in excess of repayment obligations, thereby satisfying repayment requirements. (The total of Unamortized Investment need not be zero at the end of the repayment period because of the replacements occurring subsequent to the cost evaluation period.)

Table A. 4 lists by year through the 35-year repayment period the application of the transmission amortization payments, consistent with the repayment studies, by project. The projected annual amortization payments on the transmission obligations are identified by the project name, inservice date, due date, and interest rate. The amount of the obligation is shown as both the original gross amount due and the net amount after all prior amortization payments.

TABLE A. 1
TRANSMISSION AMORTIZATION
FY 2008-2009
(\$000s)

| Maturing/Due |  |  |
| :---: | :---: | ---: |
| Bonds | 2008 | 137,119 |
|  | 2009 | 128,480 |
|  |  | 265,599 |
| Appropriations | 2008 | 10,913 |
|  | 2009 | 9,889 |
|  |  | 20,802 |
| TOTAL DUE |  | $\mathbf{2 8 6 , 4 0 1}$ |
|  |  |  |


| Scheduled But Not Yet Due |  |  |
| :---: | :---: | ---: |
| Bonds |  |  |
|  | 2008 | 0 |
|  | 2009 | 0 |
| Appropriations |  | 0 |
|  | 2008 | 19,749 |
|  | 34,289 |  |
| TOTAL DISCRETIONARY |  | 54,039 |
|  |  | 54,039 |


| Total by Year |  |  |
| :---: | :---: | :---: |
| Bonds |  |  |
|  | 2008 | 137,119 |
|  | 2009 | 128,480 |
|  |  | 265,599 |
| Appropriations |  |  |
|  | 2008 | 30,662 |
|  | 2009 | 44,178 |
|  |  | 74,841 |
| TOTAL AMORTIZATION | 2008 | 167,781 |
|  | 2009 | 172,658 |
|  |  | 340,440 |

## BONNEVILLE POWER ADMINISTRATION

OCTOBER 1, 2006 - SEPTEMBER 30, 2008 COST EVALUATION PERIOD
Transmission 2008 Initial Proposal
Table A.2A: Transmission Investments Placed in Service (\$000s) (FY 2008)

| Investment Placed in Service |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Initial Project | Replacements | Cumulative Amount in Service | Amortization | Discretionary <br> Amortization | UnAmortized Investment |
| 09/30/2006 | 2,288,707.00 | - | 2,288,707.00 | - | - | 2,288,707.00 |
| 09/30/2007 | 239,010.00 | - | 2,527,717.00 | 101,117.00 | 69,183.00 | 2,357,417.00 |
| 09/30/2008 | 290,318.00 | - | 2,818,035.00 | 148,032.00 | 19,749.25 | 2,479,953.75 |
| 09/30/2009 | - | 131,758.00 | 2,949,793.00 | 138,369.00 | 22,017.97 | 2,451,324.78 |
| 09/30/2010 | - | 135,676.00 | 3,085,469.00 | 141,259.00 | 25,934.62 | 2,419,807.16 |
| 09/30/2011 | - | 139,414.00 | 3,224,883.00 | 136,232.00 | 32,720.89 | 2,390,268.27 |
| 09/30/2012 | - | 143,127.00 | 3,368,010.00 | 19,358.00 | 118,354.79 | 2,395,682.48 |
| 09/30/2013 | - | 146,922.00 | 3,514,932.00 | 18,250.00 | 27,533.57 | 2,496,820.91 |
| 09/30/2014 | - | 150,857.00 | 3,665,789.00 | 60,040.46 | - | 2,587,637.45 |
| 09/30/2015 | - | 154,791.00 | 3,820,580.00 | - | 52,134.89 | 2,690,293.56 |
| 09/30/2016 | - | 158,743.00 | 3,979,323.00 | - | 42,621.53 | 2,806,415.03 |
| 09/30/2017 | - | 162,655.00 | 4,141,978.00 | - | 25,276.16 | 2,943,793.87 |
| 09/30/2018 | - | 166,326.00 | 4,308,304.00 | - | 21,367.34 | 3,088,752.53 |
| 09/30/2019 | - | 169,951.00 | 4,478,255.00 | - | 158,157.84 | 3,100,545.69 |
| 09/30/2020 | - | 173,552.00 | 4,651,807.00 | - | 140,849.27 | 3,133,248.42 |
| 09/30/2021 | - | 177,062.00 | 4,828,869.00 | - | 138,556.04 | 3,171,754.38 |
| 09/30/2022 | - | 180,503.00 | 5,009,372.00 | 32,000.00 | 105,344.47 | 3,214,912.91 |
| 09/30/2023 | - | 183,943.00 | 5,193,315.00 | 70,129.00 | 65,727.24 | 3,262,999.67 |
| 09/30/2024 | - | 187,246.00 | 5,380,561.00 | 90,000.00 | 49,023.65 | 3,311,222.02 |
| 09/30/2025 | - | 190,220.00 | 5,570,781.00 | 111,254.00 | 43,447.48 | 3,346,740.54 |
| 09/30/2026 | - | 192,822.00 | 5,763,603.00 | - | 148,053.21 | 3,391,509.33 |
| 09/30/2027 | - | 195,063.00 | 5,958,666.00 | - | 145,265.95 | 3,441,306.38 |
| 09/30/2028 | - | 196,971.00 | 6,155,637.00 | 112,300.00 | 33,795.19 | 3,492,182.19 |
| 09/30/2029 | - | 198,398.00 | 6,354,035.00 | - | 138,562.34 | 3,552,017.85 |
| 09/30/2030 | - | 199,491.00 | 6,553,526.00 | - | 134,871.95 | 3,616,636.90 |
| 09/30/2031 | - | 200,228.00 | 6,753,754.00 | 106,600.00 | 27,823.82 | 3,682,441.08 |
| 09/30/2032 | - | 200,720.00 | 6,954,474.00 | - | 126,668.56 | 3,756,492.52 |
| 09/30/2033 | - | 200,953.00 | 7,155,427.00 | 40,000.00 | 55,078.27 | 3,862,367.25 |
| 09/30/2034 | - | 200,750.00 | 7,356,177.00 | 20,435.83 | 10,655.03 | 4,032,026.39 |
| 09/30/2035 | - | 200,456.00 | 7,556,633.00 | 114,344.97 | - | 4,118,137.42 |
| 09/30/2036 | - | 200,111.00 | 7,756,744.00 | 65,000.00 | 41,572.16 | 4,211,676.26 |
| 09/30/2037 | - | 199,555.00 | 7,956,299.00 | 40,000.00 | 60,185.29 | 4,311,045.97 |
| 09/30/2038 | - | 198,918.00 | 8,155,217.00 | 70,000.00 | 24,862.99 | 4,415,100.98 |
| 09/30/2039 | - | 198,326.00 | 8,353,543.00 | - | 87,187.39 | 4,526,239.59 |
| 09/30/2040 | - | 197,820.00 | 8,551,363.00 | - | 81,558.89 | 4,642,500.70 |
| 09/30/2041 | - | 197,448.00 | 8,748,811.00 | - | 73,966.52 | 4,765,982.18 |
| 09/30/2042 | - | 197,229.00 | 8,946,040.00 | 65,907.24 | - | 4,897,303.94 |
| 09/30/2043 | - | 197,298.00 | 9,143,338.00 | - | 56,333.36 | 5,038,268.58 |
| Total | \$2,818,035.00 | \$6,325,303.00 | - | \$1,700,628.50 | \$2,404,440.92 | - |

[^0]
## BONNEVILLE POWER ADMINISTRATION

OCTOBER 1, 2006 - SEPTEMBER 30, 2008 COST EVALUATION PERIOD Transmission 2008 Initial Proposal

Table A.2B: PRINCIPAL PAYMENTS (\$000s) (FY 2008)

| Date | Transmission Bonds | Transmission Appropriations |
| :---: | :---: | :---: |
| 09/30/2007 | 76,643.00 | 93,657.00 |
| 09/30/2008 | 137,119.00 | 30,662.25 |
| 09/30/2009 | 128,480.00 | 31,906.97 |
| 09/30/2010 | 114,932.00 | 52,261.62 |
| 09/30/2011 | 115,000.00 | 53,952.89 |
| 09/30/2012 | - | 137,712.79 |
| 09/30/2013 | - | 45,783.57 |
| 09/30/2014 | 59,050.00 | 990.46 |
| 09/30/2015 | - | 52,134.89 |
| 09/30/2016 | - | 42,621.53 |
| 09/30/2017 | - | 25,276.16 |
| 09/30/2018 | - | 21,367.34 |
| 09/30/2019 | 128,056.31 | 30,101.53 |
| 09/30/2020 | 140,849.27 | - |
| 09/30/2021 | 138,556.04 | - |
| 09/30/2022 | 137,344.47 | - |
| 09/30/2023 | 135,856.24 | - |
| 09/30/2024 | 139,023.65 | - |
| 09/30/2025 | 154,701.48 | - |
| 09/30/2026 | 148,053.21 | - |
| 09/30/2027 | 145,265.95 | - |
| 09/30/2028 | 146,095.19 | - |
| 09/30/2029 | 138,562.34 | - |
| 09/30/2030 | 134,871.95 | - |
| 09/30/2031 | 134,423.82 | - |
| 09/30/2032 | 126,668.56 | - |
| 09/30/2033 | 95,078.27 | - |
| 09/30/2034 | 31,090.86 | - |
| 09/30/2035 | 114,344.97 | - |
| 09/30/2036 | 106,572.16 | - |
| 09/30/2037 | 100,185.29 | - |
| 09/30/2038 | 94,862.99 | - |
| 09/30/2039 | 87,187.39 | - |
| 09/30/2040 | 81,558.89 | - |
| 09/30/2041 | 73,966.52 | - |
| 09/30/2042 | 65,907.24 | - |
| 09/30/2043 | 56,333.36 | - |
| Total | \$3,486,640.42 | \$618,429.00 |

(1) Net of interest income and AFUDC.

## BONNEVILLE POWER ADMINISTRATION

OCTOBER 1, 2006 - SEPTEMBER 30, 2008 COST EVALUATION PERIOD
Transmission 2008 Initial Proposal

## Table A.2C: Interest Payments (\$000s)(FY 2008)

| Date | Transmission Bonds | Transmission Appropriations |
| :---: | :---: | :---: |
| 09/30/2007 | 88,839.49 | 44,665.17 |
| 09/30/2008 | 106,733.94 | 37,917.53 |
| 09/30/2009 | 114,911.25 | 35,713.68 |
| 09/30/2010 | 118,274.08 | 33,412.63 |
| 09/30/2011 | 120,310.62 | 29,660.60 |
| 09/30/2012 | 123,183.33 | 25,767.95 |
| 09/30/2013 | 134,596.97 | 15,780.17 |
| 09/30/2014 | 143,644.32 | 12,473.62 |
| 09/30/2015 | 149,931.15 | 12,402.01 |
| 09/30/2016 | 160,030.77 | 8,622.23 |
| 09/30/2017 | 170,540.88 | 5,539.06 |
| 09/30/2018 | 180,948.45 | 3,711.59 |
| 09/30/2019 | 191,369.93 | 2,170.32 |
| 09/30/2020 | 196,269.01 | - |
| 09/30/2021 | 198,553.07 | - |
| 09/30/2022 | 199,757.53 | - |
| 09/30/2023 | 201,222.03 | - |
| 09/30/2024 | 204,044.71 | - |
| 09/30/2025 | 207,037.85 | - |
| 09/30/2026 | 213,754.56 | - |
| 09/30/2027 | 216,602.15 | - |
| 09/30/2028 | 215,824.14 | - |
| 09/30/2029 | 223,397.10 | - |
| 09/30/2030 | 227,120.49 | - |
| 09/30/2031 | 227,584.49 | - |
| 09/30/2032 | 235,334.50 | - |
| 09/30/2033 | 237,820.23 | - |
| 09/30/2034 | 245,224.38 | - |
| 09/30/2035 | 254,103.02 | - |
| 09/30/2036 | 261,828.84 | - |
| 09/30/2037 | 268,156.71 | - |
| 09/30/2038 | 273,409.01 | - |
| 09/30/2039 | 281,018.61 | - |
| 09/30/2040 | 286,585.11 | - |
| 09/30/2041 | 294,120.48 | - |
| 09/30/2042 | 302,123.74 | - |
| 09/30/2043 | 311,653.64 | - |
| Total | \$7,585,860.58 | \$267,836.56 |

[^1]
## BONNEVILLE POWER ADMINISTRATION

OCTOBER 1, 2006 - SEPTEMBER 30, 2008 COST EVALUATION PERIOD Transmission 2008 Initial Proposal

Table A.2D: Summary of Payments (\$000s)(FY 2008)

| Date | Principal Total Payment | Interest Total Payment |
| :---: | :---: | :---: |
| 09/30/2007 | 170,300.00 | 133,504.66 |
| 09/30/2008 | 167,781.25 | 144,651.47 |
| 09/30/2009 | 160,386.97 | 150,624.93 |
| 09/30/2010 | 167,193.62 | 151,686.71 |
| 09/30/2011 | 168,952.89 | 149,971.22 |
| 09/30/2012 | 137,712.79 | 148,951.28 |
| 09/30/2013 | 45,783.57 | 150,377.14 |
| 09/30/2014 | 60,040.46 | 156,117.94 |
| 09/30/2015 | 52,134.89 | 162,333.16 |
| 09/30/2016 | 42,621.53 | 168,653.00 |
| 09/30/2017 | 25,276.16 | 176,079.94 |
| 09/30/2018 | 21,367.34 | 184,660.04 |
| 09/30/2019 | 158,157.84 | 193,540.25 |
| 09/30/2020 | 140,849.27 | 196,269.01 |
| 09/30/2021 | 138,556.04 | 198,553.07 |
| 09/30/2022 | 137,344.47 | 199,757.53 |
| 09/30/2023 | 135,856.24 | 201,222.03 |
| 09/30/2024 | 139,023.65 | 204,044.71 |
| 09/30/2025 | 154,701.48 | 207,037.85 |
| 09/30/2026 | 148,053.21 | 213,754.56 |
| 09/30/2027 | 145,265.95 | 216,602.15 |
| 09/30/2028 | 146,095.19 | 215,824.14 |
| 09/30/2029 | 138,562.34 | 223,397.10 |
| 09/30/2030 | 134,871.95 | 227,120.49 |
| 09/30/2031 | 134,423.82 | 227,584.49 |
| 09/30/2032 | 126,668.56 | 235,334.50 |
| 09/30/2033 | 95,078.27 | 237,820.23 |
| 09/30/2034 | 31,090.86 | 245,224.38 |
| 09/30/2035 | 114,344.97 | 254,103.02 |
| 09/30/2036 | 106,572.16 | 261,828.84 |
| 09/30/2037 | 100,185.29 | 268,156.71 |
| 09/30/2038 | 94,862.99 | 273,409.01 |
| 09/30/2039 | 87,187.39 | 281,018.61 |
| 09/30/2040 | 81,558.89 | 286,585.11 |
| 09/30/2041 | 73,966.52 | 294,120.48 |
| 09/30/2042 | 65,907.24 | 302,123.74 |
| 09/30/2043 | 56,333.36 | 311,653.64 |
| Total | \$4,105,069.42 | \$7,853,697.14 |

## BONNEVILLE POWER ADMINISTRATION

OCTOBER 1, 2006 - SEPTEMBER 30, 2008 COST EVALUATION PERIOD
Transmission 2008 Initial Proposal
TABLE A.2E: Summary of Investments Placed in Service (\$000s)(FY 2008)

| Date | Unamortized Investment | Term Schedule |
| ---: | ---: | ---: |
| $09 / 30 / 2006$ | $4,470,445.54$ | $5,604,622.00$ |
| $09 / 30 / 2007$ | $4,401,735.54$ | $5,343,561.00$ |
| $09 / 30 / 2008$ | $4,279,198.79$ | $5,420,847.00$ |
| $09 / 30 / 2009$ | $4,307,827.76$ | $5,304,236.00$ |
| $09 / 30 / 2010$ | $4,339,345.38$ | $5,299,8537.00$ |
| $09 / 30 / 2011$ | $4,368,884.27$ | $5,361,649.00$ |
| $09 / 30 / 2012$ | $4,363,470.06$ | $5,381,661.00$ |
| $09 / 30 / 2013$ | $4,262,331.63$ | $5,283,105.00$ |
| $09 / 30 / 2014$ | $4,171,515.09$ | $5,222,509.00$ |
| $09 / 30 / 2015$ | $4,068,858.98$ | $5,146,605.00$ |
| $09 / 30 / 2016$ | $3,952,737.51$ | $4,921,911.00$ |
| $09 / 30 / 2017$ | $3,815,358.67$ | $4,847,234.00$ |
| $09 / 30 / 2018$ | $3,670,400.01$ | $4,859,733.00$ |
| $09 / 30 / 2019$ | $3,658,606.85$ | $4,950,443.00$ |
| $09 / 30 / 2020$ | $3,625,904.12$ | $5,064,268.00$ |
| $09 / 30 / 2021$ | $3,587,398.16$ | $5,189,760.00$ |
| $09 / 30 / 2022$ | $3,544,239.63$ | $5,368,574.00$ |
| $09 / 30 / 2023$ | $3,496,152.87$ | $5,555,820.00$ |
| $09 / 30 / 2024$ | $3,44,930.52$ | $5,631,107.00$ |
| $09 / 30 / 2025$ | $3,412,412.00$ | $5,823,929.00$ |
| $09 / 30 / 2026$ | $3,391,509.33$ | $6,018,992.00$ |
| $09 / 30 / 2027$ | $3,441,306.38$ | $5,947,063.00$ |
| $09 / 30 / 2028$ | $3,492,182.19$ | $6,129,739.00$ |
| $09 / 30 / 2029$ | $3,552,017.85$ | $6,194,952.00$ |
| $09 / 30 / 2030$ | $3,616,636.90$ | $6,095,180.00$ |
| $09 / 30 / 2031$ | $3,682,441.08$ | $5,747,000.00$ |
| $09 / 30 / 2032$ | $3,756,492.52$ | $5,277,991.00$ |
| $09 / 30 / 2033$ | $3,862,367.25$ | $5,180,341.00$ |
| $09 / 30 / 2034$ | $4,032,026.39$ | $5,255,797.00$ |
| $09 / 30 / 2035$ | $4,118,137.42$ | $5,455,908.00$ |
| $09 / 30 / 2036$ | $4,211,676.26$ | $5,655,463.00$ |
| $09 / 30 / 2037$ | $4,31,045.97$ | $5,854,381.00$ |
| $09 / 30 / 2038$ | $4,415,100.98$ | $6,052,707.00$ |
| $09 / 30 / 2039$ | $4,526,239.59$ | $6,250,527.00$ |
| $09 / 30 / 2040$ | $4,642,500.70$ | $6,447,975.00$ |
| $09 / 30 / 2041$ | $4,765,982.18$ | $6,413,194.00$ |
| $09 / 30 / 2042$ | $4,897,303.94$ | $6,325,303.00$ |
| $09 / 30 / 2043$ | $5,038,268.58$ |  |
|  |  |  |

## BONNEVILLE POWER ADMINISTRATION

OCTOBER 1, 2006 - SEPTEMBER 30, 2009 COST EVALUATION PERIOD
Transmission 2008 Initial Proposal
Table A.3A: Transmission Investments Placed in Service (\$000s) (FY 2009)

| Investment Placed in Service |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Initial Project | Replacements | Cumulative Amount in Service | Amortization | Discretionary Amortization | UnAmortized Investment |
| 09/30/2006 | 2,288,707.00 | - | 2,288,707.00 | - | - | 2,288,707.00 |
| 09/30/2007 | 239,010.00 | - | 2,527,717.00 | 101,117.00 | 69,183.00 | 2,357,417.00 |
| 09/30/2008 | 290,318.00 | - | 2,818,035.00 | 148,032.00 | 19,749.25 | 2,479,953.75 |
| 09/30/2009 | 264,982.00 | - | 3,083,017.00 | 138,369.00 | 34,289.34 | 2,572,277.41 |
| 09/30/2010 | - | 138,518.00 | 3,221,535.00 | 141,259.00 | 35,429.37 | 2,534,107.04 |
| 09/30/2011 | - | 142,344.00 | 3,363,879.00 | 136,232.00 | 42,280.93 | 2,497,938.11 |
| 09/30/2012 | - | 146,082.00 | 3,509,961.00 | 19,358.00 | 127,970.38 | 2,496,691.73 |
| 09/30/2013 | - | 149,873.00 | 3,659,834.00 | 18,250.00 | 37,188.10 | 2,591,126.63 |
| 09/30/2014 | - | 153,759.00 | 3,813,593.00 | 69,697.63 | 37.93 | 2,675,150.07 |
| 09/30/2015 | - | 157,625.00 | 3,971,218.00 | - | 61,858.24 | 2,770,916.83 |
| 09/30/2016 | - | 161,504.00 | 4,132,722.00 | - | 52,267.19 | 2,880,153.64 |
| 09/30/2017 | - | 165,366.00 | 4,298,088.00 | - | 33,996.32 | 3,011,523.32 |
| 09/30/2018 | - | 169,032.00 | 4,467,120.00 | - | 30,044.14 | 3,150,511.18 |
| 09/30/2019 | - | 172,691.00 | 4,639,811.00 | - | 163,515.08 | 3,159,687.10 |
| 09/30/2020 | - | 176,324.00 | 4,816,135.00 | - | 148,152.87 | 3,187,858.23 |
| 09/30/2021 | - | 179,835.00 | 4,995,970.00 | - | 146,211.30 | 3,221,481.93 |
| 09/30/2022 | - | 183,289.00 | 5,179,259.00 | 32,000.00 | 113,379.69 | 3,259,391.24 |
| 09/30/2023 | - | 186,755.00 | 5,366,014.00 | 70,129.00 | 74,042.55 | 3,301,974.69 |
| 09/30/2024 | - | 190,108.00 | 5,556,122.00 | 95,451.00 | 52,309.35 | 3,344,322.34 |
| 09/30/2025 | - | 193,171.00 | 5,749,293.00 | 111,254.00 | 51,883.15 | 3,374,356.19 |
| 09/30/2026 | - | 195,875.00 | 5,945,168.00 | - | 155,771.98 | 3,414,459.21 |
| 09/30/2027 | - | 198,203.00 | 6,143,371.00 | - | 153,401.68 | 3,459,260.53 |
| 09/30/2028 | - | 200,172.00 | 6,343,543.00 | 156,608.43 | 1.60 | 3,502,822.50 |
| 09/30/2029 | - | 201,644.00 | 6,545,187.00 | - | 146,765.28 | 3,557,701.22 |
| 09/30/2030 | - | 202,753.00 | 6,747,940.00 | - | 143,253.83 | 3,617,200.39 |
| 09/30/2031 | - | 203,445.00 | 6,951,385.00 | 106,600.00 | 36,890.16 | 3,677,155.23 |
| 09/30/2032 | - | 203,905.00 | 7,155,290.00 | - | 135,099.04 | 3,745,961.19 |
| 09/30/2033 | - | 204,093.00 | 7,359,383.00 | 40,000.00 | 63,436.93 | 3,846,617.26 |
| 09/30/2034 | - | 203,814.00 | 7,563,197.00 | 39,364.85 | 1,339.76 | 4,009,726.65 |
| 09/30/2035 | - | 203,451.00 | 7,766,648.00 | 123,660.25 | - | 4,089,517.40 |
| 09/30/2036 | - | 203,064.00 | 7,969,712.00 | 65,000.00 | 50,223.50 | 4,177,357.90 |
| 09/30/2037 | - | 202,476.00 | 8,172,188.00 | 40,000.00 | 69,814.69 | 4,270,019.21 |
| 09/30/2038 | - | 201,802.00 | 8,373,990.00 | 70,000.00 | 33,797.82 | 4,368,023.39 |
| 09/30/2039 | - | 201,196.00 | 8,575,186.00 | - | 96,737.05 | 4,472,482.34 |
| 09/30/2040 | - | 200,683.00 | 8,775,869.00 | - | 89,741.50 | 4,583,423.84 |
| 09/30/2041 | - | 200,342.00 | 8,976,211.00 | - | 81,913.14 | 4,701,852.70 |
| 09/30/2042 | - | 200,136.00 | 9,176,347.00 | 73,534.27 | - | 4,828,454.43 |
| 09/30/2043 | - | 200,208.00 | 9,376,555.00 | 64,514.93 | - | 4,964,147.50 |
| 09/30/2044 | - | 200,682.00 | 9,577,237.00 | - | 54,235.42 | 5,110,594.08 |
| Total | \$3,083,017.00 | \$6,293,538.00 | - | \$1,860,431.36 | \$2,551,976.14 | - |

## BONNEVILLE POWER ADMINISTRATION

OCTOBER 1, 2006 - SEPTEMBER 30, 2009 COST EVALUATION PERIOD Transmission 2008 Initial Proposal

Table A.3B: PRINCIPAL PAYMENTS (1000s) (FY 2009)

| Date | Transmission Bonds | Transmission Appropriations |
| :---: | :---: | :---: |
| 09/30/2007 | 76,643.00 | 93,657.00 |
| 09/30/2008 | 137,119.00 | 30,662.25 |
| 09/30/2009 | 128,480.00 | 44,178.34 |
| 09/30/2010 | 114,932.00 | 61,756.37 |
| 09/30/2011 | 115,000.00 | 63,512.93 |
| 09/30/2012 | - | 147,328.38 |
| 09/30/2013 | - | 55,438.10 |
| 09/30/2014 | 59,050.00 | 10,685.56 |
| 09/30/2015 | - | 61,858.24 |
| 09/30/2016 | 2,915.36 | 49,351.83 |
| 09/30/2017 | 33,996.32 | - |
| 09/30/2018 | 30,044.14 | - |
| 09/30/2019 | 163,515.08 | - |
| 09/30/2020 | 148,152.87 | - |
| 09/30/2021 | 146,211.30 | - |
| 09/30/2022 | 145,379.69 | - |
| 09/30/2023 | 144,171.55 | - |
| 09/30/2024 | 147,760.35 | - |
| 09/30/2025 | 163,137.15 | - |
| 09/30/2026 | 155,771.98 | - |
| 09/30/2027 | 153,401.68 | - |
| 09/30/2028 | 156,610.03 | - |
| 09/30/2029 | 146,765.28 | - |
| 09/30/2030 | 143,253.83 | - |
| 09/30/2031 | 143,490.16 | - |
| 09/30/2032 | 135,099.04 | - |
| 09/30/2033 | 103,436.93 | - |
| 09/30/2034 | 40,704.61 | - |
| 09/30/2035 | 123,660.25 | - |
| 09/30/2036 | 115,223.50 | - |
| 09/30/2037 | 109,814.69 | - |
| 09/30/2038 | 103,797.82 | - |
| 09/30/2039 | 96,737.05 | - |
| 09/30/2040 | 89,741.50 | - |
| 09/30/2041 | 81,913.14 | - |
| 09/30/2042 | 73,534.27 | - |
| 09/30/2043 | 64,514.93 | - |
| 09/30/2044 | 54,235.42 | - |
| Total | \$3,793,978.50 | \$618,429.00 |

(1) Net of interest income and AFUDC.

## BONNEVILLE POWER ADMINISTRATION

OCTOBER 1, 2006 - SEPTEMBER 30, 2009 COST EVALUATION PERIOD
Transmission 2008 Initial Proposal

## Table A.3C: Interest Payments (\$000s)(FY 2009)

| Date | Transmission Bonds | Transmission Appropriations |
| ---: | ---: | ---: |
| $09 / 30 / 2007$ | $88,839.49$ | $44,665.17$ |
| $09 / 30 / 2008$ | $106,733.94$ | $37,917.53$ |
| $09 / 30 / 2009$ | $119,106.88$ | $35,713.68$ |
| $09 / 30 / 2010$ | $127,487.46$ | $32,520.50$ |
| $09 / 30 / 2011$ | $130,148.98$ | $28,078.20$ |
| $09 / 30 / 2012$ | $133,662.15$ | $23,490.54$ |
| $09 / 30 / 2013$ | $145,728.72$ | $12,811.89$ |
| $09 / 30 / 2014$ | $155,439.39$ | $8,803.45$ |
| $09 / 30 / 2015$ | $162,397.92$ | $8,030.89$ |
| $09 / 30 / 2016$ | $173,268.81$ | $3,558.53$ |
| $09 / 30 / 2017$ | $185,181.78$ | - |
| $09 / 30 / 2018$ | $193,806.23$ | - |
| $09 / 30 / 2019$ | $206,006.01$ | - |
| $09 / 30 / 2020$ | $206,789.41$ | - |
| $09 / 30 / 2021$ | $208,722.81$ | - |
| $09 / 30 / 2022$ | $209,548.31$ | - |
| $09 / 30 / 2023$ | $210,733.72$ | - |
| $09 / 30 / 2024$ | $213,136.01$ | - |
| $09 / 30 / 2025$ | $216,430.19$ | - |
| $09 / 30 / 2026$ | $223,864.79$ | - |
| $09 / 30 / 2027$ | $226,296.42$ | - |
| $09 / 30 / 2028$ | $223,138.30$ | - |
| $09 / 30 / 2029$ | $233,024.16$ | - |
| $09 / 30 / 2030$ | $236,567.61$ | - |
| $09 / 30 / 2031$ | $236,347.15$ | - |
| $09 / 30 / 2032$ | $244,731.02$ | - |
| $09 / 30 / 2033$ | $247,287.57$ | - |
| $09 / 30 / 2034$ | $253,434.63$ | - |
| $09 / 30 / 2035$ | $262,608.73$ | - |
| $09 / 30 / 2036$ | $270,995.50$ | - |
| $09 / 30 / 2037$ | $276,342.31$ | - |
| $09 / 30 / 2038$ | $282,285.18$ | - |
| $09 / 30 / 2039$ | $289,276.95$ | - |
| $09 / 30 / 2040$ | $296,207.50$ | - |
| $09 / 30 / 2041$ | $303,975.86$ | - |
| $09 / 30 / 2042$ | $312,296.71$ | - |
| $09 / 30 / 2043$ | $321,262.01$ | - |
| $0 / 2044$ | 30.58 | - |
|  |  | - |
|  |  | - |

(1) Net of interest income and AFUDC.

## BONNEVILLE POWER ADMINISTRATION

OCTOBER 1, 2006 - SEPTEMBER 30, 2009 COST EVALUATION PERIOD Transmission 2008 Initial Proposal

Table A.3D: Summary of Payments (1000s)(FY 2009)

| Date | Principal Total Payment | Interest Total Payment |
| :---: | :---: | :---: |
| 09/30/2007 | 170,300.00 | 133,504.66 |
| 09/30/2008 | 167,781.25 | 144,651.47 |
| 09/30/2009 | 172,658.34 | 154,820.56 |
| 09/30/2010 | 176,688.37 | 160,007.96 |
| 09/30/2011 | 178,512.93 | 158,227.18 |
| 09/30/2012 | 147,328.38 | 157,152.69 |
| 09/30/2013 | 55,438.10 | 158,540.61 |
| 09/30/2014 | 69,735.56 | 164,242.84 |
| 09/30/2015 | 61,858.24 | 170,428.81 |
| 09/30/2016 | 52,267.19 | 176,827.34 |
| 09/30/2017 | 33,996.32 | 185,181.78 |
| 09/30/2018 | 30,044.14 | 193,806.23 |
| 09/30/2019 | 163,515.08 | 206,006.01 |
| 09/30/2020 | 148,152.87 | 206,789.41 |
| 09/30/2021 | 146,211.30 | 208,722.81 |
| 09/30/2022 | 145,379.69 | 209,548.31 |
| 09/30/2023 | 144,171.55 | 210,733.72 |
| 09/30/2024 | 147,760.35 | 213,136.01 |
| 09/30/2025 | 163,137.15 | 216,430.19 |
| 09/30/2026 | 155,771.98 | 223,864.79 |
| 09/30/2027 | 153,401.68 | 226,296.42 |
| 09/30/2028 | 156,610.03 | 223,138.30 |
| 09/30/2029 | 146,765.28 | 233,024.16 |
| 09/30/2030 | 143,253.83 | 236,567.61 |
| 09/30/2031 | 143,490.16 | 236,347.15 |
| 09/30/2032 | 135,099.04 | 244,731.02 |
| 09/30/2033 | 103,436.93 | 247,287.57 |
| 09/30/2034 | 40,704.61 | 253,434.63 |
| 09/30/2035 | 123,660.25 | 262,608.73 |
| 09/30/2036 | 115,223.50 | 270,995.50 |
| 09/30/2037 | 109,814.69 | 276,342.31 |
| 09/30/2038 | 103,797.82 | 282,285.18 |
| 09/30/2039 | 96,737.05 | 289,276.95 |
| 09/30/2040 | 89,741.50 | 296,207.50 |
| 09/30/2041 | 81,913.14 | 303,975.86 |
| 09/30/2042 | 73,534.27 | 312,296.71 |
| 09/30/2043 | 64,514.93 | 321,262.01 |
| 09/30/2044 | 54,235.42 | 331,508.58 |
| Total | \$4,412,407.50 | \$8,168,700.99 |

## BONNEVILLE POWER ADMINISTRATION

OCTOBER 1, 2006 - SEPTEMBER 30, 2009 COST EVALUATION PERIOD
Transmission 2008 Initial Proposal
Table A.3E: Summary of Investments Placed in Service (\$000s) (FY 2009)

| Date | Unamortized Investment | Term Schedule |
| ---: | ---: | ---: |
| $09 / 30 / 2006$ | $4,974,824.24$ | $5,604,622.00$ |
| $09 / 30 / 2007$ | $4,906,114.24$ | $5,343,561.00$ |
| $09 / 30 / 2008$ | $4,783,577.49$ | $5,437,460.00$ |
| $09 / 30 / 2009$ | $4,691,253.83$ | $5,434,719.00$ |
| $09 / 30 / 2010$ | $4,729,424.20$ | $5,438,823.00$ |
| $09 / 30 / 2011$ | $4,765,593.13$ | $5,503,600.00$ |
| $09 / 30 / 2012$ | $4,766,839.51$ | $5,526,563.00$ |
| $09 / 30 / 2013$ | $4,672,404.61$ | $5,430,909.00$ |
| $09 / 30 / 2014$ | $4,588,381.17$ | $5,373,147.00$ |
| $09 / 30 / 2015$ | $4,492,614.41$ | $5,300,004.00$ |
| $09 / 30 / 2016$ | $4,383,377.60$ | $5,078,021.00$ |
| $09 / 30 / 2017$ | $4,252,007.92$ | $5,006,050.00$ |
| $09 / 30 / 2018$ | $4,113,020.06$ | $5,021,289.00$ |
| $09 / 30 / 2019$ | $4,103,844.14$ | $5,114,771.00$ |
| $09 / 30 / 2020$ | $4,075,673.01$ | $5,231,369.00$ |
| $09 / 30 / 2021$ | $4,042,049.31$ | $5,359,647.00$ |
| $09 / 30 / 2022$ | $4,004,140.00$ | $5,541,273.00$ |
| $09 / 30 / 2023$ | $3,961,556.55$ | $5,725,930.00$ |
| $09 / 30 / 2024$ | $3,919,208.90$ | $5,804,168.00$ |
| $09 / 30 / 2025$ | $3,889,175.05$ | $6,000,043.00$ |
| $09 / 30 / 2026$ | $3,849,072.03$ | $6,198,246.00$ |
| $09 / 30 / 2027$ | $3,804,270.71$ | $6,129,518.00$ |
| $09 / 30 / 2028$ | $3,760,708.74$ | $6,315,440.00$ |
| $09 / 30 / 2029$ | $3,705,830.02$ | $6,383,915.00$ |
| $09 / 30 / 2030$ | $3,646,330.85$ | $6,287,360.00$ |
| $09 / 30 / 2031$ | $3,677,155.23$ | $5,942,365.00$ |
| $09 / 30 / 2032$ | $3,745,961.19$ | $5,476,496.00$ |
| $09 / 30 / 2033$ | $3,846,617.26$ | $5,381,910.00$ |
| $09 / 30 / 2034$ | $4,009,726.65$ | $5,460,361.00$ |
| $09 / 30 / 2035$ | $4,089,517.40$ | $5,663,425.00$ |
| $09 / 30 / 2036$ | $4,177,357.90$ | $5,865,901.00$ |
| $09 / 30 / 2037$ | $4,270,019.21$ | $6,067,703.00$ |
| $09 / 30 / 2038$ | $4,368,023.39$ | $6,268,899.00$ |
| $09 / 30 / 2039$ | $4,472,482.34$ | $6,469,582.00$ |
| $09 / 30 / 2040$ | $4,583,423.84$ | $6,669,924.00$ |
| $09 / 30 / 2041$ | $4,701,852.70$ | $6,638,050.00$ |
| $09 / 30 / 2042$ | $4,828,454.43$ | $6,553,069.00$ |
| $09 / 30 / 2043$ | $4,964,147.50$ | $6,494,220.00$ |
| $09 / 30 / 2044$ | $5,110,594.08$ |  |
|  |  |  |

Bonneville Power Administration
Transmission Repayment Study
October 1, 2006 to September 30, 2009 Cost Evaluation Period
Table A.4: Application of Amortization (\$000s) (FY 2009)

| Date | Project | In Service | Due | Original Balance | Amount Available | Rate | Replace ment? | Rollover? | Amount Amortized |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FY 2007 | BONNEVILLE POWER | 1962 | 2007 | 19,597 | 19,597 | 6.980\% | No | No | 19,597 |
| FY 2007 | BONNEVILLE POWER | 1962 | 2007 | 4,877 | 4,877 | 6.980\% | No | No | 4,877 |
| FY 2007 | BPA PROGRAM | 2004 | 2007 | 30,000 | 30,000 | 3.100\% | No | No | 30,000 |
| FY 2007 | BPA PROGRAM | 2004 | 2007 | 46,643 | 46,643 | 2.500\% | No | No | 46,643 |
| FY 2007 | BONNEVILLE POWER | 1972 | 2017 | 29,326 | 20,056 | 7.290\% | No | No | 20,056 |
| FY 2007 | BONNEVILLE POWER | 1972 | 2017 | 21,170 | 8,364 | 7.290\% | No | No | 8,364 |
| FY 2007 | BONNEVILLE POWER | 1973 | 2018 | 21,656 | 21,656 | 7.280\% | No | No | 13,904 |
| FY 2007 | BONNEVILLE POWER | 1973 | 2018 | 16,368 | 16,368 | 7.280\% | No | No | 16,368 |
| FY 2007 | BONNEVILLE POWER | 1973 | 2018 | 10,491 | 10,491 | 7.280\% | No | No | 10,491 |
| Subtotal |  | - | - | \$200,128 | \$178,052 | - | No | No | \$170,300 |
| FY 2008 | BONNEVILLE POWER | 1963 | 2008 | 4,876 | 4,876 | 7.020\% | No | No | 4,876 |
| FY 2008 | BONNEVILLE POWER | 1963 | 2008 | 4,330 | 4,330 | 7.020\% | No | No | 4,330 |
| FY 2008 | BONNEVILLE POWER | 1963 | 2008 | 904 | 904 | 7.020\% | No | No | 904 |
| FY 2008 | BONNEVILLE POWER | 1963 | 2008 | 803 | 803 | 7.020\% | No | No | 803 |
| FY 2008 | BPA PROGRAM | 1998 | 2008 | 75,300 | 75,300 | 6.000\% | No | No | 75,300 |
| FY 2008 | BPA PROGRAM | 1998 | 2008 | 36,819 | 36,819 | 5.750\% | No | No | 36,819 |
| FY 2008 | BPA PROGRAM | 2004 | 2008 | 25,000 | 25,000 | 3.800\% | No | No | 25,000 |
| FY 2008 | BONNEVILLE POWER | 1973 | 2018 | 33,788 | 33,788 | 7.280\% | No | No | 11,997 |
| FY 2008 | BONNEVILLE POWER | 1973 | 2018 | 21,656 | 7,752 | 7.280\% | No | No | 7,752 |
| Subtotal |  | - | - | \$203,476 | \$189,572 | - | No | No | \$167,781 |
| FY 2009 | BONNEVILLE POWER | 1964 | 2009 | 4,151 | 4,151 | 7.060\% | No | No | 4,151 |
| FY 2009 | BONNEVILLE POWER | 1964 | 2009 | 5,738 | 5,738 | 7.060\% | No | No | 5,738 |
| FY 2009 | BPA PROGRAM | 1998 | 2009 | 72,700 | 72,700 | 6.000\% | No | No | 72,700 |
| FY 2009 | ENVIRONMENT | 2006 | 2009 | 20,000 | 20,000 | 5.050\% | No | No | 20,000 |
| FY 2009 | BPA PROGRAM | 2006 | 2009 | 20,000 | 20,000 | 5.050\% | No | No | 20,000 |
| FY 2009 | BPA PROGRAM | 2005 | 2009 | 15,780 | 15,780 | 3.750\% | No | No | 15,780 |
| FY 2009 | BONNEVILLE POWER | 1970 | 2015 | 24,412 | 23,551 | 7.270\% | No | No | 12,499 |
| FY 2009 | BONNEVILLE POWER | 1973 | 2018 | 33,788 | 21,791 | 7.280\% | No | No | 21,791 |
| Subtotal |  | - | - | \$196,569 | \$183,711 | - | No | No | \$172,658 |
| FY 2010 | BONNEVILLE POWER | 1965 | 2010 | 3,706 | 3,706 | 7.090\% | No | No | 3,706 |
| FY 2010 | BONNEVILLE POWER | 1965 | 2010 | 7,248 | 7,248 | 7.090\% | No | No | 7,248 |
| FY 2010 | BONNEVILLE POWER | 1965 | 2010 | 5,202 | 5,202 | 7.090\% | No | No | 5,202 |
| FY 2010 | BONNEVILLE POWER | 1965 | 2010 | 10,171 | 10,171 | 7.090\% | No | No | 10,171 |
| FY 2010 | ENVIRONMENT | 2001 | 2010 | 30,000 | 30,000 | 6.050\% | No | No | 30,000 |
| FY 2010 | BPA PROGRAM | 2001 | 2010 | 59,932 | 59,932 | 6.050\% | No | No | 59,932 |
| FY 2010 | BPA PROGRAM | 2006 | 2010 | 5,000 | 5,000 | 4.950\% | No | No | 5,000 |
| FY 2010 | BPA PROGRAM | 2006 | 2010 | 20,000 | 20,000 | 4.950\% | No | No | 20,000 |
| FY 2010 | BONNEVILLE POWER | 1970 | 2015 | 64,977 | 64,977 | 7.270\% | No | No | 16,382 |
| FY 2010 | BONNEVILLE POWER | 1970 | 2015 | 7,995 | 7,995 | 7.270\% | No | No | 7,995 |
| FY 2010 | BONNEVILLE POWER | 1970 | 2015 | 24,412 | 11,052 | 7.270\% | No | No | 11,052 |
| Subtotal |  | - | - | \$238,643 | \$225,283 | - | No | No | \$176,688 |
| FY 2011 | BONNEVILLE POWER | 1966 | 2011 | 11,830 | 11,830 | 7.130\% | No | No | 11,830 |
| FY 2011 | BONNEVILLE POWER | 1966 | 2011 | 3,049 | 3,049 | 7.130\% | No | No | 3,049 |
| FY 2011 | BONNEVILLE POWER | 1966 | 2011 | 6,647 | 6,353 | 7.130\% | No | No | 6,353 |
| FY 2011 | BPA PROGRAM | 1998 | 2011 | 40,000 | 40,000 | 6.200\% | No | No | 40,000 |
| FY 2011 | BPA PROGRAM | 2001 | 2011 | 25,000 | 25,000 | 5.950\% | No | No | 25,000 |
| FY 2011 | BPA PROGRAM | 2001 | 2011 | 50,000 | 50,000 | 5.750\% | No | No | 50,000 |
| FY 2011 | BONNEVILLE POWER | 1970 | 2015 | 64,977 | 48,595 | 7.270\% | No | No | 42,281 |
| Subtotal |  | - | - | \$201,503 | \$184,827 | - | No | No | \$178,513 |

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| Date | Project | In Service | Due | Original Balance | Amount Available | Rate | Replace ment? | Rollover? | Amount Amortized |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FY 2012 | BONNEVILLE POWER | 1967 | 2012 | 19,003 | 19,003 | 7.160\% | No | No | 19,003 |
| FY 2012 | BONNEVILLE POWER | 1967 | 2012 | 4,566 | 355 | 7.160\% | No | No | 355 |
| FY 2012 | BONNEVILLE POWER | 1970 | 2015 | 64,977 | 6,314 | 7.270\% | No | No | 6,314 |
| FY 2012 | BONNEVILLE POWER | 1974 | 2019 | 12,079 | 12,079 | 7.270\% | No | No | 12,079 |
| FY 2012 | BONNEVILLE POWER | 1974 | 2019 | 20,984 | 20,984 | 7.270\% | No | No | 20,984 |
| FY 2012 | BONNEVILLE POWER | 1974 | 2019 | 12,563 | 12,563 | 7.270\% | No | No | 12,563 |
| FY 2012 | BONNEVILLE POWER | 1974 | 2019 | 21,826 | 21,826 | 7.270\% | No | No | 21,826 |
| FY 2012 | BONNEVILLE POWER | 1975 | 2020 | 32,026 | 32,026 | 7.250\% | No | No | 3,388 |
| FY 2012 | BONNEVILLE POWER | 1975 | 2020 | 21,916 | 21,916 | 7.250\% | No | No | 21,916 |
| FY 2012 | BONNEVILLE POWER | 1975 | 2020 | 17,158 | 17,158 | 7.250\% | No | No | 17,158 |
| FY 2012 | BONNEVILLE POWER | 1975 | 2020 | 11,742 | 11,742 | 7.250\% | No | No | 11,742 |
| Subtotal |  | - | - | \$238,840 | \$175,966 | - | No | No | \$147,328 |
| FY 2013 | BONNEVILLE POWER | 1968 | 2013 | 41,070 | 18,250 | 7.200\% | No | No | 18,250 |
| FY 2013 | BONNEVILLE POWER | 1969 | 2014 | 42,237 | 19,198 | 7.230\% | No | No | 8,550 |
| FY 2013 | BONNEVILLE POWER | 1975 | 2020 | 32,026 | 28,638 | 7.250\% | No | No | 28,638 |
| Subtotal |  | - | - | \$115,333 | \$66,086 | - | No | No | \$55,438 |
| FY 2014 | BONNEVILLE POWER | 1969 | 2014 | 42,237 | 10,648 | 7.230\% | No | No | 10,648 |
| FY 2014 | BPA PROGRAM | 1999 | 2014 | 59,050 | 59,050 | 5.900\% | No | No | 59,050 |
| FY 2014 | BONNEVILLE POWER | 1976 | 2021 | 2,212 | 2,212 | 7.230\% | No | No | 38 |
| Subtotal |  | - | - | \$103,499 | \$71,910 | - | No | No | \$69,736 |
| FY 2015 | BONNEVILLE POWER | 1976 | 2021 | 61,025 | 61,025 | 7.230\% | No | No | 59,684 |
| FY 2015 | BONNEVILLE POWER | 1976 | 2021 | 2,212 | 2,174 | 7.230\% | No | No | 2,174 |
| Subtotal |  | - | - | \$63,237 | \$63,199 | - | No | No | \$61,858 |
| FY 2016 | BONNEVILLE POWER | 1976 | 2021 | 61,025 | 1,341 | 7.230\% | No | No | 1,341 |
| FY 2016 | BONNEVILLE POWER | 1977 | 2022 | 3,948 | 3,948 | 7.210\% | No | No | 3,948 |
| FY 2016 | BONNEVILLE POWER | 1977 | 2022 | 5,380 | 5,380 | 7.210\% | No | No | 5,380 |
| FY 2016 | BONNEVILLE POWER | 1977 | 2022 | 33,702 | 33,702 | 7.210\% | No | No | 33,702 |
| FY 2016 | BONNEVILLE POWER | 1977 | 2022 | 4,981 | 4,981 | 7.210\% | No | No | 4,981 |
| FY 2016 | BPA PROGRAM | 1998 | 2032 | 98,900 | 98,900 | 6.700\% | No | No | 2,915 |
| Subtotal |  | - | - | \$207,936 | \$148,252 | - | No | No | \$52,267 |
| FY 2017 | BPA PROGRAM | 1998 | 2032 | 98,900 | 95,985 | 6.700\% | No | No | 33,996 |
| Subtotal |  | - | - | \$98,900 | \$95,985 | - | No | No | \$33,996 |
| FY 2018 | BPA PROGRAM | 1998 | 2032 | 98,900 | 61,988 | 6.700\% | No | No | 30,044 |
| Subtotal |  | - | - | \$98,900 | \$61,988 | - | No | No | \$30,044 |
| FY 2019 | BPA PROGRAM | 1998 | 2032 | 98,900 | 31,944 | 6.700\% | No | No | 31,944 |
| FY 2019 | BPA PROGRAM | 2009 | 2044 | 259,531 | 259,531 | 6.630\% | No | No | 131,571 |
| Subtotal |  | - | - | \$358,431 | \$291,475 | - | No | No | \$163,515 |
| FY 2020 | BPA PROGRAM | 2009 | 2044 | 259,531 | 127,960 | 6.630\% | No | No | 127,960 |
| FY 2020 | BPA PROGRAM | 2010 | 2045 | 138,518 | 138,518 | 6.630\% | Yes | No | 20,193 |
| Subtotal |  | - | - | \$398,049 | \$266,478 | - | Yes | No | \$148,153 |
| FY 2021 | BONNEVILLE POWER | 1976 | 2021 | 61,025 | 0 | 7.230\% | No | No | 0 |
| FY 2021 | BPA PROGRAM | 2010 | 2045 | 138,518 | 118,325 | 6.630\% | Yes | No | 118,325 |
| FY 2021 | BPA PROGRAM | 2011 | 2046 | 142,344 | 142,344 | 6.630\% | Yes | No | 27,886 |
| Subtotal |  | - | - | \$341,887 | \$260,669 | - | Yes | No | \$146,211 |
| FY 2022 | ENVIRONMENT | 2007 | 2022 | 7,000 | 7,000 | 5.660\% | No | No | 7,000 |
| FY 2022 | BPA PROGRAM | 2003 | 2022 | 25,000 | 25,000 | 5.650\% | No | Yes | 25,000 |
| FY 2022 | BPA PROGRAM | 2011 | 2046 | 142,344 | 114,458 | 6.630\% | Yes | No | 113,380 |
| Subtotal |  | - | - | \$174,344 | \$146,458 | - | Yes | Yes | \$145,380 |
| FY 2023 | ENVIRONMENT | 2008 | 2023 | 5,129 | 5,129 | 5.940\% | No | No | 5,129 |
| FY 2023 | BPA PROGRAM | 2004 | 2023 | 65,000 | 65,000 | 5.680\% | No | Yes | 65,000 |
| FY 2023 | BPA PROGRAM | 2011 | 2046 | 142,344 | 1,078 | 6.630\% | Yes | No | 1,078 |
| FY 2023 | BPA PROGRAM | 2012 | 2047 | 146,082 | 146,082 | 6.630\% | Yes | No | 72,964 |
| Subtotal |  | - | - | \$358,555 | \$217,289 | - | Yes | Yes | \$144,172 |

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| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FY 2024 | ENVIRONMENT | 2009 | 2024 | 5,451 | 5,451 | 6.230\% | No | No | 5,451 |
| FY 2024 | BPA PROGRAM | 2003 | 2024 | 40,000 | 40,000 | 5.720\% | No | Yes | 40,000 |
| FY 2024 | BPA PROGRAM | 2004 | 2024 | 50,000 | 50,000 | 5.720\% | No | Yes | 50,000 |
| FY 2024 | BPA PROGRAM | 2012 | 2047 | 146,082 | 73,118 | 6.630\% | Yes | No | 52,309 |
| Subtotal |  | - | - | \$241,533 | \$168,569 | - | Yes | Yes | \$147,760 |
| FY 2025 | BPA PROGRAM | 1997 | 2025 | 111,254 | 111,254 | 5.750\% | No | Yes | 111,254 |
| FY 2025 | BPA PROGRAM | 2012 | 2047 | 146,082 | 20,808 | 6.630\% | Yes | No | 20,808 |
| FY 2025 | BPA PROGRAM | 2013 | 2048 | 149,873 | 149,873 | 6.630\% | Yes | No | 31,075 |
| Subtotal |  | - | - | \$407,209 | \$281,935 | - | Yes | Yes | \$163,137 |
| FY 2026 | BPA PROGRAM | 2013 | 2048 | 149,873 | 118,798 | 6.630\% | Yes | No | 118,798 |
| FY 2026 | BPA PROGRAM | 2014 | 2049 | 153,759 | 153,759 | 6.630\% | Yes | No | 36,974 |
| Subtotal |  | - | - | \$303,632 | \$272,557 | - | Yes | No | \$155,772 |
| FY 2027 | BPA PROGRAM | 1998 | 2028 | 50,000 | 50,000 | 6.650\% | No | No | 5,692 |
| FY 2027 | BPA PROGRAM | 2014 | 2049 | 153,759 | 116,785 | 6.630\% | Yes | No | 116,785 |
| FY 2027 | BPA PROGRAM | 2015 | 2050 | 157,625 | 157,625 | 6.630\% | Yes | No | 30,925 |
| Subtotal |  | - | - | \$361,384 | \$324,410 | - | Yes | No | \$153,402 |
| FY 2028 | BPA PROGRAM | 1998 | 2028 | 50,000 | 44,308 | 6.650\% | No | No | 44,308 |
| FY 2028 | BPA PROGRAM | 1998 | 2028 | 112,300 | 112,300 | 5.850\% | No | No | 112,300 |
| FY 2028 | BPA PROGRAM | 2015 | 2050 | 157,625 | 126,700 | 6.630\% | Yes | No | 2 |
| Subtotal |  | - | - | \$319,925 | \$283,309 | - | Yes | No | \$156,610 |
| FY 2029 | BPA PROGRAM | 2015 | 2050 | 157,625 | 126,699 | 6.630\% | Yes | No | 126,699 |
| FY 2029 | BPA PROGRAM | 2016 | 2051 | 161,504 | 161,504 | 6.630\% | Yes | No | 20,067 |
| Subtotal |  | - | - | \$319,129 | \$288,203 | - | Yes | No | \$146,765 |
| FY 2030 | BPA PROGRAM | 2016 | 2051 | 161,504 | 141,437 | 6.630\% | Yes | No | 141,437 |
| FY 2030 | BPA PROGRAM | 2017 | 2052 | 165,366 | 165,366 | 6.630\% | Yes | No | 1,817 |
| Subtotal |  | - | - | \$326,870 | \$306,803 | - | Yes | No | \$143,254 |
| FY 2031 | BPA PROGRAM | 1998 | 2031 | 106,600 | 106,600 | 6.000\% | No | Yes | 106,600 |
| FY 2031 | BPA PROGRAM | 2017 | 2052 | 165,366 | 163,549 | 6.630\% | Yes | No | 36,890 |
| Subtotal |  | - | - | \$271,966 | \$270,149 | - | Yes | Yes | \$143,490 |
| FY 2032 | BPA PROGRAM | 2017 | 2052 | 165,366 | 126,659 | 6.630\% | Yes | No | 126,659 |
| FY 2032 | BPA PROGRAM | 2018 | 2053 | 169,032 | 169,032 | 6.630\% | Yes | No | 8,440 |
| Subtotal |  | - | - | \$334,398 | \$295,691 | - | Yes | No | \$135,099 |
| FY 2033 | BPA PROGRAM | 2003 | 2033 | 40,000 | 40,000 | 5.550\% | No | No | 40,000 |
| FY 2033 | BPA PROGRAM | 2004 | 2034 | 40,000 | 40,000 | 5.600\% | No | No | 635 |
| FY 2033 | BPA PROGRAM | 2018 | 2053 | 169,032 | 160,592 | 6.630\% | Yes | No | 62,802 |
| Subtotal |  | - | - | \$249,032 | \$240,592 | - | Yes | No | \$103,437 |
| FY 2034 | BPA PROGRAM | 2004 | 2034 | 40,000 | 39,365 | 5.600\% | No | No | 39,365 |
| FY 2034 | BPA PROGRAM | 2005 | 2035 | 40,000 | 40,000 | 5.500\% | No | No | 1,340 |
| FY 2034 | BPA PROGRAM | 2018 | 2053 | 169,032 | 97,790 | 6.630\% | Yes | No | 0 |
| Subtotal |  | - | - | \$249,032 | \$177,155 | - | Yes | No | \$40,705 |
| FY 2035 | BPA PROGRAM | 2005 | 2035 | 40,000 | 38,660 | 5.500\% | No | No | 38,660 |
| FY 2035 | BPA PROGRAM | 2005 | 2035 | 40,000 | 40,000 | 5.400\% | No | No | 40,000 |
| FY 2035 | BPA PROGRAM | 2005 | 2035 | 45,000 | 45,000 | 5.250\% | No | No | 45,000 |
| Subtotal |  | - | - | \$125,000 | \$123,660 | - | No | No | \$123,660 |
| FY 2036 | BPA PROGRAM | 2004 | 2036 | 65,000 | 65,000 | 6.370\% | No | Yes | 65,000 |
| FY 2036 | BPA PROGRAM | 2008 | 2043 | 285,189 | 285,189 | 6.320\% | No | No | 7,146 |
| FY 2036 | BPA PROGRAM | 2018 | 2053 | 169,032 | 97,790 | 6.630\% | Yes | No | 43,078 |
| Subtotal |  | - | - | \$519,221 | \$447,979 | - | Yes | Yes | \$115,224 |
| FY 2037 | BPA PROGRAM | 2005 | 2037 | 40,000 | 40,000 | 6.680\% | No | Yes | 40,000 |
| FY 2037 | BPA PROGRAM | 2008 | 2043 | 285,189 | 278,043 | 6.320\% | No | No | 69,815 |
| Subtotal |  | - | - | \$325,189 | \$318,043 | - | No | Yes | \$109,815 |

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| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FY 2038 | BPA PROGRAM | 2006 | 2038 | 70,000 | 70,000 | 6.720\% | No | Yes | 70,000 |
| FY 2038 | BPA PROGRAM | 2008 | 2043 | 285,189 | 208,229 | 6.320\% | No | No | 33,798 |
| Subtotal |  | - | - | \$355,189 | \$278,229 | - | No | Yes | \$103,798 |
| FY 2039 | BPA PROGRAM | 2008 | 2043 | 285,189 | 174,431 | 6.320\% | No | No | 96,737 |
| Subtotal |  | - | - | \$285,189 | \$174,431 | - | No | No | \$96,737 |
| FY 2040 | BPA PROGRAM | 2007 | 2042 | 232,010 | 232,010 | 6.000\% | No | No | 76,563 |
| FY 2040 | BPA PROGRAM | 2008 | 2043 | 285,189 | 77,694 | 6.320\% | No | No | 13,179 |
| Subtotal |  | - | - | \$517,199 | \$309,704 | - | No | No | \$89,742 |
| FY 2041 | BPA PROGRAM | 2007 | 2042 | 232,010 | 155,447 | 6.000\% | No | No | 81,913 |
| Subtotal |  | - | - | \$232,010 | \$155,447 | - | No | No | \$81,913 |
| FY 2042 | BPA PROGRAM | 2007 | 2042 | 232,010 | 73,534 | 6.000\% | No | No | 73,534 |
| Subtotal |  | - | - | \$232,010 | \$73,534 | - | No | No | \$73,534 |
| FY 2043 | BPA PROGRAM | 2008 | 2043 | 285,189 | 64,515 | 6.320\% | No | No | 64,515 |
| Subtotal |  | - | - | \$285,189 | \$64,515 | - | No | No | \$64,515 |
| FY 2044 | BPA PROGRAM | 2018 | 2053 | 169,032 | 54,713 | 6.630\% | Yes | No | 54,235 |
| Subtotal |  | - | - | \$169,032 | \$54,713 | - | Yes | No | \$54,235 |
| FY 2045 | BPA PROGRAM | 2018 | 2053 | 169,032 | 477 | 6.630\% | Yes | No | 477 |
| FY 2045 | BPA PROGRAM | 2019 | 2054 | 172,691 | 172,691 | 6.630\% | Yes | No | 48,484 |
| Subtotal |  | - | - | \$341,723 | \$173,168 | - | Yes | No | \$48,961 |
| FY 2046 | BPA PROGRAM | 2011 | 2046 | 142,344 | -0 | 6.630\% | Yes | No | -0 |
| FY 2046 | BPA PROGRAM | 2019 | 2054 | 172,691 | 124,207 | 6.630\% | Yes | No | 52,287 |
| Subtotal |  | - | - | \$315,035 | \$124,207 | - | Yes | No | \$52,287 |
| FY 2047 | BPA PROGRAM | 2012 | 2047 | 146,082 | 0 | 6.630\% | Yes | No | 0 |
| FY 2047 | BPA PROGRAM | 2019 | 2054 | 172,691 | 71,919 | 6.630\% | Yes | No | 55,847 |
| Subtotal |  | - | - | \$318,773 | \$71,919 | - | Yes | No | \$55,847 |
| FY 2048 | BPA PROGRAM | 2019 | 2054 | 172,691 | 16,073 | 6.630\% | Yes | No | 16,073 |
| FY 2048 | BPA PROGRAM | 2020 | 2055 | 176,324 | 176,324 | 6.630\% | Yes | No | 43,502 |
| Subtotal |  | - | - | \$349,015 | \$192,397 | - | Yes | No | \$59,574 |
| FY 2049 | BPA PROGRAM | 2014 | 2049 | 153,759 | -0 | 6.630\% | Yes | No | -0 |
| FY 2049 | BPA PROGRAM | 2020 | 2055 | 176,324 | 132,822 | 6.630\% | Yes | No | 63,607 |
| Subtotal |  | - | - | \$330,083 | \$132,822 | - | Yes | No | \$63,607 |
| FY 2050 | BPA PROGRAM | 2020 | 2055 | 176,324 | 69,215 | 6.630\% | Yes | No | 67,954 |
| Subtotal |  | - | - | \$176,324 | \$69,215 | - | Yes | No | \$67,954 |
| FY 2051 | BPA PROGRAM | 2020 | 2055 | 176,324 | 1,261 | 6.630\% | Yes | No | 1,261 |
| FY 2051 | BPA PROGRAM | 2021 | 2056 | 179,835 | 179,835 | 6.630\% | Yes | No | 71,211 |
| Subtotal |  | - | - | \$356,159 | \$181,096 | - | Yes | No | \$72,472 |
| FY 2052 | BPA PROGRAM | 2017 | 2052 | 165,366 | 0 | 6.630\% | Yes | No | 0 |
| FY 2052 | BPA PROGRAM | 2021 | 2056 | 179,835 | 108,624 | 6.630\% | Yes | No | 77,431 |
| Subtotal |  | - | - | \$345,201 | \$108,624 | - | Yes | No | \$77,431 |
| FY 2053 | BPA PROGRAM | 2018 | 2053 | 169,032 | 0 | 6.630\% | Yes | No | 0 |
| FY 2053 | BPA PROGRAM | 2021 | 2056 | 179,835 | 31,193 | 6.630\% | Yes | No | 31,193 |
| FY 2053 | BPA PROGRAM | 2022 | 2057 | 183,289 | 183,289 | 6.630\% | Yes | No | 51,451 |
| Subtotal |  | - | - | \$532,156 | \$214,482 | - | Yes | No | \$82,645 |
| FY 2054 | BPA PROGRAM | 2019 | 2054 | 172,691 | 0 | 6.630\% | Yes | No | 0 |
| FY 2054 | BPA PROGRAM | 2022 | 2057 | 183,289 | 131,838 | 6.630\% | Yes | No | 88,255 |
| Subtotal |  | - | - | \$355,980 | \$131,838 | - | Yes | No | \$88,255 |

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| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FY 2055 | BPA PROGRAM | 2020 | 2055 | 176,324 | -0 | 6.630\% | Yes | No | -0 |
| FY 2055 | BPA PROGRAM | 2022 | 2057 | 183,289 | 43,583 | 6.630\% | Yes | No | 43,583 |
| FY 2055 | BPA PROGRAM | 2023 | 2058 | 186,755 | 186,755 | 6.630\% | Yes | No | 50,641 |
| Subtotal |  | - | - | \$546,368 | \$230,338 | - | Yes | No | \$94,224 |
| FY 2056 | BPA PROGRAM | 2021 | 2056 | 179,835 | -0 | 6.630\% | Yes | No | -0 |
| FY 2056 | BPA PROGRAM | 2023 | 2058 | 186,755 | 136,114 | 6.630\% | Yes | No | 100,616 |
| Subtotal |  | - | - | \$366,590 | \$136,114 | - | Yes | No | \$100,616 |
| FY 2057 | BPA PROGRAM | 2023 | 2058 | 186,755 | 35,498 | 6.630\% | Yes | No | 35,498 |
| FY 2057 | BPA PROGRAM | 2024 | 2059 | 190,108 | 190,108 | 6.630\% | Yes | No | 71,910 |
| Subtotal |  | - | - | \$376,863 | \$225,606 | - | Yes | No | \$107,408 |
| FY 2058 | BPA PROGRAM | 2023 | 2058 | 186,755 | -0 | 6.630\% | Yes | No | -0 |
| FY 2058 | BPA PROGRAM | 2024 | 2059 | 190,108 | 118,198 | 6.630\% | Yes | No | 114,735 |
| Subtotal |  | - | - | \$376,863 | \$118,198 | - | Yes | No | \$114,735 |
| FY 2059 | BPA PROGRAM | 2024 | 2059 | 190,108 | 3,463 | 6.630\% | Yes | No | 3,463 |
| FY 2059 | BPA PROGRAM | 2025 | 2060 | 193,171 | 193,171 | 6.630\% | Yes | No | 118,961 |
| Subtotal |  | - | - | \$383,279 | \$196,634 | - | Yes | No | \$122,424 |
| FY 2060 | BPA PROGRAM | 2025 | 2060 | 193,171 | 74,210 | 6.630\% | Yes | No | 74,210 |
| FY 2060 | BPA PROGRAM | 2026 | 2061 | 195,875 | 195,875 | 6.630\% | Yes | No | 56,545 |
| Subtotal |  | - | - | \$389,046 | \$270,085 | - | Yes | No | \$130,755 |
| FY 2061 | BPA PROGRAM | 2026 | 2061 | 195,875 | 139,330 | 6.630\% | Yes | No | 139,330 |
| FY 2061 | BPA PROGRAM | 2027 | 2062 | 198,203 | 198,203 | 6.630\% | Yes | No | 303 |
| Subtotal |  | - | - | \$394,078 | \$337,533 | - | Yes | No | \$139,633 |
| Grand Total |  | - | - | \$16,281,104 | \$10,651,106 | - | Yes | Yes | \$5,945,471 |

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## APPENDIX B

Programs In Review Close-out Letter

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## Department of Energy

Bonneville Power Administration
P.O. Box 3621

Portland, Oregon 97208-3621
EXECUTIVE OFFICE

JAN 262007
In reply refer to: T-DITT2
Dear Programs in Review Participant:
On November 22, 2006, we sent a letter to you reflecting the tentative results of a public process called Programs in Review (PIR), which the Bonneville Power Administration conducted from May 2006 through the summer of 2006. This process engaged the region in discussions about Transmission Services' fiscal year 2008 and 2009 program levels and program costs. During this public process, BPA presented information about its transmission programs and invited customers, tribes, constituents and other regional stakeholders to comment on and make recommendations related to these programs.

The November 22 letter provided (1) an update on where Transmission Services' program costs stood compared to the initial PIR proposal; (2) a comparison of program levels for the upcoming rate period versus the current rate period; and (3) my tentative decision for Transmission Services' program levels for Fiscal Years 2008 and 2009. Because there had been recent updates in program levels, we provided a two-week comment period on the tentative PIR decisions.

No comments we received addressed specific expense or capital levels in the letter and, as a result, the figures presented in the November 22 PIR letter are now final. For your convenience, the appendices from the November 22 letter that show the expense and capital levels are enclosed.

## Specific Issues Raised in Comments

A common theme in the comments was a wish to become more involved in the capital review process before projects are authorized. As part of the Regional Dialogue discussion, BPA will design a process that among other things will enhance the transparency of the agency's capital decisions and provide opportunities for stakeholder input into these decisions. As this process is implemented, customers and stakeholders will be able to provide timely input into agency capital and expense decisions.

Other issues addressed in comments involved regional transmission planning, expansion and maintenance practices. BPA is addressing these issues individually with the parties in a separate process.

BPA also received a request for a workshop regarding the depreciation study and is exploring options about the best forum for this discussion.

BPA Power Services expressed concern that the Libby-(Flathead Electric Cooperative)-Troy Rebuild Plan, which calls for a single-circuit 115-kilovolt line, could limit generation at the Hungry Horse and Libby projects. A thorough review by the Technical Review Committee in May 2006 determined that the $115-\mathrm{kV}$ line will meet load service requirements well into the future since there are no firm plans for additional resource development in the Libby area. Without an identified need, the incremental cost to build a double circuit $230-\mathrm{kV}$ line versus a single circuit $115-\mathrm{kV}$ rebuild is not justified. If and when the transmission system requires additional capacity out of the Libby area, Transmission Services will evaluate all potential options including the Libby-Bonners Ferry corridor.

In addition to comments received, BPA wishes to clarify language in the November 22 letter. Under the section comparing the prior rate case to the new rate period, we indicated that "In accordance with current accounting policies and practices, certain investments that were formerly charged to capital will now be expensed." This may have inadvertently suggested a change in accounting policies, which is not correct. The change was in the application of the policies. To clarify, a review of BPA's application of its capitalization policies identified situations where certain replacements had been charged incorrectly to capital instead of expense. Examples include replacements of certain "Minor Items of Property," such as roofs, heating, ventilation and air-conditioning systems, spacer dampers, airway lighting and marker balls; the support costs associated with this work; and individual items of "Personal Property" that do not meet the $\$ 10,000$ capitalization threshold, such as small miscellaneous tools and equipment.

I would like to express my sincere appreciation for the participation and thoughtful comments of our customers and other regional stakeholders. BPA remains committed to an open and collaborative public process where ideas can flow freely. Thank you again for your participation in this process that has helped shape our program levels.

Sincerely,


Stephen J. Wright Administrator and Chief Executive Officer

4 Enclosures
Appendix 1: Expense Program Comparison of Initial and Current PIR FY08-09 Program levels Appendix 2: Expense Program Levels FY08-09
Appendix 3: Capital Program-Comparison of Initial and Current PIR Average FY08-09 Program Levels
Appendix 4: Capital Program Levels FY08-09

Transmission Expenses (\$000) - Programs In Review

| Program \& Other Operating Costs | Averages Across FY 2008-09 |  |  |
| :---: | :---: | :---: | :---: |
|  | Initial Proposal | Final Proposal | Change |
| Transmission's Transmission Acquisition |  |  |  |
| Leased Facilities | 14,945 | 14,853 | (91) |
| Settlements | 940 | 940 | - |
| Non-BBL Ancillary Services | 310 | 3,050 | 2,740 |
| Transmission System Operations |  |  |  |
| Information Technology | - | 671 | 671 |
| Power System Dispatching | 10,103 | 10,228 | 125 |
| Control Center Support | 9,511 | 9,531 | 20 |
| Technical Operations | 3,732 | 3,732 | - |
| Substation Operations | 18,756 | 18,951 | 194 |
| Transmission Scheduling |  |  |  |
| Management Supervision \& Administration | 1,053 | 1,053 | - |
| Reservations | 464 | 464 | - |
| Pre-Scheduling | 763 | 763 | - |
| Real-Time Scheduling | 4,005 | 4,005 | - |
| Scheduling Technical Support | 2,715 | 2,715 | - |
| Scheduling After-The-Fact | 673 | 673 | - |
| Transmission Marketing |  |  |  |
| Transmission Sales | 2,256 | 2,256 | - |
| Marketing Internal Operations | 872 | 872 | - |
| Transmission Finance | 824 | 824 | - |
| Contract Management | 1,477 | 1,477 | - |
| Transmission Billing | 1,942 | 1,942 | - |
| Business Strategy \& Assessment | 2,471 | 2,471 | - |
| Marketing IT Support | - | - | - |
| Meter Data | 1,370 | 1,370 | - |
| Transmission Business Support |  |  |  |
| Executive and Admin Services | 8,118 | 8,118 | - |
| Staff Management | - | - | - |
| TBL Internal G\&A | 7,643 | 7,655 | 13 |
| Aircraft Services | 1,071 | 1,343 | 272 |
| Logistics Services | 4,058 | 5,133 | 1,075 |
| Security Enhancements | 1,038 | 1,039 | 0 |
| Transmission System Development |  |  |  |
| Research \& Development | 3,431 | 3,431 | - |
| TSD Planning \& Analysis | 3,518 | 3,518 | - |
| Capital to Expense Transfer | 3,000 | 3,000 | - |
| Inventory Management | 4,500 | 4,500 | - |
| Regulatory \& Region Association Fees | 1,821 | 2,215 | 394 |

Transmission Expenses (\$000) - Programs In Review

| Program \& Other Operating Costs | Averages Across FY 2008-09 |  |  |
| :---: | :---: | :---: | :---: |
|  | Initial Proposal | Final Proposal | Change |
| Transmission System Maintenance |  |  |  |
| Non-Electric Maintenance | 11,102 | 11,141 | 39 |
| Substation Maintenance | 17,006 | 17,607 | 600 |
| Transmission Line Maintenance | 18,337 | 19,008 | 671 |
| System Protection Control Maintenance | 8,763 | 9,820 | 1,057 |
| Power System Control Maintenance | 8,804 | 10,742 | 1,938 |
| System Maintenance Management | 6,889 | 6,890 | 1 |
| ROW Maintenance | 12,923 | 12,966 | 43 |
| Heavy Mobile Equipment Maintenance | 1,694 | 847 | (847) |
| Technical Training | 3,811 | 3,811 | - |
| Transmission Environmental Operations |  |  |  |
| Environmental Policy \& Planning | 1,286 | 1,286 | - |
| Pollution Prevention \& Abatement | 3,440 | 3,440 | - |
| Transmission Other |  |  |  |
| Civil Service Retirement System (CSRS) | 12,139 | 12,139 | - |
| Undistributed Cost Reduction | $(2,000)$ | $(2,000)$ | - |
| Non-Federal Debt Service | - | 12,234 | 12,234 |
| Total Transmission System O \& M | 221,576 | 242,727 | 21,150 |
| Between Business Line Expenses |  |  |  |
| Ancillary Services | 53,491 | 45,521 | $(7,970)$ |
| Corps/Bureau/Network/Delivery Facilities | 7,213 | 7,025 | (188) |
| Station Service | 3,792 | 3,589 | (203) |
| Total BBL Expense | 64,496 | 56,135 | $(8,361)$ |
| Corporate Expenses |  |  |  |
| Legal Support - Expense | 2,168 | 2,250 | 81 |
| Shared Services Costs | - | - | - |
| Corporate Overhead Distributions | 63,836 | 66,202 | 2,366 |
| Total Corporate Charges | 66,004 | 68,451 | 2,448 |
| Total Transmission Operating Expense | 352,076 | 367,313 | 15,237 |

This information has been made publicly available by BPA on November 21, 2006, but due to the detailed nature or the manner in which it is grouped, the numbers cannot be identified in any other publicly released Standard Financial Report or other Agency Financial Information

Appendix 2
Transmission Expenses (\$000) - Programs In Review

| Program \& Other Operating Costs | FY2008 | FY2009 |
| :---: | :---: | :---: |
| Transmission's Transmission Acquisition |  |  |
| Leased Facilities <br> Settlements <br> Stability Reserve Payments <br> Sub-Total Transmission Acquisition | $\begin{array}{r} 13,608 \\ 931 \\ 3,050 \\ 17,589 \end{array}$ | $\begin{array}{r} 16,098 \\ 950 \\ 3,050 \\ 20,098 \\ \hline \end{array}$ |
| Transmission System Operations |  |  |
| Information Technology <br> Power System Dispatching <br> Control Center Support <br> Technical Operations <br> Substation Operations <br> Sub-Total Transmission System Operations | $\begin{array}{r} 662 \\ 10,125 \\ 9,449 \\ 3,694 \\ 18,758 \\ 42,688 \end{array}$ | $\begin{array}{r} 681 \\ 10,332 \\ 9,613 \\ 3,770 \\ 19,143 \\ 43,539 \end{array}$ |
| Transmission Scheduling |  |  |
| Management Supervision \& Administration <br> Reservations <br> Pre-Scheduling <br> Real-Time Scheduling <br> Scheduling Technical Support <br> Scheduling After-The-Fact <br> Sub-Total Transmission Scheduling | $\begin{array}{r} 1,035 \\ 459 \\ 755 \\ 3,971 \\ 2,691 \\ 666 \\ 9,577 \end{array}$ | 1,071 469 771 4,039 2,738 680 9,767 |
| Transmission Marketing |  |  |
| Transmission Sales <br> Marketing Internal Operations <br> Transmission Finance <br> Contract Management <br> Transmission Billing <br> Business Strategy \& Assessment <br> Marketing IT Support <br> Meter Data <br> Sub-Total Transmission Marketing | $\begin{array}{r} 2,230 \\ 861 \\ 815 \\ 1,456 \\ 1,922 \\ 2,446 \\ 0 \\ 1,354 \\ 11,084 \end{array}$ | $\begin{array}{r}2,283 \\ 884 \\ 832 \\ 1,498 \\ 1,962 \\ 2,496 \\ 0 \\ 1,385 \\ \mathbf{1 1 , 3 4 0} \\ \hline\end{array}$ |
| Transmission Business Support |  |  |
| Executive and Admin Services 1/ <br> Staff Management <br> TBL Internal G\&A 1/ <br> Aircraft Services <br> Logistics Services <br> Security Enhancements <br> Sub-Total Transmission Business Support | $\begin{array}{r} 8,045 \\ 0 \\ 7,577 \\ 1,327 \\ 5,080 \\ 1,028 \\ 23,057 \end{array}$ | $\begin{array}{r}8,191 \\ 0 \\ 7,733 \\ 1,360 \\ 5,185 \\ 1,049 \\ \mathbf{2 3 , 5 1 9} \\ \hline\end{array}$ |
| Transmission System Development |  |  |
| Research \& Development <br> TSD Planning \& Analysis <br> Capital to Expense Transfer <br> Inventory Management <br> Regulatory \& Region Association Fees <br> Sub-Total Transmission System Development | 3,396 3,502 3,000 5,000 2,180 17,078 | 3,466 3,534 3,000 4,000 2,250 $\mathbf{1 6 , 2 5 0}$ |

Transmission Expenses (\$000) - Programs In Review

| Program a Other Operating Costs | FY2008 | FY2009 |
| :---: | :---: | :---: |
| Transmission System Maintenance |  |  |
| Non-Electric Maintenance <br> Substation Maintenance <br> Transmission Line Maintenance <br> System Protection Control Maintenance <br> Power System Control Maintenance <br> System Maintenance Management <br> Right Of Way Maintenance <br> Heavy Mobile Equipment Maintenance <br> Technical Training <br> Sub-Total Transmission System Maintenance | $\begin{array}{r} 11,053 \\ 17,386 \\ 18,826 \\ 9,730 \\ 10,627 \\ 6,822 \\ 12,844 \\ 858 \\ 3,530 \\ 91,675 \\ \hline \end{array}$ | 11,229 <br> 17,827 <br> 19,191 <br> 9,911 <br> 10,858 <br> 6,958 <br> 13,088 <br> 836 <br> 4,092 <br> 93,992 |
| Transmission Environmental Operations |  |  |
| Environmental Policy \& Planning <br> Pollution Prevention \& Abatement <br> Sub-Total Transmission Environmental Operations | $\begin{aligned} & 1,266 \\ & 3,389 \\ & \mathbf{4 , 6 5 5} \end{aligned}$ | $\begin{aligned} & 1,307 \\ & 3,491 \\ & 4,798 \end{aligned}$ |
| Transmission Other |  |  |
| Civil Service Retirement System (CSRS) <br> Undistributed Cost Reduction <br> Non-Federal Debt Service <br> Sub-Total Transmission Other | $\begin{array}{r} 9,000 \\ (2,000) \\ 11,034 \\ 18,034 \end{array}$ | $\begin{array}{r} 15,277 \\ -2,000 \\ 13,434 \\ 26,711 \\ \hline \end{array}$ |
| Sub-Total Transmission System Operations \& Maintenance | 235,438 | 250,016 |
| Between Business Line Expenses |  |  |
| Ancillary Services <br> Corps/Bureau/Network/Delivery Facilities <br> Station Service | $\begin{array}{r} 45,521 \\ 6,652 \\ 3,589 \\ \hline \end{array}$ | $\begin{array}{r} 45,521 \\ 7,397 \\ 3,589 \\ \hline \hline \end{array}$ |
| Sub-Total Between Business Line Expense | 55,762 | 56,507 |
| Corporate Expenses |  |  |
| Legal Support - Expense <br> Shared Services Costs <br> Corporate Overhead Distributions | $\begin{array}{r} 2,213 \\ 0 \\ 66,044 \end{array}$ | $\begin{array}{r} 2,287 \\ 0 \\ 66,359 \\ \hline \hline \end{array}$ |
| Sub-Total Corporate Charges | 68,257 | 68,646 |
| Total Transmission Expense Program Levels | 359,457 | 375,169 |

1/Executive and Admin Services includes expenses for Executive Management, Asset Management, Continuity of Operations, and non-project travel and training costs Internal G\&A includes expenses for General Administration, Relocations and Pay for Performance

Sources: Tentative Program Levels as approved by Steve Wright, on November 21, 2006

This information has been made publicly available by BPA on November 21, 2006, but due to the detailed nature or the manner in which it is grouped, the numbers cannot be separately identified in any other publicly released Standard Financial Report or other Agency Financial Information.

CAPITAL PROGRAM LEVELS FY08-FY09
(\$ in Thousands)

| Program Description | Energization Date | FY 2008 Forecast | FY 2009 Forecast |
| :---: | :---: | :---: | :---: |
| MAIN GRID PROJECTS |  |  |  |
| West of McNary Generation Integration | 2010 | 3,205.8 |  |
| Line Relocations on Tribal Lands | On Going | 3,740.1 | 3,815.6 |
| Seattle Area 500/230 kV Bank | 2010 | 213.7 | 2,180.4 |
| Olympic Peninsula Reinforcement | 2009 | 12,556.0 | 12,809.6 |
| Shelton-Fairmount 230KV line | 2012 | 0.0 | 1,090.2 |
| 1-5 Corridor upgrades | 2011 | 5,343.0 | 10,901.8 |
| Libby-Troy Rebuild | 2009 | 5,984.1 | 981.2 |
| Other Associated Gen Integration | On Going | 5,000.0 | 5,000.0 |
| Communications moved to Corporate |  | (41.0) | (42.0) |
| NERC Criteria Compliance | On Going | 15,000.0 | 15,000.0 |
| System Reactive Facilities | On Going | 10,000.0 | 10,000.0 |
| Various Additions | On Going | 10,000.0 | 10,000.0 |
| Sub-Total Main Grid |  | 71,001.7 | 71,736.8 |


| AREA \& CUSTOMER SERVICE PROJECTS |  |  |  |
| :--- | :---: | ---: | ---: |
| Lower Valley Reinforcement (Caribou) | 2008 | $8,121.3$ | 0.0 |
| Madison Shunt Cap | 2008 | 480.9 | 0.0 |
| City of Centralia | 2008 | $8,548.8$ | 0.0 |
| Misc. Line Upgrade | On Going | $4,274.4$ | $4,360.7$ |
| Customer Service Items | On Going | $4,000.0$ | $4,000.0$ |
| Sub-Total Area \& Customer Srvc |  | $\mathbf{2 5 , 4 2 5 . 4}$ | $\mathbf{8 , 3 6 0 . 7}$ |


| UPGRADES \& ADDITIONS PROJECTS |  |  |  |
| :--- | :---: | ---: | ---: |
| System Controls | On Going | $7,480.2$ | $7,631.3$ |
| Celio Upgrades |  | $13,784.9$ | $7,086.2$ |
| CC Systems | On Going | $5,343.0$ | $5,450.9$ |
| Fiber Optics (Incls Terminations) | On Going | $16,028.9$ | $10,901.8$ |
| Misc Sub Additions | On Going | $5,000.0$ | $5,000.0$ |
| Sub-Total Upgrades \& Additions |  | $\mathbf{4 7 , 6 3 7 . 0}$ | $\mathbf{3 6 , 0 7 0 . 2}$ |


| SYSTEM REPLACEMENTS PROJECTS |  |  |  |
| :--- | :---: | ---: | ---: |
| Nonelectric Plant Replcmts | On Going | $3,205.8$ | $3,270.5$ |
| Security Enhancements | 0 | $3,953.8$ | $4,033.7$ |
| Transmission Line Replcmts | On Going | $1,068.6$ | $1,090.2$ |
| Wood Pole Replacement | On Going | $6,411.6$ | $6,541.1$ |
| NCI Replacements | On Going | 320.6 | 327.1 |
| Spacer Damper Replacements | On Going | $9,617.4$ | $9,811.6$ |
| Substation Replcmts | On Going | $9,617.4$ | $9,811.6$ |
| System Protection Replcmts | On Going | $7,480.2$ | $7,631.3$ |
| Pwr Sys Cntrl Replcmts | On Going | $49,155.4$ | $50,631.3$ |
| Total System Replacements | 2009 | $6,945.9$ | $7,086.2$ |
| Aircraft Replacement | On Going | $6,500.0$ | $6,500.0$ |
| Tools and Equipment |  | $62,601.3$ | $63,734.5$ |
| Sub-Total System Replacements |  |  |  |


| ENVIRONMENT PROJECTS | On Going | $5,129.3$ | $5,450.9$ |
| :--- | :---: | ---: | ---: |
| Total Environment (PP\&A) |  | $5,129.3$ | $\mathbf{5 , 4 5 0 . 9}$ |
| Sub-Total Environment (PP\&A) |  |  |  |

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## CAPITAL PROGRAM LEVELS FY08-FY09

(\$ in Thousands)

| Program Description | Energization <br> Date | FY 2008 <br> Forecast | FY 2009 <br> Forecast |
| :--- | :--- | ---: | ---: |
| ALL OTHER DIRECT CAPITAL | On-going | 106.9 | 109.0 |
| Completion of Prior Yr Items | On-going | $(3,000.0)$ | $(3,000.0)$ |
| Cap-to-Exp Adjustments | On-going |  |  |
| Undistributed Capital Adjustments | On-going | $3,000.0$ | $3,000.0$ |
| Non-Wires Program | On-going | $5,000.0$ | $5,000.0$ |
| Retirements and Sale of Facilities |  | $\mathbf{5 , 1 0 6 . 9}$ | $\mathbf{5 , 1 0 9 . 0}$ |
| Sub-Total All Other Capital |  |  |  |

SUB TOTAL CAPITAL (DIRECT)
216,901.5 190,462.2

| INDIRECTS |  |  |
| :--- | ---: | ---: |
| TSD Program Indirect | $21,803.8$ | $22,244.1$ |
| TSD MS\&A | $8,865.6$ | $9,044.7$ |
| Support Services Cap Distribution | $10,639.3$ | $10,854.2$ |
| AFUDC | $10,295.0$ | $10,798.0$ |
| Corporate Distributions | $25,388.0$ | $25,168.0$ |
| SUB TOTAL CAPITAL (INDIRECT) | $\mathbf{7 6 , 9 9 1 . 7}$ | $\mathbf{7 8 , 1 0 9 . 0}$ |
| TOTAL CAPITAL REQUIRING BORROWING AUTHORITY |  |  |


| Non-Treasury Financed <Note 1 |  |  |  |
| :--- | :--- | ---: | ---: |
| Generator and Third Party Financed <Note 2 |  |  |  |
| Generator Interconnection | TBD | $42,743.8$ | $38,156.4$ |
| COI Addition Project | 2008 | $4,274.4$ | 0.0 |
| Non-Federal AFUDC <Note 3 | TBD | $2,087.0$ | 285.0 |
| Revenue Financed Projects | TBD |  |  |
| Projects Funded in Advance | TBD | $13,400.0$ | $22,900.0$ |
| Total Non-Treasury Financed |  | $\mathbf{6 2 , 5 0 5 . 2}$ | $\mathbf{6 1 , 3 4 1 . 4}$ |

TOTAL CAPITAL (Direct, Indirect \& Non-Treasury)
$356,398.5 \quad 329,912.6$

This information has been made publicly available by BPA on November 21, 2006, but due to the detailed nature or manner in which it is grouped, the numbers cannot be separately identified in any other publicly released Standard Financial Report or other Agency Financial Information.

## Notes:

$<1$ Source: This category includes those facilities where BPA retains ownership but which is funded by a third party.
<2 Projects shown in this section have not been approved and depend upon signing transmission agreements requiring customer advance payments in return for future transmission credits before going forward. $<3$ Source: AFUDC related to non-Treasury funded projects that is non-Treasury financed.

Capital Program: Comparison of Initial and Current PIR Averages FY08-09 Program Levels (\$ in Thousands)

| Capital Program | Averages Across myos-09 |  |  |
| :---: | :---: | :---: | :---: |
|  | Plintital <Note 1 | Pif Proposal < Note 2 | Delta |
| Main Grid <Note 3 | 72,545 | 71,369 | $(1,175)$ |
| Area and Customer Service | 16,893 | 16,893 |  |
| Upgrades and Additions | 41,854 | 41,854 |  |
| System Replacements < Note 4 | 68,168 | 63,168 | $(5,000)$ |
| Environment | 5,290 | 5,290 | - |
| All Other Capital <Note 7 | $(9,892)$ | 5,108 | 15,000 |
| Sub Total Capital | 194,857 | 203,682 | 8,825 |
| Indirects < Note 5 | 81,242 | 77,550 | $(3,692)$ |
| Total Capital Requiring Treasury Borrowing Authority | 276,100 | 281,232 | 5,133 |
| Non-Treasury Financed <Note 6, <Note 7 | 75,737 | 61,923 | $(13,814)$ |
| Total Capital Program | 351,837 | 343,155 | $(8,681)$ |

This information has been made publicly available by BPA on November 21, 2006, but due to the detailed nature or the manner in which it is grouped, the numbers cannot be separately identified in any other publicly released Standard Financial Report of other Agency Financial Information.

Notes:
<1 Source: Initial PIR is from the Initial PIR meetings in June 2006.
<2 Source: Forecasted Capital used in the October 3, 2006 Revenue Requirement
<3 Source: Planned capital for Libby Troy decreased from initial proposal to reflect a revised plan of service. Part of this decrease was offset by additional planned capital for West of McNary preliminary engineering costs that was not in the initial proposal.
<4 Source: Capital program decreased from initial proposal due to removal of placeholder for emergency capital work.
<5 Source: AFUDC decreased from initial proposal which was offset by an increase in Agency Services.
$<6$ Source: Increased from initial proposal due to the addition of AFUDC related to non-Treasury funded projects that is non-Treasury financed
$<7$ Source: Changes in the Other Capital and Non-Treasury Financed lines are due to reflection of all projected spending for the capital program, Treasury and Non-Treasury financed. The net change of these two lines is zero and therefore is not changing the total projected capital program


[^0]:    test 3-yr TRANS 2008 IP | SINGLE PURPOSE | 12/21/2006 | $9: 52$ AM

[^1]:    (1) Net of interest income and AFUDC.

