

BP-24 Rate Proceeding

Final Proposal

Transmission Revenue Requirement Study Documentation

BP-24-FS-BPA-06A

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TRANSMISSION REVENUE REQUIREMENT STUDY DOCUMENTATION

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COMMONLY USED ACRONYMS AND SHORT FORMS

AAC	Anticipated Accumulation of Cash
ACNR	Accumulated Calibrated Net Revenue
ACS	Ancillary and Control Area Services
AF	Advance Funding
AFUDC	Allowance for Funds Used During Construction
AGC	automatic generation control
aMW	average megawatt(s)
ANR	Accumulated Net Revenues
ASC	Average System Cost
BAA	Balancing Authority Area
BiOp	Biological Opinion
BPA	Bonneville Power Administration
BPAP	Bonneville Power Administration Power
BPAT	Bonneville Power Administration Transmission
Bps	basis points
Btu	British thermal unit
CAISO	California Independent System Operator
CIP	Capital Improvement Plan
CIR	Capital Investment Review
CDQ	Contract Demand Quantity
CGS	Columbia Generating Station
CHWM	Contract High Water Mark
CNR	Calibrated Net Revenue
COB	California-Oregon border
COI	California-Oregon Intertie
Commission	Federal Energy Regulatory Commission
Corps	U.S. Army Corps of Engineers
COSA	Cost of Service Analysis
COU	consumer-owned utility
Council	Northwest Power and Conservation Council (see also "NPCC")
COVID-19	coronavirus disease 2019
CP	Coincidental Peak
CRAC	Cost Recovery Adjustment Clause
CRFM	Columbia River Fish Mitigation
CSP	Customer System Peak
CT	combustion turbine
CWIP	Construction Work in Progress
CY	calendar year (January through December)
DD	Dividend Distribution
DDC	Dividend Distribution Clause
dec	decrease, decrement, or decremental
DERBS	Dispatchable Energy Resource Balancing Service
DFS	Diurnal Flattening Service

DNR	Designated Network Resource
DOE	Department of Energy
DOI	Department of Interior
DSI	direct-service industrial customer or direct-service industry
DSO	Dispatcher Standing Order
EE	Energy Efficiency
EESC	EIM Entity Scheduling Coordinator
EIM	Energy imbalance market
EIS	environmental impact statement
EN	Energy Northwest, Inc.
ESA	Endangered Species Act
ESS	Energy Shaping Service
e-Tag	electronic interchange transaction information
FBS	Federal base system
FCRPS	Federal Columbia River Power System
FCRTS	Federal Columbia River Transmission System
FELCC	firm energy load carrying capability
FERC	Federal Energy Regulatory Commission
FMM-IIE	Fifteen Minute Market – Instructed Imbalance Energy
FOIA	Freedom of Information Act
FORS	Forced Outage Reserve Service
FPS	Firm Power and Surplus Products and Services
FPT	Formula Power Transmission
FRP	Financial Reserves Policy
F&W	Fish & Wildlife
FY	fiscal year (October through September)
G&A	general and administrative (costs)
GARD	Generation and Reserves Dispatch (computer model)
GDP	Gross Domestic Product
GI	generation imbalance
GMS	Grandfathered Generation Management Service
GSP	Generation System Peak
GSR	Generation Supplied Reactive
GRSPs	General Rate Schedule Provisions
GTA	General Transfer Agreement
GWh	gigawatthour
HLH	Heavy Load Hour(s)
HYDSIM	Hydrosystem Simulator (computer model)
IE	Eastern Intertie
IIE	Instructed Imbalance Energy
IM	Montana Intertie
inc	increase, increment, or incremental
IOU	investor-owned utility
IP	Industrial Firm Power
IPR	Integrated Program Review

IR	Integration of Resources
IRD	Irrigation Rate Discount
IRM	Irrigation Rate Mitigation
IRPL	Incremental Rate Pressure Limiter
IS	Southern Intertie
kcfs	thousand cubic feet per second
kW	kilowatt
kWh	kilowatthour
LAP	Load Aggregation Point
LDD	Low Density Discount
LGIA	Large Generator Interconnection Agreement
LLH	Light Load Hour(s)
LMP	Locational Marginal Price
LPP	Large Project Program
LT	long term
LTF	Long-term Firm
Maf	million acre-feet
Mid-C	Mid-Columbia
MMBtu	million British thermal units
MNR	Modified Net Revenue
MO	market operator
MRNR	Minimum Required Net Revenue
MW	megawatt
MWh	megawatthour
NCP	Non-Coincidental Peak
NEPA	National Environmental Policy Act
NERC	North American Electric Reliability Corporation
NFB	National Marine Fisheries Service (NMFS) Federal Columbia River Power System (FCRPS) Biological Opinion (BiOp)
NLSL	New Large Single Load
NMFS	National Marine Fisheries Service
NOAA Fisheries	National Oceanographic and Atmospheric Administration Fisheries
NOB	Nevada-Oregon border
NORM	Non-Operating Risk Model (computer model)
NWPA	Northwest Power Act/Pacific Northwest Electric Power Planning and Conservation Act
NWPP	Northwest Power Pool
NP-15	North of Path 15
NPCC	Northwest Power and Conservation Council
NPV	net present value
NR	New Resource Firm Power
NRFS	NR Resource Flattening Service
NRU	Northwest Requirements Utilities
NT	Network Integration

NTSA	Non-Treaty Storage Agreement
NUG	non-utility generation
OATT	Open Access Transmission Tariff
O&M	operations and maintenance
OATI	Open Access Technology International, Inc.
ODE	Over Delivery Event
OS	oversupply
OY	operating year (August through July)
P10	tenth percentile of a given dataset
PDCI	Pacific DC Intertie
PF	Priority Firm Power
PFp	Priority Firm Public
PFx	Priority Firm Exchange
PNCA	Pacific Northwest Coordination Agreement
PNRR	Planned Net Revenues for Risk
PNW	Pacific Northwest
POD	Point of Delivery
POI	Point of Integration or Point of Interconnection
POR	point of receipt
PPC	Public Power Council
PRSC	Participating Resource Scheduling Coordinator
PS	Power Services
PSC	power sales contract
PSW	Pacific Southwest
PTP	Point-to-Point
PUD	public or people's utility district
RAM	Rate Analysis Model (computer model)
RAS	Remedial Action Scheme
RCD	Regional Cooperation Debt
RD	Regional Dialogue
RDC	Reserves Distribution Clause
REC	Renewable Energy Certificate
Reclamation	U.S. Bureau of Reclamation
REP	Residential Exchange Program
REPSIA	REP Settlement Implementation Agreement
RevSim	Revenue Simulation Model
RFA	Revenue Forecast Application (database)
RHWM	Rate Period High Water Mark
ROD	Record of Decision
RPSA	Residential Purchase and Sale Agreement
RR	Resource Replacement
RRHL	Regional Residual Hydro Load
RRS	Resource Remarketing Service
RSC	Resource Shaping Charge
RSS	Resource Support Services

RT1SC	RHWM Tier 1 System Capability
RTD-IIE	Real-Time Dispatch – Instructed Imbalance Energy
RTIEO	Real-Time Imbalance Energy Offset
SCD	Scheduling, System Control, and Dispatch Service
SCADA	Supervisory Control and Data Acquisition
SCS	Secondary Crediting Service
SDD	Short Distance Discount
SILS	Southeast Idaho Load Service
Slice	Slice of the System (product)
SMCR	Settlements, Metering, and Client Relations
SP-15	South of Path 15
T1SFCO	Tier 1 System Firm Critical Output
TC	Tariff Terms and Conditions
TCMS	Transmission Curtailment Management Service
TDG	Total Dissolved Gas
TGT	Townsend-Garrison Transmission
TOCA	Tier 1 Cost Allocator
TPP	Treasury Payment Probability
TRAM	Transmission Risk Analysis Model
Transmission System Act	Federal Columbia River Transmission System Act
Treaty	Columbia River Treaty
TRL	Total Retail Load
TRM	Tiered Rate Methodology
TS	Transmission Services
TSS	Transmission Scheduling Service
UAI	Unauthorized Increase
UDE	Under Delivery Event
UFE	unaccounted for energy
UFT	Use of Facilities Transmission
UIC	Unauthorized Increase Charge
UIE	Uninstructed Imbalance Energy
ULS	Unanticipated Load Service
USFWS	U.S. Fish & Wildlife Service
VER	Variable Energy Resource
VERBS	Variable Energy Resource Balancing Service
VOR	Value of Reserves
VR1-2014	First Vintage Rate of the BP-14 rate period (PF Tier 2 rate)
VR1-2016	First Vintage Rate of the BP-16 rate period (PF Tier 2 rate)
WECC	Western Electricity Coordinating Council
WPP	Western Power Pool
WRAP	Western Resource Adequacy Program
WSPP	Western Systems Power Pool

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1. TRANSMISSION REVENUE REQUIREMENTS

1.1 Introduction

Chapter 1 documents how the Bonneville Power Administration's (BPA) annual transmission revenue requirements are determined. Two tables are presented, each showing both years of the rate period (FY 2024 and FY 2025). On the first table, revenue requirements for FY 2024 and FY 20235 are projected in an income statement format. The second table, a statement of annual cash flows, determines the minimum required net revenues and presents the annual cash flows available for risk mitigation.

1.2 Income Statement

Below is a line-by-line description of each of the components in the Income Statement (Table 1-1).

Transmission operations (line 2). Transmission operations includes spending for technical operations; substation operations; control center support; power system dispatching; Transmission information technology (IT) costs, including corporate agency services IT costs that are allocated to Transmission Services (TS); and scheduling services (reservations, pre-scheduling, real-time and after-the-fact scheduling, and technical support). This category also includes spending for business strategy and assessment, billing, finance, contract management, and internal operations. *See Ch. 3.*

Transmission engineering (line 3). This category includes spending on asset management and planning, design of lines/towers/substations, construction planning, construction management, and real property services. *Id.*

Transmission maintenance (line 4). This category includes spending for all Transmission Services maintenance activities, such as ongoing maintenance of substations, lines, and protection control systems. This category also includes spending on environmental analysis and pollution prevention and abatement. *Id.*

Transmission acquisition & ancillary services (line 5). This category includes inter-business line expenses resulting from functional separation and costs of ancillary services products, including Power Services generation inputs to ancillary services. It also includes the costs of station service and remedial action schemes, Corps of Engineers (Corps) and Bureau of Reclamation (Reclamation) transmission facilities serving the Network and Utility Delivery segments, and payments to other utilities for stability reserves, settlements, and operating leases. *Id.*

BPA internal support (line 6). This category comprises spending on general and administrative programs that are allocated to BPA's two business units. These programs include legal services, finance, risk management, security and emergency management, human resources, and executive oversight and management. *Id.*

Other income, expenses & adjustments (line 7). Generally, this category includes items that do not fit in any other category. If the Administrator proposes to use reserves in support of a settlement, this line displays the amount of financial reserves to be used as an offset of expenses.

Depreciation & amortization (line 8). Depreciation is the annual capital recovery expense associated with Federal Columbia River Transmission System (FCRTS) plant-in-service. BPA transmission and general plant are depreciated by the straight-line method, using the remaining life technique. Amortization refers to the annual capital recovery expense for deferred transmission assets (also known as regulatory assets). Amortization expense includes a new regulatory asset, the I-5 reinforcement project. *See* Ch. 3 & 4.

Total operating expenses (line 9). Total operating expenses is the sum of the above expenses (lines 2 through 8).

Federal appropriations (line 13). Federal appropriations consists of interest on the appropriations BPA received prior to full implementation of BPA's self-financing authority and is determined in the transmission repayment studies. *See* Ch. 3.

Capitalization adjustment (line 14). Implementation of the BPA Appropriations Refinancing Act (*see* Transmission Revenue Requirement Study, BP-24-FS-BPA-06, § 1.2.1.2) 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 expense.

Long-term debt (line 15). Long-term debt includes interest on bonds that BPA issues to the U.S. 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. This line includes any payments of call premiums for bonds projected to be amortized. *See* Ch. 3.

Amortization of capitalized bond premiums (line 16). When a bond issued to the U.S. Treasury is refinanced, any call premium resulting from early retirement of the original bond is may be 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. *Id.*

Debt service reassignment interest (line 17). Debt service reassignment interest consists of the interest component of the debt service reassigned to TS through the Debt Optimization Program. *See* Ch. 3 & 8.

Non-Federal interest (line 18). Non-Federal interest consists of interest paid on BPA's lease purchase projects and other capital leases as well as interest paid on customer advance funding for generator interconnection agreements and for the California-Oregon Intertie (COI) upgrade. The customers' advanced funds accrue interest on the outstanding balances until they are returned to customers through credits for transmission service. *See* Transmission Revenue Requirement Study, BP-24-FS-BPA-06, § 2.2.5.

Premiums/Discounts (line 19). Premiums and discounts are paid or received on federal bonds. *See* Transmission Revenue Requirement Study, BP-24-FS-BPA-06, at § 2.3.

Allowance for funds used during construction (AFUDC) (line 20). AFUDC for U.S. Treasury-financed transmission projects is a credit against interest on long-term debt (line 15). 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. Also included is the interest accrued on large generator interconnection agreement (LGIA) funds during the construction period of the associated facilities. AFUDC is capitalized, added to other construction costs, and is recovered in rates once the facilities are placed in service. AFUDC is part of the depreciation expense that is recovered over the expected life of the plant. *See* Ch. 3.

Interest income (line 21). Interest income is computed on the projected year-end cash balances in the BPA Fund that are attributed to the transmission function and that carry over into the next year. It is credited against interest on long-term debt. 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. *See* Ch. 5.

Net interest expense (line 22). Net interest expense is computed as the sum of the interest on Federal appropriations (line 13), capitalization adjustment (line 14), long-term debt (line 15), amortization of capitalized bond premiums (line 16), debt service reassignment interest (line 17), non-Federal interest (line 18), premiums/discounts (line 19), AFUDC (line 20), and interest income (line 21).

Total expenses (line 24). Total expenses is the sum of total operating expenses (line 9) and net interest expense (line 22).

Minimum Required Net Revenues (line 26). Minimum required net revenues (MRNR), an input from line 2 of the Statement of Cash Flows (Table 1-2), may be necessary to cover cash requirements in excess of accrued expenses. An explanation of the method used for determining MRNR is included in section 1.3 below.

Planned Net Revenues for Risk (line 27). Planned net revenues for risk (PNRR) is the amount of net revenues, if any, to be included in rates for financial risk mitigation.

Total planned net revenues (line 28). Total planned net revenues is the sum of Minimum Required Net Revenues (line 26) and Planned Net Revenues for Risk (line 27).

Total revenue requirement (line 30). Total revenue requirement is the sum of total expenses (line 24) and total planned net revenues (line 28).

1.3 Statement of Cash Flows

Below is a line-by-line description of each of the components in the Statement of Cash Flows (Table 1-2).

Minimum Required Net Revenue (MRNR) (line 2). BPA determines whether MRNR is necessary by evaluating the annual cash inflows and outflows shown on the Statement of Cash Flows. MRNR may be necessary to ensure that the cash provided by current operations (line 11) will be sufficient to cover the planned amortization payments (the difference between lines 16 and 24) without causing the annual increase (decrease) in cash (line 26) to be negative. The MRNR determined in the Statement of Cash Flows is incorporated in the Income Statement (Table 1-1, line 26).

Cashflow (line 3). This represents the cash flow generated after after LGIA iterations are completed. It is the sum of line 4 through line 12, line 18, and line 26. A negative value is an offset to line 2b, Revenue Financing Minimum Required Net Revenue.

Revenue Financing Minimum Required Net Revenue (line 4). This represents the amount of revenue financing chosen for the implementation of the Leverage Policy or for any other purpose.

Depreciation & Amortization (line 6). The depreciation amount is from the Income Statement (Table 1-1, line 8). It, like the following five lines, is added back to net revenues in computing cash provided by current operations (Table 1-2, line 11) because it is a non-cash expense.

Transmission credit projects net interest (line 7). Transmission credit projects net interest is the non-cash expenses from the Income Statement for generator interconnection and COI upgrade customers' interest on their credit balances for advance funding (included in Table 1-1, line 18) and the AFUDC on the projects under construction funded by those customers (included in Table 1-1, line 20).

Amortization of capitalized bond premiums (line 8). Amortization of capitalized bond premiums, from the Income Statement (Table 1-1, line 16), is a non-cash expense.

Capitalization adjustment (line 9). The capitalization adjustment, from the Income Statement (Table 1-1, line 14), is a negative non-cash expense.

LGIA (line 11). Revenue credits associated with customer-funded capital projects are recognized as non-cash revenues. Customers provide an up-front deposit for construction of transmission facilities which is returned to them through a transmission credit on their transmission service bill until the deposit is repaid.

AC Intertie/fiber (line 12). Accrual revenues are recognized here because these revenues provide no cash for cost recovery. BPA accounts for the AC Intertie non-Federal capacity ownership lump-sum payments received in FY 1995 as unearned revenues that are recognized annually over the estimated average service life of the associated transmission facilities. Similarly, some leases of fiber optic capacity have included up-front payments, 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.

Cash provided by current operations (line 13). Cash provided by current operations, the sum of lines 3 through 12, is available for the year to satisfy cash requirements.

Investment in utility plant (line 17). Investment in utility plant represents the annual increase in capital expenditures for additions and replacements to the transmission system funded by U.S. Treasury bonds or available cash reserves. *See Ch. 7.*

Cash used for capital investments (line 18). Cash used for capital investments is the sum of investments in utility plant.

Increase in long-term debt (line 21). 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. This amount also includes any notes issued to the U.S. Treasury. *See Ch. 7.*

Debt service reassignment principal (line 22). Debt service reassignment principal is the principal component of the debt service obligation reassigned to TS through the Debt Optimization Program. *See Ch. 8.*

Repayment of capital leases (line 24). Repayment of capital leases is BPA's payment of the principal component of certain capital leases.

Repayment of long-term debt (line 25). 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 Ch. 3.*

Repayment of capital appropriations (line 25). Repayment of capital appropriations represents projected amortization of outstanding BPA appropriations (pre-self-financing) as determined in the repayment studies. Transmission no longer has appropriations outstanding. *Id.*

Cash from treasury borrowing and appropriations (line 26). Cash from treasury borrowing and appropriations is the sum of lines 19 through 23. 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 28). Annual increase (decrease) in cash, the sum of lines 13, 18, and 26, reflects the annual net cash flow from current operations, 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 above discussion of Minimum Required Net Revenues (line 2).

Planned net revenues for risk (line 30). Planned net revenues for risk reflects the amounts included in revenue requirements to meet BPA's risk mitigation objectives (from Table 1-1, line 27.)

Total annual increase (decrease) in cash (line 32). Total annual increase (decrease) in cash, the sum of Lines 26 and 28, is the total annual cash that is projected to be available to add to BPA's cash reserves.

TABLE 1-1
TRANSMISSION REVENUE REQUIREMENT INCOME STATEMENT
(\$000)

	A	B
	<u>2024</u>	<u>2025</u>
1 OPERATING EXPENSES		
2 TRANSMISSION OPERATIONS	191,615	198,324
3 TRANSMISSION ENGINEERING	60,231	61,194
4 TRANSMISSION MAINTENANCE	193,212	199,230
5 TRANSMISSION ACQUISITION & ANCILLARY SERVICES	117,998	117,998
6 BPA INTERNAL SUPPORT	136,034	139,965
7 OTHER INCOME, EXPENSES & ADJUSTMENTS	-	-
8 DEPRECIATION & AMORTIZATION	<u>357,998</u>	<u>343,958</u>
9 TOTAL OPERATING EXPENSES	1,057,089	1,060,670
10		
11 INTEREST EXPENSE		
12 INTEREST EXPENSE		
13 FEDERAL APPROPRIATIONS	-	-
14 CAPITALIZATION ADJUSTMENT	(18,968)	(18,968)
15 ON LONG-TERM DEBT	123,338	139,964
16 AMORTIZATION OF CAPITALIZED BOND PREMIUMS	559	559
17 DEBT SERVICE REASSIGNMENT INTEREST	843	-
18 NON-FEDERAL INTEREST	61,885	62,050
19 PREMIUMS/DISCOUNTS	-	-
20 AFUDC	(15,100)	(13,934)
21 INTEREST INCOME	<u>(1,804)</u>	<u>(2,575)</u>
22 NET INTEREST EXPENSE	150,752	167,096
23		
24 TOTAL EXPENSES	1,207,841	1,227,766
25		
26 MINIMUM REQUIRED NET REVENUE 1/	54,751	54,723
27 PLANNED NET REVENUES FOR RISK	-	-
28 TOTAL PLANNED NET REVENUE	54,751	54,723
29		
30 TOTAL REVENUE REQUIREMENT	1,262,593	1,282,490

1/ SEE NOTE ON CASH FLOW TABLE.

TABLE 1-2
TRANSMISSION REVENUE REQUIREMENT STATEMENT OF CASH FLOWS
(\$000)

	A	B
	2024	2025
1 CASH FROM CURRENT OPERATIONS:		
2 TOTAL MINIMUM REQUIRED NET REVENUE	54,751	54,723
3 CASH FLOW	<u>(249)</u>	<u>(277)</u>
4 REVENUE FINANCING MINIMUM REQUIRED NET REVENUE	55,000	55,000
5 EXPENSES NOT REQUIRING CASH:		
6 DEPRECIATION & AMORTIZATION	357,998	343,958
7 TRANSMISSION CREDIT PROJECTS NET INTEREST	3,656	2,918
8 AMORTIZATION OF CAPITALIZED BOND PREMIUMS	559	559
9 CAPITALIZATION ADJUSTMENT	(18,968)	(18,968)
10 NON-CASH REVENUES/ACCRUAL REVENUES		
11 LGIA	(24,112)	(26,502)
12 AC INTERTIE CO/FIBER	<u>(3,791)</u>	<u>(3,524)</u>
13 CASH PROVIDED BY CURRENT OPERATIONS	370,093	353,164
14		
15 CASH USED FOR CAPITAL INVESTMENTS:		
16 INVESTMENT IN:		
17 UTILITY PLANT	<u>(573,492)</u>	<u>(557,985)</u>
18 CASH USED FOR CAPITAL INVESTMENTS	(573,492)	(557,985)
19		
20 CASH FROM TREASURY BORROWING AND APPROPRIATIONS:		
21 INCREASE IN LONG-TERM DEBT	518,492	502,985
22 DEBT SERVICE REASSIGNMENT PRINCIPAL	(17,640)	-
23 REPAYMENT OF CAPITAL LEASES	(92,441)	(110,726)
24 REPAYMENT OF LONG-TERM DEBT	(205,012)	(187,438)
25 REPAYMENT OF CAPITAL APPROPRIATIONS	<u>-</u>	<u>-</u>
26 CASH FROM TREASURY BORROWING AND APPROPRIATIONS	203,399	204,821
27		
28 ANNUAL INCREASE (DECREASE) IN CASH ^{1/}	-	-
29		
30 PLANNED NET REVENUE FOR RISK	-	-
31		
32 TOTAL ANNUAL INCREASE (DECREASE) IN CASH	-	-

1/ Line 24 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 1-3
CALCULATION OF MINIMUM REQUIRED NET REVENUES
(\$000)

	2024	2025
SOURCES OF CASH -- CASH FROM OPERATIONS		
1 DEPRECIATION & AMORTIZATION	357,998	343,958
2 TRANSMISSION CREDIT PROJECTS NET INTEREST	3,656	2,918
3 AMORTIZATION OF CAPITALIZED BOND PREMIUMS	559	559
4 CAPITALIZATION ADJUSTMENT	(18,968)	(18,968)
5 LGIA	(24,112)	(26,502)
6 AC INTERTIE CO/FIBER	<u>(3,791)</u>	<u>(3,524)</u>
7 TOTAL SOURCES OF CASH	315,342	298,441
8		
9 USES OF CASH -- CAPITAL FINANCING & DEBT REPAYMENT		
10 DEBT SERVICE REASSIGNMENT PRINCIPAL	17,640	-
11 REPAYMENT OF CAPITAL LEASES	92,441	110,726
12 REPAYMENT OF LONG-TERM DEBT	205,012	187,438
13 REPAYMENT OF CAPITAL APPROPRIATIONS	-	-
14 REVENUE FINANCING 1/	<u>55,000</u>	<u>55,000</u>
15 TOTAL USES OF CASH	370,093	353,164
16		
17 MINIMUM REQUIRED NET REVENUE (line 15 minus line 7)	54,751	54,723

1/ Equals difference between Table 1-2 line 18 and the sum of Table 1-2 lines 21 and 25

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2. SEGMENTATION OF TRANSMISSION REVENUE REQUIREMENT

This chapter is not used since BPA is proposing a settlement at BP-22 rates which does not require the use of a segmented revenue requirement.

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3. TRANSMISSION EXPENSES

3.1 Introduction

This chapter compiles the expenses that are included in transmission revenue requirements for the rate period.

3.2 Expenses

Table 3-1 displays the forecast program spending levels that are the basis for the revenue requirement study. There are two types of expenses included in the program spending levels, O&M expenses and inter-business line expenses. O&M expenses came from the Integrated Program Review (IPR) process. Inter-business line expenses, including the cost of redispatch, are composed of two sub-groups of costs. The first is the generation inputs for ancillary services. The second is the annual cost of Network segment facilities and Utility Delivery segment facilities of the Corps of Engineers and Bureau of Reclamation annual costs of those agencies.

Depreciation and amortization expense is calculated using the straight-line method and remaining-life technique for lines, substations, and each of the FERC Accounts in the general plant category. *See* Ch. 4.

Interest expense is calculated in the transmission repayment study using the capital appropriations and BPA revenue bonds issued to the U.S. Treasury at individual interest rates. *See* section 5 for calculation of the interest credit on cash reserves.

TABLE 3-1
TRANSMISSION PROGRAM SPENDING FORECAST
(\$000s)

	A 2024	B 2025
1 TRANSMISSION SYSTEM OPERATIONS		
2 POWER SYSTEM DISPATCHING	21,324	22,435
3 INFORMATION TECHNOLOGY	10,517	10,927
4 CONTROL CENTER SUPPORT	36,279	36,802
5 TECHNICAL OPERATIONS	7,463	7,695
6 SUBSTATION OPERATIONS	31,097	32,699
7 OVERSUPPLY ADMIN - SPLIT FROM TECH. OPS	308	308
11 SUB-TOTAL TRANSMISSION SYSTEM OPERATIONS	106,988	110,866
12 TRANSMISSION SCHEDULING		
13 RESERVATIONS	769	791
14 PRE-SCHEDULING	-	-
15 REAL-TIME SCHEDULING	5,518	5,714
16 SCHEDULING TECHNICAL SUPPORT	5,111	5,273
17 SCHEDULING AFTER-THE-FACT	3	3
18 SUB-TOTAL TRANSMISSION SCHEDULING	11,401	11,781
19 TRANSMISSION MARKETING		
20 TRANSMISSION SALES	3,793	3,946
21 CONTRACT MANAGEMENT	2,745	2,849
22 TRANSMISSION BILLING	-	-
23 BUSINESS STRATEGY & ASSESSMENT	6,671	6,924
STRATEGIC INTEGRATION (<i>Previously Energy Imbalance Market - EIM</i>)	80	80
24 SUB-TOTAL TRANSMISSION MARKETING	13,289	13,799
25 TRANSMISSION BUSINESS SUPPORT		
26 EXECUTIVE & ADMIN SERVICES	15,326	15,806
27 AIRCRAFT SERVICES	774	792
28 GENERAL ADMINISTRATIVE	33,255	34,181
29 LOGISTICS SERVICES	5,381	5,771
30 SECURITY ENHANCEMENTS EXPENSE	2,581	2,591
31 LEGAL SUPPORT - EXPENSE	2,797	2,913
34 SUB-TOTAL TRANSMISSION BUSINESS SUPPORT	60,113	62,054
35 TRANSMISSION ENGINEERING		
36 RESEARCH & DEVELOPMENT	1,688	1,713
37 TSD PLANNING & ANALYSIS	33,404	34,005
38 CAPITAL TO EXPENSE TRANSFER	6,468	6,492
39 NERC/WECC COMPLIANCE	10,582	10,765
40 ENVIRONMENTAL POLICY/PLANNING	3,231	3,337
41 ENG. LINE RATING	2,725	2,750
42 SUB-TOTAL TRANSMISSION ENGINEERING	58,099	59,062

**TABLE 3-1
TRANSMISSION PROGRAM SPENDING FORECAST
(\$000s)**

	A	B
	2024	2025
43 TRANSMISSION SYSTEM MAINTENANCE		
44 ENVIRONMENTAL ANALYSIS		
45 HEAVY MOBILE EQUIPMENT MAINTENANCE		
46 NON-ELECTRIC MAINTENANCE	28,589	29,071
47 SUBSTATION MAINTENANCE	39,944	41,907
48 TRANSMISSION LINE MAINTENANCE	30,191	31,453
49 SYSTEM PROTECTION CONTROL MAINTENANCE	20,642	21,259
50 POWER SYSTEM CONTROL MAINTENANCE	28,137	29,078
51 JOINT COST MAINTENANCE	132	141
52 SYSTEM MAINTENANCE MANAGEMENT	9,451	9,714
53 RIGHT OF WAY MAINTENANCE	6,217	6,291
54 POLLUTION PREVENTION & ABATEMENT	5,633	5,793
55 TECHNICAL TRAINING	2,758	2,845
56 VEGETATION MANAGEMENT	22,163	22,263
57 SUB-TOTAL TRANSMISSION SYSTEM MAINTENANCE	193,858	199,816
58 SUB-TOTAL TRANSMISSION SYSTEM OPERATIONS & MAINTENANCE	443,748	457,377
59 NON-BETWEEN BUSINESS LINE ANCILLARY SERVICES		
60 LEASED FACILITIES	4,128	4,129
61 SETTLEMENT AGREEMENTS	-	-
62 NON-BBL ANCILLARY SERVICES	221	221
63 RELIABILITY DEMAND RESPONSE/REDISPATCH (NonBBL)	-	-
64 SUB-TOTAL NON-BETWEEN BUSINESS LINE ANCILLARY SERVICES	4,349	4,350
65 CORPORATE EXPENSES		
66 UNFUNDED RETIREMENT BENEFITS	18,470	18,470
67 CORPORATE OVERHEAD DISTRIBUTIONS	117,558	121,465
68 SUB-TOTAL CORPORATE CHARGES	136,027	139,935
69 EIM rolled-in costs	1,362	1,362
69 OTHER INCOME AND ADJUSTMENTS	-	-
70 TOTAL TRANSMISSION IPR PROGRAM LEVELS	585,486	603,025

TABLE 3-2
SUMMARY OF TRANSMISSION REPAYMENT STUDY DATA
(\$000s)

	A	B
	<u>2024</u>	<u>2025</u>
1 DSR INTEREST	843	-
2 NON-FEDERAL/CAPITAL LEASES INTEREST	58,229	59,133
3 APPROPRIATION INTEREST	-	-
4 BOND INTEREST	123,338	139,964
5 DISCOUNTS / PREMIUMS	-	-
6 TOTAL GROSS INTEREST	<u>182,410</u>	<u>199,097</u>
6 DSR PRINCIPAL	17,640	-
7 NON-FEDERAL/CAPITAL LEASE PRINCIPAL	92,441	110,726
8 APPROPRIATION PRINCIPAL	-	-
9 BOND PRINCIPAL	<u>205,012</u>	<u>187,438</u>
10 TOTAL PRINCIPAL	315,093	298,164

TABLE 3-3
ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION
(\$000s)

	A	B
	<u>2024</u>	<u>2025</u>
1 CAPITAL EXPENDITURES	547,897	531,745
2 PLANT-IN-SERVICE	604,927	596,190
3 SOY CWIP BALANCE	630,532	573,503
4 EOY CWIP BALANCE	573,503	509,058
5 AVERAGE CWIP BALANCE	602,017	541,280
6 AFUDC RATE	2.47%	2.52%
7 AFUDC	14,870	13,640
8 CORPORATE CAPITAL (65% OF TOTAL)	10,725	12,600
9 CORPORATE AFUDC	<u>231</u>	<u>294</u>
10 TOTAL AFUDC FOR BPA BORROWING	15,100	13,934

TABLE 3-4
AMORTIZATION OF PREMIUMS OF BOND REFINANCINGS
(\$000s)

A	B	C	D	E	F	G	H	I
DATE OF REFINANCING	PREMIUM	PRORATION	NO. OF MONTHS	MONTHLY AMORTIZATION	TYPE OF BOND	LAST MONTH TO AMORTIZE	<u>ANNUAL AMOUNTS</u>	
							2024	2025
1	5/31/1998		411	15	CONSTRUCTION	Aug-2032	184	184
2	8/31/1998		360	13	CONSTRUCTION	Aug-2028	156	156
3	8/31/1998		360	18	CONSTRUCTION	Aug-2028	219	219
4	Total			47			559	559

**TABLE 3-5
BETWEEN BUSINESS LINE COSTS
(\$000s)**

	A	B	C
	<u>2024</u>	<u>2025</u>	<u>AVERAGE</u>
1 ANCILLARY SERVICES	105,896	105,896	105,896
2 SYNCHRONOUS CONDENSING	1,292	1,292	1,292
3 GENERATION DROPPING	553	553	553
4 COE/RECLAMATION NETWORK/ DELIVERY FACILITIES SEGMENTATION	706	706	706
5 REDISPATCH	332	332	332
6 STATION SERVICE	3,307	3,307	3,307
7 LOSSES	-	-	-
7 TOTAL	112,086	112,086	112,086

TABLE 3-6
SUMMARY OF DEPRECIATION
(\$000s)

	<u>A</u> <u>2024</u>	<u>B</u> <u>2025</u>
1 TRANSMISSION PLANT		
2 LINES	119,309	123,195
3 SUBSTATION	126,160	133,036
4 STATION EQUIPMENT	4,465	5,636
5 GENERAL PLANT	74,646	74,549
6 ANCILLARY SERVICES (Excludes Station Equipment)	9,200	10,497
7 INTANGIBLE ASSETS	431	431
8 REGULATORY ASSET	<u>28,253</u>	<u>2,250</u>
9 TOTAL	357,998	343,958

TABLE 3-7
TRANSMISSION REGULATORY ASSETS
(\$000s)

		<u>A</u>	<u>B</u>
		2024	2025
1	SPACER DAMPERS - 30 YR LIFE		
2	ADDITIONS	-	-
3	AMORTIZATION	956	956
4	SPACER DAMPERS - 25 YR LIFE		
5	ADDITIONS	-	-
6	AMORTIZATION	1,294	1,294
7	CAPITALIZED BOND PREMIUMS	559	559
8	I-5 REINFORCEMENT PROJECT	26,003	

Table 3-8
Debt to Asset Ratio Assuming 10% Revenue Financing
(\$000s)

	<u>2023</u>	<u>2024</u>	<u>2025</u>
DEBT	6,146,644	6,347,711	6,551,704
1 PRIOR YEAR NET DEBT OUTSTANDING	5,997,100	6,146,644	6,347,711
2 NEW FEDERAL BORROWING	449,393	516,120	502,157
3 NEW NON-FEDERAL BORROWING			
4 DEFERRED BORROWING 1/			
5 LESS: PRINCIPAL REPAYMENT	(299,849)	(315,053)	(298,164)
6 ASSETS (INCLUDE CORP ALLOCATION)	8,133,726	8,452,846	8,752,616
7 PRIOR YEAR COMPLETED PLANT BALANCE	11,156,534	11,611,624	12,137,397
8 CWIP	755,569	755,569	755,569
9 NEW BPA-FINANCED INVESTMENT	489,393	573,492	557,985
10 NEW NONBPA FINANCED INVESTMENT	55,451	42,035	50,153
11 ASSET RETIREMENT	(89,754)	(89,754)	(89,754)
12 LESS: PRIOR YEAR ACCUMULATED DEPRECIATION*	(4,037,205)	(4,233,467)	(4,440,120)
13 LESS: CURRENT YEAR DEPRECIATION*	(326,492)	(336,883)	(348,845)
14 ADJUSTMENTS TO DEPRECIATION	130,230	130,230	130,230
15 DEBT TO ASSET RATIO	75.57%	75.10%	74.85%

Table 3-8
Debt to Asset Ratio Assuming 10% Revenue Financing
(\$000s)

	<u>2026</u>	<u>2027</u>	<u>2028</u>
DEBT	6,717,390	6,846,074	6,962,486
1 PRIOR YEAR NET DEBT OUTSTANDING	6,551,704	6,717,390	6,846,074
2 NEW FEDERAL BORROWING	476,538	455,664	462,646
3 NEW NON-FEDERAL BORROWING			
4 DEFERRED BORROWING 1/			
5 LESS: PRINCIPAL REPAYMENT	(310,852)	(326,979)	(346,235)
6 ASSETS (INCLUDE CORP ALLOCATION)	9,010,075	9,231,214	9,446,254
7 PRIOR YEAR COMPLETED PLANT BALANCE	12,655,782	13,146,162	13,613,799
8 CWIP	755,569	755,569	755,569
9 NEW BPA-FINANCED INVESTMENT	529,674	506,641	514,572
10 NEW NONBPA FINANCED INVESTMENT	50,460	50,750	50,670
11 ASSET RETIREMENT	(89,754)	(89,754)	(89,754)
12 LESS: PRIOR YEAR ACCUMULATED DEPRECIATION*	(4,658,735)	(4,891,656)	(5,138,154)
13 LESS: CURRENT YEAR DEPRECIATION*	(363,151)	(376,728)	(390,680)
14 ADJUSTMENTS TO DEPRECIATION	130,230	130,230	130,230
15 DEBT TO ASSET RATIO	74.55%	74.16%	73.71%

Table 3-8
Debt to Asset Ratio Assuming 10% Revenue Financing
(\$000s)

	<u>2029</u>	<u>2030</u>	<u>2031</u>
DEBT	7,042,665	7,106,408	7,153,928
1 PRIOR YEAR NET DEBT OUTSTANDING	6,962,486	7,042,665	7,106,408
2 NEW FEDERAL BORROWING	450,352	451,063	449,163
3 NEW NON-FEDERAL BORROWING			
4 DEFERRED BORROWING 1/			
5 LESS: PRINCIPAL REPAYMENT	(370,173)	(387,321)	(401,643)
6 ASSETS (INCLUDE CORP ALLOCATION)	9,636,153	9,814,851	9,964,061
7 PRIOR YEAR COMPLETED PLANT BALANCE	14,089,288	14,551,484	15,014,675
8 CWIP	755,569	755,569	755,569
9 NEW BPA-FINANCED INVESTMENT	501,096	502,083	500,177
10 NEW NONBPA FINANCED INVESTMENT	50,853	50,862	35,518
11 ASSET RETIREMENT	(89,754)	(89,754)	(89,754)
12 LESS: PRIOR YEAR ACCUMULATED DEPRECIATION*	(5,398,604)	(5,670,899)	(5,955,392)
13 LESS: CURRENT YEAR DEPRECIATION*	(402,526)	(414,723)	(426,961)
14 ADJUSTMENTS TO DEPRECIATION	130,230	130,230	130,230
15 DEBT TO ASSET RATIO	73.09%	72.40%	71.80%

Table 3-8
Debt to Asset Ratio Assuming 10% Revenue Financing
(\$000s)

	<u>2032</u>	<u>2033</u>	<u>2034</u>
DEBT	7,191,023	7,216,515	7,263,286
1 PRIOR YEAR NET DEBT OUTSTANDING	7,153,928	7,191,023	7,216,515
2 NEW FEDERAL BORROWING	448,754	450,753	458,090
3 NEW NON-FEDERAL BORROWING			
4 DEFERRED BORROWING 1/			
5 LESS: PRINCIPAL REPAYMENT	(411,659)	(425,260)	(411,319)
6 ASSETS (INCLUDE CORP ALLOCATION)	10,101,254	10,225,438	10,372,788
7 PRIOR YEAR COMPLETED PLANT BALANCE	15,460,615	15,904,556	16,349,256
8 CWIP	755,569	755,569	755,569
9 NEW BPA-FINANCED INVESTMENT	499,935	502,376	510,877
10 NEW NONBPA FINANCED INVESTMENT	33,760	32,078	32,801
11 ASSET RETIREMENT	(89,754)	(89,754)	(89,754)
12 LESS: PRIOR YEAR ACCUMULATED DEPRECIATION*	(6,252,123)	(6,558,871)	(6,879,387)
13 LESS: CURRENT YEAR DEPRECIATION*	(436,978)	(450,746)	(436,804)
14 ADJUSTMENTS TO DEPRECIATION	130,230	130,230	130,230
15 DEBT TO ASSET RATIO	71.19%	70.57%	70.02%

Table 3-8
Debt to Asset Ratio Assuming 10% Revenue Financing
(\$000s)

	<u>2035</u>	<u>2036</u>	<u>2037</u>
DEBT	7,306,878	7,341,010	7,358,685
1 PRIOR YEAR NET DEBT OUTSTANDING	7,263,286	7,306,878	7,341,010
2 NEW FEDERAL BORROWING	464,753	471,443	478,172
3 NEW NON-FEDERAL BORROWING			
4 DEFERRED BORROWING 1/			
5 LESS: PRINCIPAL REPAYMENT	(421,160)	(437,311)	(460,496)
6 ASSETS (INCLUDE CORP ALLOCATION)	10,518,849	10,663,469	10,806,492
7 PRIOR YEAR COMPLETED PLANT BALANCE	16,803,180	17,265,705	17,736,902
8 CWIP	755,569	755,569	755,569
9 NEW BPA-FINANCED INVESTMENT	518,735	526,647	534,627
10 NEW NONBPA FINANCED INVESTMENT	33,543	34,303	35,080
11 ASSET RETIREMENT	(89,754)	(89,754)	(89,754)
12 LESS: PRIOR YEAR ACCUMULATED DEPRECIATION*	(7,185,962)	(7,502,425)	(7,829,002)
13 LESS: CURRENT YEAR DEPRECIATION*	(446,694)	(456,807)	(467,161)
14 ADJUSTMENTS TO DEPRECIATION	130,230	130,230	130,230
15 DEBT TO ASSET RATIO	69.46%	68.84%	68.10%

Table 3-8
Debt to Asset Ratio Assuming 10% Revenue Financing
(\$000s)

	<u>2038</u>	<u>2039</u>	<u>2040</u>
DEBT	7,372,580	7,382,478	7,388,164
1 PRIOR YEAR NET DEBT OUTSTANDING	7,358,685	7,372,580	7,382,478
2 NEW FEDERAL BORROWING	484,943	491,751	498,629
3 NEW NON-FEDERAL BORROWING			
4 DEFERRED BORROWING 1/			
5 LESS: PRINCIPAL REPAYMENT	(471,049)	(481,852)	(492,943)
6 ASSETS (INCLUDE CORP ALLOCATION)	10,947,760	11,087,108	11,224,373
7 PRIOR YEAR COMPLETED PLANT BALANCE	18,216,856	18,705,659	19,203,397
8 CWIP	755,569	755,569	755,569
9 NEW BPA-FINANCED INVESTMENT	542,680	550,800	559,025
10 NEW NONBPA FINANCED INVESTMENT	35,877	36,692	37,529
11 ASSET RETIREMENT	(89,754)	(89,754)	(89,754)
12 LESS: PRIOR YEAR ACCUMULATED DEPRECIATION*	(8,165,933)	(8,513,468)	(8,871,858)
13 LESS: CURRENT YEAR DEPRECIATION*	(477,765)	(488,620)	(499,765)
14 ADJUSTMENTS TO DEPRECIATION	130,230	130,230	130,230
15 DEBT TO ASSET RATIO	67.34%	66.59%	65.82%

Table 3-9
Debt to Asset Ratio Assuming 20% Revenue Financing
(\$000s)

	<u>2023</u>	<u>2024</u>	<u>2025</u>
DEBT	6,146,644	6,350,083	6,554,904
1 PRIOR YEAR NET DEBT OUTSTANDING	5,997,100	6,146,644	6,350,083
2 NEW FEDERAL BORROWING	449,393	518,492	502,985
3 NEW NON-FEDERAL BORROWING			
4 DEFERRED BORROWING 1/			
5 LESS: PRINCIPAL REPAYMENT	(299,849)	(315,053)	(298,164)
6 ASSETS (INCLUDE CORP ALLOCATION)	8,133,726	8,452,846	8,752,616
7 PRIOR YEAR COMPLETED PLANT BALANCE	11,156,534	11,611,624	12,137,397
8 CWIP	755,569	755,569	755,569
9 NEW BPA-FINANCED INVESTMENT	489,393	573,492	557,985
10 NEW NONBPA FINANCED INVESTMENT	55,451	42,035	50,153
11 ASSET RETIREMENT	(89,754)	(89,754)	(89,754)
12 LESS: PRIOR YEAR ACCUMULATED DEPRECIATION*	(4,037,205)	(4,233,467)	(4,440,120)
13 LESS: CURRENT YEAR DEPRECIATION*	(326,492)	(336,883)	(348,845)
14 ADJUSTMENTS TO DEPRECIATION	130,230	130,230	130,230
15 DEBT TO ASSET RATIO	75.57%	75.12%	74.89%

Table 3-9
Debt to Asset Ratio Assuming 20% Revenue Financing
(\$000s)

	<u>2026</u>	<u>2027</u>	<u>2028</u>
DEBT	6,703,726	6,813,388	6,896,726
1 PRIOR YEAR NET DEBT OUTSTANDING	6,554,904	6,703,726	6,813,388
2 NEW FEDERAL BORROWING	459,674	436,641	429,572
3 NEW NON-FEDERAL BORROWING			
4 DEFERRED BORROWING 1/			
5 LESS: PRINCIPAL REPAYMENT	(310,852)	(326,979)	(346,235)
6 ASSETS (INCLUDE CORP ALLOCATION)	9,010,075	9,231,214	9,446,254
7 PRIOR YEAR COMPLETED PLANT BALANCE	12,655,782	13,146,162	13,613,799
8 CWIP	755,569	755,569	755,569
9 NEW BPA-FINANCED INVESTMENT	529,674	506,641	514,572
10 NEW NONBPA FINANCED INVESTMENT	50,460	50,750	50,670
11 ASSET RETIREMENT	(89,754)	(89,754)	(89,754)
12 LESS: PRIOR YEAR ACCUMULATED DEPRECIATION*	(4,658,735)	(4,891,656)	(5,138,154)
13 LESS: CURRENT YEAR DEPRECIATION*	(363,151)	(376,728)	(390,680)
14 ADJUSTMENTS TO DEPRECIATION	130,230	130,230	130,230
15 DEBT TO ASSET RATIO	74.40%	73.81%	73.01%

Table 3-9
Debt to Asset Ratio Assuming 20% Revenue Financing
(\$000s)

	<u>2029</u>	<u>2030</u>	<u>2031</u>
DEBT	6,942,649	6,957,411	6,955,945
1 PRIOR YEAR NET DEBT OUTSTANDING	6,896,726	6,942,649	6,957,411
2 NEW FEDERAL BORROWING	416,096	402,083	400,177
3 NEW NON-FEDERAL BORROWING			
4 DEFERRED BORROWING 1/			
5 LESS: PRINCIPAL REPAYMENT	(370,173)	(387,321)	(401,643)
6 ASSETS (INCLUDE CORP ALLOCATION)	9,636,153	9,814,851	9,964,061
7 PRIOR YEAR COMPLETED PLANT BALANCE	14,089,288	14,551,484	15,014,675
8 CWIP	755,569	755,569	755,569
9 NEW BPA-FINANCED INVESTMENT	501,096	502,083	500,177
10 NEW NONBPA FINANCED INVESTMENT	50,853	50,862	35,518
11 ASSET RETIREMENT	(89,754)	(89,754)	(89,754)
12 LESS: PRIOR YEAR ACCUMULATED DEPRECIATION*	(5,398,604)	(5,670,899)	(5,955,392)
13 LESS: CURRENT YEAR DEPRECIATION*	(402,526)	(414,723)	(426,961)
14 ADJUSTMENTS TO DEPRECIATION	130,230	130,230	130,230
15 DEBT TO ASSET RATIO	72.05%	70.89%	69.81%

Table 3-9
Debt to Asset Ratio Assuming 20% Revenue Financing
(\$000s)

	<u>2032</u>	<u>2033</u>	<u>2034</u>
DEBT	6,941,859	6,915,728	6,909,712
1 PRIOR YEAR NET DEBT OUTSTANDING	6,955,945	6,941,859	6,915,728
2 NEW FEDERAL BORROWING	397,573	399,130	405,303
3 NEW NON-FEDERAL BORROWING			
4 DEFERRED BORROWING 1/			
5 LESS: PRINCIPAL REPAYMENT	(411,659)	(425,260)	(411,319)
6 ASSETS (INCLUDE CORP ALLOCATION)	10,101,254	10,225,438	10,372,788
7 PRIOR YEAR COMPLETED PLANT BALANCE	15,460,615	15,904,556	16,349,256
8 CWIP	755,569	755,569	755,569
9 NEW BPA-FINANCED INVESTMENT	499,935	502,376	510,877
10 NEW NONBPA FINANCED INVESTMENT	33,760	32,078	32,801
11 ASSET RETIREMENT	(89,754)	(89,754)	(89,754)
12 LESS: PRIOR YEAR ACCUMULATED DEPRECIATION*	(6,252,123)	(6,558,871)	(6,879,387)
13 LESS: CURRENT YEAR DEPRECIATION*	(436,978)	(450,746)	(436,804)
14 ADJUSTMENTS TO DEPRECIATION	130,230	130,230	130,230
15 DEBT TO ASSET RATIO	68.72%	67.63%	66.61%

Table 3-9
Debt to Asset Ratio Assuming 20% Revenue Financing
(\$000s)

	<u>2035</u>	<u>2036</u>	<u>2037</u>
DEBT	6,899,322	6,878,249	6,839,468
1 PRIOR YEAR NET DEBT OUTSTANDING	6,909,712	6,899,322	6,878,249
2 NEW FEDERAL BORROWING	410,770	416,238	421,716
3 NEW NON-FEDERAL BORROWING			
4 DEFERRED BORROWING 1/			
5 LESS: PRINCIPAL REPAYMENT	(421,160)	(437,311)	(460,496)
6 ASSETS (INCLUDE CORP ALLOCATION)	10,518,849	10,663,469	10,806,492
7 PRIOR YEAR COMPLETED PLANT BALANCE	16,803,180	17,265,705	17,736,902
8 CWIP	755,569	755,569	755,569
9 NEW BPA-FINANCED INVESTMENT	518,735	526,647	534,627
10 NEW NONBPA FINANCED INVESTMENT	33,543	34,303	35,080
11 ASSET RETIREMENT	(89,754)	(89,754)	(89,754)
12 LESS: PRIOR YEAR ACCUMULATED DEPRECIATION*	(7,185,962)	(7,502,425)	(7,829,002)
13 LESS: CURRENT YEAR DEPRECIATION*	(446,694)	(456,807)	(467,161)
14 ADJUSTMENTS TO DEPRECIATION	130,230	130,230	130,230
15 DEBT TO ASSET RATIO	65.59%	64.50%	63.29%

Table 3-9
Debt to Asset Ratio Assuming 20% Revenue Financing
(\$000s)

	<u>2038</u>	<u>2039</u>	<u>2040</u>
DEBT	6,795,625	6,746,475	6,691,765
1 PRIOR YEAR NET DEBT OUTSTANDING	6,839,468	6,795,625	6,746,475
2 NEW FEDERAL BORROWING	427,206	432,702	438,233
3 NEW NON-FEDERAL BORROWING			
4 DEFERRED BORROWING 1/			
5 LESS: PRINCIPAL REPAYMENT	(471,049)	(481,852)	(492,943)
6 ASSETS (INCLUDE CORP ALLOCATION)	10,947,760	11,087,108	11,224,373
7 PRIOR YEAR COMPLETED PLANT BALANCE	18,216,856	18,705,659	19,203,397
8 CWIP	755,569	755,569	755,569
9 NEW BPA-FINANCED INVESTMENT	542,680	550,800	559,025
10 NEW NONBPA FINANCED INVESTMENT	35,877	36,692	37,529
11 ASSET RETIREMENT	(89,754)	(89,754)	(89,754)
12 LESS: PRIOR YEAR ACCUMULATED DEPRECIATION*	(8,165,933)	(8,513,468)	(8,871,858)
13 LESS: CURRENT YEAR DEPRECIATION*	(477,765)	(488,620)	(499,765)
14 ADJUSTMENTS TO DEPRECIATION	130,230	130,230	130,230
15 DEBT TO ASSET RATIO	62.07%	60.85%	59.62%

TABLE 3-10
ADJUSTMENTS TO GROSS PLANT AND ACCUMULATED DEPRECIATION
(\$000s)

		A	B	C	D	E	F	G
Corporate		Asset Retirements	Proceeds from Sales	Costs of Removal	Gain or Loss on Sale of Land	Adjustments	Rcls FAS 143 (Neg Salv)	Total
1	2021	(37,096)	-	-	-	-	-	(37,096)
2	2020	(9,868)	-	-	-	-	-	(9,868)
3	2019	(28,768)	-	-	-	-	-	(28,768)
4	2018	(15,333)	-	-	-	-	-	(15,333)
5	3 yr Average	(25,244)	-	-	-	-	-	(25,244)
6								
7								
8	Transmission (includes capital leases and lease purchase)							
9	2021	(97,671)	5,796	(17,879)	47	(4,521)	(38,637)	(152,865)
10	2020	(56,199)	9,470	(10,548)	(1,155)	28,541	(42,839)	(72,730)
11	2019	(66,165)	2,046	(16,300)	21	-	(35,471)	(115,869)
12	2018	(53,101)	4,121	(23,383)	(35)	3	(21,190)	(93,585)
13	3 yr Average	(73,345)	5,771	(14,909)	(362)	8,007	(38,982)	(113,821)
14								
15	Asset Retirements (3-year average)							
16	Transmission	(73,345)						
17	65% of Corp	(16,409)						
18	Total	(89,754)						
19								
20								
21	Adjustments to Depreciation							
22	Transmission	(113,821)						
23	65% of Corp	(16,409)						
24	Total	(130,230)						

**TABLE 3-11
AGENCY SERVICES G&A ALLOCATORS**

A	B	C D E F				G	
		Final IPR					
Allocation	Costs included in the pool	Power	F&W	Transmission expense	Transmission capital	Comments	
1	Corporate Executive, Planning & Gov.	Regulatory affairs, executive, CAO management, strategic planning and internal audit.	40.5%	9.5%	28.5%	21.5%	A - Equal Effort
2	Finance	Accounting, budgeting, forecasting, accounts payable, payroll, financial reporting, treasury, rates support, capital management, financial liaisons	40.5%	9.5%	28.5%	21.5%	A - Equal Effort
3	Legal	General counsel	40.5%	9.5%	28.5%	21.5%	A - Equal Effort
4	IT Cross Agency Applications	Customer billing systems, enterprise performance management (EPM), reporting services, data integration	40.5%	9.5%	50.0%	0.0%	A - Equal Effort
5	Public Affairs	Internal and external communications, national relations, regional relations, tribal relations	40.5%	9.5%	50.0%	0.0%	A - Equal Effort
6	Risk Management	Enterprise risk, transaction risk and credit risk management	40.5%	9.5%	28.5%	21.5%	A - Equal Effort
7	Technology Innovation	Technology innovation administration and project management costs	40.5%	9.5%	50.0%	0.0%	A - Equal Effort
8	Metering & Billing	Power and Transmission Services customer billing and metering services	40.5%	9.5%	50.0%	0.0%	A - Equal Effort
9	Forecasting & Contract Management	Contract management and support, load forecasting and analysis	40.5%	9.5%	50.0%	0.0%	A - Equal Effort
10	BTO Portfolio Management	BTO administration and project management costs	40.5%	9.5%	50.0%	0.0%	A - Equal Effort
11	IT Corp Application Assets	IT maintenance of BES/Financials, HRMIS and a number of other IT business systems applications such as SharePoint, customer contracting and DOE hiring.	28.3%	6.7%	65.0%	0.0%	B - Extra Effort
12	Supply Chain Management & Admin	Management and administrative costs for agency purchasing & Transmission contracting and logistics	28.3%	6.7%	65.0%	0.0%	B - Extra Effort
13	Supply Chain Agency Purchasing	Purchasing services for environment, Energy Efficiency, Power, IT and Corporate	28.3%	6.7%	37.1%	28.0%	B - Extra Effort
14	IT Admin & System Policy	IT leadership & planning, admin, quality control, project management, IT training	16.2%	3.8%	45.6%	34.4%	C - Labor Hour (FTE and supplemental labor)
15	Grid Modernization	Grid modernization project management	16.2%	3.8%	45.6%	34.4%	C - Labor Hour (FTE and supplemental labor)
16	BPA Safety	Field safety, construction safety, medical surveillance, corporate safety	16.2%	3.8%	45.6%	34.4%	C - Labor Hour (FTE and supplemental labor)
17	BPA Security	Physical, personnel and information security, continuity of operations	17.0%	4.0%	45.0%	34.0%	C - Labor Hour (FTE only)
18	IT Infrastructure Assets	Data center storage, Linux, Wintel, security, Desk top/end user computing, LAN, WAN, help desk, and phone services	17.0%	4.0%	79.0%	0.0%	C - Labor Hour (FTE only)
19	Human Resources	HR policy, talent acquisition, employee development, labor relations, staffing and classification, EEO	28.3%	6.7%	37.1%	28.0%	E - Blended IT
20	Agency Service Awards	Corporate awards	34.0%	8.0%	33.1%	24.9%	F - Workplace Services
21	Workplace Services	HQ and field leases, utilities, janitorial, maintenance, space management including moves and furniture, office equipment & supplies, mail/courier, media services, motor pool, transit and parking	35.0%	0.0%	65.0%	0.0%	G - Grid Modernization

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4. FCRTS INVESTMENT BASE

4.1 Introduction

This chapter documents the development of the FCRTS investment for the rate period, which is the basis for annual depreciation expense calculations and the allocation of financing-related costs (net interest expense and planned net revenue) to the segments.

4.2 Methodology

The calculation of investment base for each year of the rate period starts with historical transmission plant investment. The general plant investment is identified according to FERC Account from BPA plant investment records. In addition, general plant investment for facilities required for Ancillary Services is separately identified and treated by FERC Account. The historical investment information includes plant investments associated with Projects Funded In Advance. Entities provide BPA with funding for exclusive use facilities and BPA retains ownership of the facilities. The facilities are excluded from general rate development, but depreciation of the facilities is included in BPA expenses. The depreciation calculated herein on these facilities is used for budgeting purposes, but neither the investment nor associated depreciation is incorporated into ratemaking.

Forecast plant additions, derived from capital budgets, are then added to the historical year investment. The additions are adjusted to take into account retirements by applying a ratio of retirements to additions, using an average of the past five years of actuals by FERC account. The application of the retirement ratio produces the gross investment for lines, substations, and general plant accounts for each year of the cost evaluation period.

The gross investment is then reduced by accumulated depreciation. Depreciation accrual rates are from BPA's periodic depreciation study. For general plant categories, annual depreciation rates are used unadjusted. For lines and substations, the annual depreciation rate has been weighted by the depreciation rates of each FERC account that composes these facilities. Depreciation is calculated on gross plant investment in each plant category according to the category's group rates. For each forecast year, depreciation expense is added to the prior year's accumulated depreciation to establish the forecast of accumulated depreciation.

Calculation of the investment base for each of the segments in each rate period year starts with the average net plant investment for that year (gross investment less accumulated depreciation). Various adjustments are made to the calculated investment base to reflect plant not included in the Transmission Segmentation Study and Documentation's analysis of historical investment and additions, and to remove plant that was funded in advance by customer deposits. First, net investment related to intangible plant (e.g. capacity rights acquired by BPA) is added to the Network and Southern Intertie segments. The regulatory asset net investment (e.g. spacer dampers) is added to the Network segment. Then, net investment in general plant categories is prorated to the segments based on the sum of net plant investment, net intangible plant, and net regulatory assets. Next the Network net

plant investment is reduced by the net plant associated with LGIA/SGIA, and the Southern Intertie net plant investment is reduced by the net plant associated with the COI upgrade. The Southern Intertie net plant investment is also reduced to remove the balance of the unearned revenues associated with non-Federal capacity ownership on the AC Intertie. Finally, the unearned revenue balance associated with prepaid fiber optic leases is allocated to each segment pro rata based on the communications plant in each segment.

TABLE 4-1
BPA TRANSMISSION PLANT DEPRECIATION AND ACCUMULATED DEPRECIATION
(\$000s)

	A	B	C	D	E	F	G	H	I	J	K	L	M
1													
2													
3													
4													
5													
6													
7													
8	2023	13,124	33,038	935	14,059	1,399,429	3,702,312	103,462	1,502,891	123,754	313,927	8,870	132,624
9	2024	14,059	33,038	935	14,994	1,502,891	3,840,173	106,761	1,609,652	132,624	315,257	8,906	141,530
10	2025	14,994	33,038	935	15,929	1,609,652	3,974,194	110,609	1,720,261	141,530	316,612	8,944	150,474
11													
12													
13													
14													
15													
16	2023	39,839	182,674	4,121	43,960	1,226,923	4,374,300	95,935	1,322,858	258,889	827,728	18,651	277,540
17	2024	43,960	182,674	4,121	48,081	1,322,858	4,674,856	102,070	1,424,928	277,540	829,809	18,696	296,236
18	2025	48,081	182,674	4,121	52,202	1,424,928	4,979,687	108,898	1,533,826	296,236	831,927	18,744	314,980
19													
20													
21													
22													
23													
24	2023	-	-	-	-	774	4,085	184	958	1,037	5,473	247	1,284
25	2024	-	-	-	-	958	4,085	184	1,142	1,284	5,473	247	1,531
26	2025	-	-	-	-	1,142	4,085	184	1,326	1,531	5,473	247	1,778

TABLE 4-1
BPA TRANSMISSION PLANT DEPRECIATION AND ACCUMULATED DEPRECIATION
(\$000s)

	A	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC
1																	
2																	
3																	
4	LINES																
5																	
6	EASTERN INTERTIE				UTILITY DELIVERY				DSI DELIVERY				TOTAL LINES				
7	Prior Year Accum Depr	Plant Invest	Dep Exp	Accum Depr	Prior Year Accum Depr	Plant Invest	Dep Exp	Accum Depr	Prior Year Accum Depr	Plant Invest	Dep Exp	Accum Depr	Prior Year Accum Depr	Plant Invest	Dep Exp	Accum Depr	
8	2023	37,742	95,006	2,690	40,432	235	590	17	252	-	-	-	-	1,574,284	4,144,874	115,974	1,690,258
9	2024	40,432	95,006	2,690	43,122	252	590	17	269	-	-	-	-	1,690,258	4,284,065	119,309	1,809,567
10	2025	43,122	95,006	2,690	45,812	269	590	17	286	-	-	-	-	1,809,567	4,419,440	123,195	1,932,762
11																	
12	SUBSTATIONS																
13																	
14	EASTERN INTERTIE				UTILITY DELIVERY				DSI DELIVERY				TOTAL SUBSTATIONS				
15	Prior Year Accum Depr	Plant Invest	Dep Exp	Accum Depr	Prior Year Accum Depr	Plant Invest	Dep Exp	Accum Depr	Prior Year Accum Depr	Plant Invest	Dep Exp	Accum Depr	Prior Year Accum Depr	Plant Invest	Dep Exp	Accum Depr	
16	2023	8,934	28,436	641	9,575	5,954	19,750	446	6,400	2,594	8,257	186	2,780	1,543,132	5,441,144	119,980	1,663,112
17	2024	9,575	28,436	641	10,216	6,400	19,750	446	6,846	2,780	8,257	186	2,966	1,663,112	5,743,782	126,160	1,789,272
18	2025	10,216	28,436	641	10,857	6,846	19,750	446	7,292	2,966	8,257	186	3,152	1,789,272	6,050,731	133,036	1,922,308
19																	
20	Intangible Plant																
21																	
22	EASTERN INTERTIE				UTILITY DELIVERY				DSI DELIVERY				TOTAL INTANGIBLE PLANT				
23	Prior Year Accum Depr	Plant Invest	Dep Exp	Accum Depr	Prior Year Accum Depr	Plant Invest	Dep Exp	Accum Depr	Prior Year Accum Depr	Plant Invest	Dep Exp	Accum Depr	Prior Year Accum Depr	Plant Invest	Dep Exp	Accum Depr	
24	2023	-	-	-	-	-	-	-	-	-	-	-	-	1,811	9,559	431	2,242
25	2024	-	-	-	-	-	-	-	-	-	-	-	-	2,242	9,559	431	2,673
26	2025	-	-	-	-	-	-	-	-	-	-	-	-	2,673	9,559	431	3,104

**TABLE 4-2
INVESTMENT BASE
(\$000s)**

Completed Plant

		A	B	C	D	E	F
		GENERATION- INTEGRATION	NETWORK	SOUTHERN INTERTIE	EASTERN INTERTIE	UTILITY DELIVERY	DSI DELIVERY
1	2023 Ending Balance	215,712	8,076,612	1,141,655	123,442	20,340	8,257
2	Average	215,712	7,907,352	1,140,082	123,442	20,340	8,257
3	2024 Ending Balance	215,712	8,515,029	1,145,066	123,442	20,340	8,257
4	Average	215,712	8,295,821	1,143,360	123,442	20,340	8,257
5	2025 Ending Balance	215,712	8,953,880	1,148,539	123,442	20,340	8,257
6	Average	215,712	8,734,455	1,146,802	123,442	20,340	8,257

Accumulated Depreciation

		A	B	C	D	E	F
		GENERATION- INTEGRATION	NETWORK	SOUTHERN INTERTIE	EASTERN INTERTIE	UTILITY DELIVERY	DSI DELIVERY
7	2023 Ending Balance	58,019	2,825,749	410,164	50,007	6,652	2,780
8	Average	55,491	2,726,050	396,404	48,342	6,420	2,687
9	2024 Ending Balance	63,075	3,034,580	437,766	53,338	7,115	2,966
10	Average	60,547	2,930,164	423,965	51,673	6,883	2,873
11	2025 Ending Balance	68,131	3,254,087	465,454	56,669	7,578	3,152
12	Average	65,603	3,144,333	451,610	55,004	7,346	3,059

Net Investment

		A	B	C	D	E	F
		GENERATION- INTEGRATION	NETWORK	SOUTHERN INTERTIE	EASTERN INTERTIE	UTILITY DELIVERY	DSI DELIVERY
13	2023 Ending Balance	157,693	5,250,863	731,491	73,435	13,689	5,477
14	Average	160,221	5,181,302	743,678	75,101	13,920	5,570
15	2024 Ending Balance	152,637	5,480,450	707,299	70,104	13,226	5,291
16	Average	155,165	5,365,656	719,395	71,770	13,457	5,384
17	2025 Ending Balance	147,581	5,699,793	683,085	66,773	12,763	5,105
18	Average	150,109	5,590,122	695,192	68,439	12,994	5,198

TABLE 4-2
INVESTMENT BASE
(\$000s)

Completed Plant

		G	H	I	J	K
		REGULATORY ASSET	INTANGIBLE PLANT	ANCILLARY SERVICES	GENERAL PLANT	TOTAL COMPLETED PLANT
1	2023 Ending Balance	191,047	9,559	271,401	1,425,236	11,483,261
2	Average	191,047	9,559	247,471	1,394,205	11,257,467
3	2024 Ending Balance	191,047	9,559	313,761	1,490,724	12,032,937
4	Average	191,047	9,559	292,581	1,457,980	11,758,099
5	2025 Ending Balance	191,047	9,559	377,509	1,532,361	12,580,645
6	Average	191,047	9,559	345,635	1,511,542	12,306,791

Accumulated Depreciation

		G	H	I	J	K
		REGULATORY ASSET	INTANGIBLE PLANT	ANCILLARY SERVICES	GENERAL PLANT	TOTAL COMPLETED PLANT
7	2023 Ending Balance	129,870	2,242	94,257	642,309	4,222,048
8	Average	115,744	2,026	89,837	605,244	4,048,244
9	2024 Ending Balance	158,123	2,673	103,457	716,955	4,580,047
10	Average	143,997	2,457	98,857	679,632	4,401,047
11	2025 Ending Balance	160,373	3,104	113,954	791,504	4,924,005
12	Average	159,248	2,888	108,705	754,229	4,752,026

Net Investment

		G	H	I	J	K
		REGULATORY ASSET	INTANGIBLE PLANT	ANCILLARY SERVICES	GENERAL PLANT	TOTAL COMPLETED PLANT
13	2023 Ending Balance	61,176	7,317	177,145	782,927	7,261,213
14	Average	75,302	7,533	157,635	788,961	7,209,223
15	2024 Ending Balance	32,923	6,886	210,305	773,769	7,452,890
16	Average	47,050	7,102	193,725	778,348	7,357,051
17	2025 Ending Balance	30,673	6,455	263,555	740,857	7,656,641
18	Average	31,798	6,671	236,930	757,313	7,554,765

**TABLE 4-3
BPA PROJECTED TRANSMISSION PLANT INVESTMENT
(\$000s)**

		A	B	C	D	E	F
		GENERATION-INTEGRATION			NETWORK		
		Invest	Additions	Total	Invest	Additions	Total
1	2023	215,712	-	215,712	7,738,093	338,519	8,076,612
2	2024	215,712	-	215,712	8,076,612	438,417	8,515,029
3	2025	215,712	-	215,712	8,515,029	438,851	8,953,880

**TABLE 4-3
BPA PROJECTED TRANSMISSION PLANT INVESTMENT
(\$000s)**

		G	H	I	J	K	L
		SOUTHERN INTERTIE			EASTERN INTERTIE		
		Invest	Additions	Total	Invest	Additions	Total
1	2023	1,138,508	3,147	1,141,655	123,442	-	123,442
2	2024	1,141,655	3,411	1,145,066	123,442	-	123,442
3	2025	1,145,066	3,473	1,148,539	123,442	-	123,442

**TABLE 4-3
BPA PROJECTED TRANSMISSION PLANT INVESTMENT
(\$000s)**

		M	N	O	P	Q	R
		UTILITY DELIVERY			DSI DELIVERY		
		Invest	Additions	Total	Invest	Additions	Total
1	2023	20,340	-	20,340	8,257	-	8,257
2	2024	20,340	-	20,340	8,257	-	8,257
3	2025	20,340	-	20,340	8,257	-	8,257

TABLE 4-4
INVESTMENT BASE BY SEGMENT
(\$000s)

	A	B	C	E	F	
FY 2024	GENERATION INTEGRATION	NETWORK	SOUTHERN INTERTIE	EASTERN INTERTIE	UTILITY DELIVERY	
1	NET TRANSMISSION PLANT	155,165	5,365,656	719,395	71,770	13,457
2	INTANGIBLE PLANT		3,035	4,066		
3	REGULATORY ASSET		47,050			
4	SUBTOTAL INVESTMENT	155,165	5,415,741	723,461	71,770	13,457
5	PERCENT	2%	82.32%	11.00%	1.09%	0.20%
6	GENERAL PLANT	18,358	640,754	85,595	8,491	1,592
7	TRANSMISSION CREDIT PROJECTS (NET PLANT)		(399,573)			
8	ACC REV BAL ADJ - Fiber	(12)	(406)	(54)	(5)	(1)
9	ACC REV BAL ADJ - 3AC			(85,110)		
10	INVESTMENT BASE	173,511	5,656,516	723,892	80,256	15,048
FY 2025						
11	NET TRANSMISSION PLANT	150,109	5,590,122	695,192	68,439	12,994
12	INTANGIBLE PLANT		2,851	3,819		
13	REGULATORY ASSET		31,798			
14	SUBTOTAL INVESTMENT	150,109	5,624,771	699,012	68,439	12,994
15	PERCENT	2%	82.75%	10.28%	1.01%	0.19%
16	GENERAL PLANT	16,724	626,663	77,878	7,625	1,448
17	TRANSMISSION CREDIT PROJECTS (NET PLANT)		(409,212)			
18	ACC REV BAL ADJ - Fiber	-	-	-	-	-
19	ACC REV BAL ADJ - 3AC			(81,586)		
20	INVESTMENT BASE	166,833	5,842,222	695,303	76,064	14,442

TABLE 4-4
INVESTMENT BASE BY SEGMENT
(\$000s)

		G	H	I
FY 2024		DSI DELIVERY	ANCILLARY SERVICES	TOTAL
1	NET TRANSMISSION PLANT	5,384	193,725	6,524,552
2	INTANGIBLE PLANT			7,102
3	REGULATORY ASSET			47,050
4	SUBTOTAL INVESTMENT	5,384	193,725	6,578,703
5	PERCENT	0.08%	2.94%	100.00%
6	GENERAL PLANT	637	22,920	778,348
7	TRANSMISSION CREDIT PROJECTS (NET PLANT)			(399,573)
8	ACC REV BAL ADJ - Fiber	(0)	(15)	(493)
9	ACC REV BAL ADJ - 3AC			(85,110)
10	INVESTMENT BASE	6,020	216,630	6,871,875
FY 2025				
11	NET TRANSMISSION PLANT	5,198	236,930	6,758,983
12	INTANGIBLE PLANT			6,671
13	REGULATORY ASSET			31,798
14	SUBTOTAL INVESTMENT	5,198	236,930	6,797,452
15	PERCENT	0.08%	3.49%	100.00%
16	GENERAL PLANT	579	26,397	757,313
17	TRANSMISSION CREDIT PROJECTS (NET PLANT)			(409,212)
18	ACC REV BAL ADJ - Fiber	-	-	-
19	ACC REV BAL ADJ - 3AC			(81,586)
20	INVESTMENT BASE	5,777	263,327	7,063,967

**TABLE 4-5
CALCULATION OF RETIREMENT RATIOS
(\$000s)**

		A	B	C	D	E
RETIREMENTS		Transmission Plant				
		STRUCTURES/ IMPROVEMENTS	STATION EQUIPMENT	TOWERS & FIXTURES	POLES & FIXTURES	OVERHEAD CONDUCTOR
FERC ACCOUNT		3520	3530	3540	3550	3560
1	2017	380,561	8,578,588	382,627	1,083,964	5,745,269
2	2018	792,817	16,052,896	62,749	571,943	2,027,814
3	2019	261,096	17,965,148	51,967	1,930,464	883,899
4	2020	227,577	13,197,247	136,557	405,609	480,504
5	2021	718,557	17,006,061	594,401	1,880,507	331,914
<hr/>						
ADDITIONS		Transmission Plant				
		STRUCTURES/ IMPROVEMENTS	STATION EQUIPMENT	TOWERS & FIXTURES	POLES & FIXTURES	OVERHEAD CONDUCTOR
FERC ACCOUNT		3520	3530	3540	3550	3560
6	2017	21,811,683	183,888,387	5,751,592	29,007,130	99,101,963
7	2018	20,743,746	160,324,905	1,687,550	42,210,636	52,468,238
8	2019	28,378,851	135,373,062	5,421,868	33,360,134	23,550,665
9	2020	12,044,460	146,256,712	5,266,194	21,686,142	27,333,828
10	2021	6,322,391	120,127,243	25,240,855	31,082,393	18,130,998
<hr/>						
RETIREMENT RATIO CALCULATION		Transmiss				
		STRUCTURES/ IMPROVEMENTS	STATION EQUIPMENT	TOWERS & FIXTURES	POLES & FIXTURES	OVERHEAD CONDUCTOR
FERC ACCOUNT		3520	3530	3540	3550	3560
11	Avg Retirements (\$000's)	476	14,560	246	1,174	1,894
12	Avg Additions (\$000's)	17,860	149,194	8,674	31,469	44,117
13	ADDITIONS LESS RETIREMENTS	17,384	134,634	8,428	30,295	42,223
14	Retirement Ratio	97.33%	90.24%	97.17%	96.27%	95.71%
15	Weight Calculation	11.44%	88.56%	7.88%	28.31%	39.45%
16	Weighted Retirement Ratio	11.13%	79.92%	7.65%	27.25%	37.76%

**TABLE 4-5
CALCULATION OF RETIREMENT RATIOS
(\$000s)**

		F	G	H	I
	RETIREMENTS	UNDERGROUND CONDUCTOR		ROADS & TRAILS	
	FERC ACCOUNT	3580	3590		
1	2017	-	-		
2	2018	-	-		
3	2019	-	31,446		
4	2020	-	-		
5	2021	-	14,696		
	ADDITIONS	UNDERGROUND CONDUCTOR		ROADS & TRAILS	
	FERC ACCOUNT	3580	3590		
6	2017	-	43,870,570		
7	2018	-	41,094,085		
8	2019	-	15,438,293		
9	2020	268,694	13,658,636		
10	2021	492	16,086,485		
	RETIREMENT RATIO CALCULATION	ion Plant			
		UNDERGROUND CONDUCTOR	ROADS & TRAILS	SUBS	LINES
	FERC ACCOUNT	3580	3590		
11	Avg Retirements (\$000's)	-	9	15,036	3,323
12	Avg Additions (\$000's)	54	26,030	167,054	110,343
13	ADDITIONS LESS RETIREMENTS	54	26,020	152,018	107,020
14	Retirement Ratio	100.00%	99.96%	0.909993	0.969883
15	Weight Calculation	0.05%	24.31%	1.00	1.00
16	Weighted Retirement Ratio	0.05%	24.30%	91.05%	97.02%

**TABLE 4-6
BPA TRANSMISSION PLANT INVESTMENT ADDITIONS
(\$000s)**

	A	B	C	D	E	F	G	H	I	J	K	L	M
1													
2	Gross Investment												
3													
4		GENERATION-INTEGRATION			Total Additions	NETWORK			Total Additions	SOUTHERN INTERTIE			Total Additions
5		Lines	Subs	Other		Lines	Subs	Other		Lines	Subs	Other	
6	2023	-	-	-	-	81,399	245,516	-	326,915	1,265	2,108	-	3,373
7	2024	-	-	-	-	131,661	316,502	-	448,164	1,371	2,285	-	3,656
8	2025	-	-	-	-	127,704	321,195	-	448,899	1,396	2,327	-	3,723
9													
10													
11	Investment Net of Retirements												
12													
13		GENERATION-INTEGRATION			Total Additions	NETWORK			Total Additions	SOUTHERN INTERTIE			Total Additions
14		Lines	Subs	Other		Lines	Subs	Other		Lines	Subs	Other	
15	2023	-	-	-	-	78,972	223,547	-	302,519	1,227	1,920	-	3,147
16	2024	-	-	-	-	127,736	288,182	-	415,917	1,330	2,080	-	3,411
17	2025	-	-	-	-	123,896	292,455	-	416,351	1,355	2,119	-	3,473

**TABLE 4-6
BPA TRANSMISSION PLANT INVESTMENT ADDITIONS
(\$000s)**

	A	N	O	P	Q	R	S	T	U	V	W	X	Y
1													
2	Gross Invest												
3													
4		EASTERN INTERTIE			Total Additions	UTILITY DELIVERY			Total Additions	DSI DELIVERY			Total Additions
5		Lines	Subs	Other		Lines	Subs	Other		Lines	Subs	Other	
6	2023	-	-	-	-	-	-	-	-	-	-	-	-
7	2024	-	-	-	-	-	-	-	-	-	-	-	-
8	2025	-	-	-	-	-	-	-	-	-	-	-	-
9													
10													
11	Investment												
12													
13		EASTERN INTERTIE			Total Additions	UTILITY DELIVERY			Total Additions	DSI DELIVERY			Total Additions
14		Lines	Subs	Other		Lines	Subs	Other		Lines	Subs	Other	
15	2023	-	-	-	-	-	-	-	-	-	-	-	-
16	2024	-	-	-	-	-	-	-	-	-	-	-	-
17	2025	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 4-6
BPA TRANSMISSION PLANT INVESTMENT ADDITIONS
(\$000s)

	A	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK
1													
2	Gross Invest												
3													
4		REGULATORY ASSET			Total Additions	GENERAL PLANT (No Ancillary Services)			Total Additions	TOTAL BPA			Total Additions
5		Lines	Subs	Other		Lines	Subs	Other		Lines	Subs	Other	
6	2023	-	-	-	-	-	-	62,062	62,062	82,664	247,624	62,062	392,350
7	2024	-	-	-	-	-	-	65,488	65,488	133,032	318,787	65,488	517,307
8	2025	-	-	-	-	-	-	41,637	41,637	129,100	323,523	41,637	494,259
9													
10													
11	Investment												
12													
13		REGULATORY ASSET			Total Additions	GENERAL PLANT (No Ancillary Services)			Total Additions	TOTAL BPA			Total Additions
14		Lines	Subs	Other		Lines	Subs	Other		Lines	Subs	Other	
15	2023	-	-	-	-	-	-	62,062	62,062	80,199	225,467	62,062	367,727
16	2024	-	-	-	-	-	-	65,488	65,488	129,066	290,262	65,488	484,816
17	2025	-	-	-	-	-	-	41,637	41,637	125,250	294,574	41,637	461,461

**TABLE 4-7
AMORTIZATION OF BPA TRANSMISSION OTHER DEFERRED ASSETS
(\$000s)**

**SPACER DAMPERS
30-YEAR SERVICE LIFE**

	A	B	C	D	E	F	G	H	
	FY	INVESTMENT	PARTIAL YEAR	FULL YEAR	ANNUAL	ACCUM AMORT	CUMULATIVE INVESTMENT	DEFERRED INVESTMENT	NET INVESTMENT
1	2023	-	-	0	956	12,971	28,692		15,721
2	2024	-	-	0	956	13,927	28,692		14,765
3	2025	-	-	0	956	14,884	28,692		13,809

**SPACER DAMPERS
25-YEAR SERVICE LIFE**

	A	B	C	D	E	F	G	H	
	FY	INVESTMENT	PARTIAL YEAR	FULL YEAR	ANNUAL	ACCUM AMORT	CUMULATIVE INVESTMENT	DEFERRED INVESTMENT	NET INVESTMENT
4	2023	0	0	0	1,294	12,889	32,341		19,452
5	2024	0	0	0	1,294	14,182	32,341		18,158
6	2025	0	0	0	1,294	15,476	32,341		16,865

**I-5 REINFORCEMENT PROJECT
5 YEAR LIFE**

	A	B	C	D	E	F	G	H	
	FY	INVESTMENT	PARTIAL YEAR	FULL YEAR	ANNUAL	ACCUM AMORT	CUMULATIVE INVESTMENT	DEFERRED INVESTMENT	NET INVESTMENT
7	2023	0	0	0	26,003	104,011	130,013	0	26,003
8	2024	0	0	0	26,003	130,013	130,013	0	0
9	2025	0	0	0	0	130,013	130,013	0	0

TABLE 4-8
DEPRECIATION OF LARGE GENERATOR INTERCONNECTION AGREEMENTS
(\$000s)

	A	B	C	D	E	F	G	H	I	J
	IN-SERVICE	CUMULATIVE INVESTMENT	TOTAL ANNUAL INVESTMENT	LINES	SUBSTATIONS	DEPRECIATION LINES	SUBSTATIONS	ACCUMULATED DEPRECIATION LINES	SUBSTATIONS	TOTAL
1	2023	510,565	36,000	16,200	19,800	2,436	9,576	16,770	99,182	115,952
2	2024	533,065	22,500	10,125	12,375	2,723	9,855	19,493	109,038	128,531
3	2025	555,565	22,500	10,125	12,375	3,010	10,135	22,503	119,172	141,675

TABLE 4-9
BPA GENERAL PLANT CUMULATIVE INVESTMENT
(\$000s)

	A	B	C	D	E	F
1						
2						
3						
4						
5			LAND & LAND RIGHTS	STRUCTURES & IMPROVEMENTS	OFFICE FURNITURE & FIXTURES	DATA PROCESSING - EQUIPMENT
6		FERC Account	389	390	391.1	391.2
7		Depr Acrl Rate	0.07	0.02	0.05	0.18
8		Depreciation Expense	1,859	7,289	87	70
9	2023	Accumulated Depreciation	2,422	98,932	1,442	2,774
10		Total Investment	37,891	380,812	1,730	2,774
11		Depreciation Expense	3,213	7,614	87	-
12	2024	Accumulated Depreciation	5,635	106,546	1,529	2,774
13		Total Investment	56,067	400,073	1,730	2,774
14		Depreciation Expense	4,280	7,814	87	-
15	2025	Accumulated Depreciation	9,915	114,360	1,616	2,774
16		Total Investment	69,090	401,357	1,730	2,774

TABLE 4-9
BPA GENERAL PLANT CUMULATIVE INVESTMENT
(\$000s)

	A	B	G	H	I	J
1						
2						
3						
4	TRANSMISSION ASSIGNMENTS					
5			DATA PROCESSING - SOFTWARE	TRANSPORT EQUIPMENT	HELICOPTERS	AIRPLANES
6		FERC Account	391.3	392.1	392.2	392.3
7		Depr Acrl Rate	0.15	0.04	0.03	0.08
8		Depreciation Expense	327	2,493	284	220
9	2023	Accumulated Depreciation	10,297	34,353	5,315	4,527
10		Total Investment	10,297	71,199	9,234	4,527
11		Depreciation Expense	-	2,753	284	-
12	2024	Accumulated Depreciation	10,297	37,106	5,599	4,527
13		Total Investment	10,297	78,815	9,234	4,527
14		Depreciation Expense	-	3,034	284	-
15	2025	Accumulated Depreciation	10,297	40,140	5,883	4,527
16		Total Investment	10,297	86,539	9,234	4,527

TABLE 4-9
BPA GENERAL PLANT CUMULATIVE INVESTMENT
(\$000s)

	A	B	K	L	M	N
1						
2						
3						
4						
5			STORES EQUIPMENT	TOOLS, SHOP & GARAGE EQUIPMENT	LAB EQUIPMENT	POWER OPERATED EQUIPMENT
6		FERC Account	393	394	395	396
7		Depr Acrl Rate	0.03	0.04	0.08	0.02
8		Depreciation Expense	112	921	2,849	995
9	2023	Accumulated Depreciation	706	9,638	20,513	18,667
10		Total Investment	3,276	23,309	36,112	41,297
11		Depreciation Expense	112	995	2,849	995
12	2024	Accumulated Depreciation	818	10,633	23,362	19,662
13		Total Investment	3,276	25,109	36,112	41,297
14		Depreciation Expense	112	1,069	2,849	995
15	2025	Accumulated Depreciation	930	11,702	26,211	20,657
16		Total Investment	3,276	26,909	36,112	41,297

TABLE 4-9
BPA GENERAL PLANT CUMULATIVE INVESTMENT
(\$000s)

	A	B	O	P	Q	R
1						
2						
3						
4						
5			COMMUNICATIONS EQUIPMENT	MISC EQUIPMENT	SUBTOTAL GENERAL PLANT	OFFICE FURNITURE & FIXTURES
6		FERC Account	397	398		391.1
7		Depr Acrl Rate	0.07	0.07		0.05
8		Depreciation Expense	43,860	4,879	66,245	-
9	2023	Accumulated Depreciation	353,667	33,529	596,781	0
10		Total Investment	670,858	73,152	1,366,467	-
11		Depreciation Expense	45,083	4,879	68,864	-
12	2024	Accumulated Depreciation	398,750	38,408	665,645	0
13		Total Investment	689,493	73,152	1,431,954	-
14		Depreciation Expense	46,291	4,879	71,694	-
15	2025	Accumulated Depreciation	445,041	43,287	737,339	0
16		Total Investment	707,298	73,152	1,473,591	-

TABLE 4-9
BPA GENERAL PLANT CUMULATIVE INVESTMENT
(\$000s)

	A	B	S	T	U	V	W	X	
1									
2									
3									
4	CORPORATE ASSIGNMENTS								
5			DATA PROCESSING - EQUIPMENT	DATA PROCESSING · SOFTWARE	COMMUNICATIONS EQUIPMENT	MISC EQUIPMENT	SUBTOTAL CORPORATE GENERAL PLANT	TOTAL GENERAL PLANT (Excluding Ancillary Services)	
6		FERC Account	391.2	391.3	397	398			
7		Depr Accrl Rate	0.18	0.15	0.07	0.07			
8		Depreciation Expense	5,030	1,523	-	1,332	7,885	74,130	
9	2023	Accumulated Depreciation	25,734	6,111	(14)	13,696	45,528	642,309	
10		Total Investment	28,661	10,139	-	19,969	58,770	1,425,236	
11		Depreciation Expense	2,927	1,523	-	1,332	5,782	74,646	
12	2024	Accumulated Depreciation	28,661	7,634	(14)	15,028	51,310	716,955	
13		Total Investment	28,661	10,139	-	19,969	58,770	1,490,724	
14		Depreciation Expense	-	1,523	-	1,332	2,855	74,549	
15	2025	Accumulated Depreciation	28,661	9,157	(14)	16,360	54,165	791,504	
16		Total Investment	28,661	10,139	-	19,969	58,770	1,532,361	

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5. PROJECTED CASH BALANCES/INTEREST CREDITS

5.1 Introduction

This chapter projects Transmission Services' cash balances for the rate period and estimates the interest income (credits) to be earned on BPA's projected cash balances and on annual funds to be returned to the U.S. Treasury.

5.2 Interest credits on BPA's projected cash balances

The beginning rate period cash balance was derived from BPA's business unit cash analysis for the end of FY 2023 and from current forecasts of transmission revenues, expenses, and cash flows for FY 2024-2025. The annual incremental cash provided from forecast net revenues is added to the beginning cash balance for revenue requirements and the current and revised revenue tests. Using the existing interest earnings rate, annual interest income is calculated from projected average annual cash balances. The resulting interest income is applied as a credit against interest expense in the transmission revenue requirements and in the income statements of the current and revised revenue tests.

5.3 Interest credits on reserves not for risk

The projected interest earnings rate is multiplied by the reserves not for risk (RNFR) average cash balance for each year to determine the annual interest income. The resulting interest income is applied as a credit against interest expense in the transmission revenue requirement.

5.4 Interest income (repayment program calculation)

Separately, interest income rates listed in this chapter are calculated and used within the repayment program to calculate an interest credit based on the average cash necessary to pay the interest, bond call premiums, and amortization payments calculated by the study for return to the U.S. Treasury in each study year. The repayment program assumes the cash accumulates at a uniform rate throughout the year, except for interest paid on bonds issued to the U.S. Treasury at mid-year. At the end of the year, the cash balance, together with the interest credit earned thereon, is used in the program for payment of interest expense, amortization of the Federal investment, and payment of bond premiums.

TABLE 5-1
INTEREST INCOME FROM PROJECTED CASH BALANCES
REVENUE REQUIREMENT DEVELOPMENT
(\$000s)

	A	B
	<u>2024</u>	<u>2025</u>
1 ANNUAL CASH SURPLUS/(DEFICIT)	-	-
2 ADJUSTMENTS TO CASH	-	-
3 SOY CASH BALANCE	264,325	264,325
4 EOY CASH BALANCE	264,325	264,325
5 AVERAGE CASH BALANCE	264,325	264,325
6 INTEREST INCOME RATE	0.39%	0.55%
7 INTEREST ON BPA FUND/INVESTMENTS (LN 5 X LN 6)	1,025	1,442
8 REPAYMENT STUDY INTEREST INCOME	452	672
<u>INTEREST EARNED ON RESERVES NOT FOR RISK</u>		
9 SOY CASH BALANCE	84,500	84,500
10 EOY CASH BALANCE	84,500	84,500
11 AVERAGE CASH BALANCE	84,500	84,500
12 INTEREST ON FUNDS HELD FOR OTHERS (LN 11 X LN 6)	328	461
13 TRUSTEE INTEREST INCOME	-	-
14 TOTAL ANNUAL INTEREST INCOME (LN 7+8+12+13)	1,804	2,575

TABLE 5-2
INTEREST INCOME FROM PROJECTED CASH BALANCES
REVENUES FROM CURRENT RATES
(\$000s)

	A	B
	<u>2024</u>	<u>2025</u>
1 ANNUAL CASH SURPLUS/(DEFICIT)	(16,558)	(12,471)
2 ADJUSTMENTS TO CASH	-	-
3 SOY CASH BALANCE	264,325	247,767
4 EOY CASH BALANCE	247,767	235,296
5 AVERAGE CASH BALANCE	256,046	241,532
6 INTEREST INCOME RATE	0.39%	0.55%
7 INTEREST ON BPA FUND/INVESTMENTS (LN 5 X LN 6)	993	1,317
8 REPAYMENT STUDY INTEREST INCOME	452	672
<u>INTEREST EARNED ON RESERVES NOT FOR RISK</u>		
9 SOY CASH BALANCE	114,500	114,500
10 EOY CASH BALANCE	114,500	114,500
11 AVERAGE CASH BALANCE	114,500	114,500
12 INTEREST INCOME (LN 11 X LN 6)	444	625
13 TRUSTEE INTEREST INCOME	-	-
14 TOTAL ANNUAL INTEREST INCOME (LN 7+8+12+13)	1,889	2,614

TABLE 5-3
INTEREST INCOME FROM PROJECTED CASH BALANCES
REVENUES FROM PROPOSED RATES
(\$000s)

	A	B
	<u>2024</u>	<u>2025</u>
1 ANNUAL CASH SURPLUS/(DEFICIT)	(420)	(611)
2 ADJUSTMENTS TO CASH	-	-
3 SOY CASH BALANCE	264,325	263,905
4 EOY CASH BALANCE	263,905	263,294
5 AVERAGE CASH BALANCE	264,115	263,600
6 INTEREST INCOME RATE	0.39%	0.55%
7 INTEREST ON BPA FUND/INVESTMENTS (LN 5 X LN 6)	1,024	1,438
8 REPAYMENT STUDY INTEREST INCOME	452	672
<u>INTEREST EARNED ON RESERVES NOT FOR RISK</u>		
9 SOY CASH BALANCE	114,500	114,500
10 EOY CASH BALANCE	114,500	114,500
11 AVERAGE CASH BALANCE	114,500	114,500
12 INTEREST INCOME (LN 11 X LN 6)**	444	625
13 TRUSTEE INTEREST INCOME	-	-
14 TOTAL ANNUAL INTEREST INCOME (LN 7+8+12+13)	1,920	2,734

6. INTEREST RATES AND PRICE DEFLATORS

6.1 Introduction

Interest rates on bonds issued by BPA to the U.S. Treasury are used in development of repayment studies and projections of Federal interest expense in revenue requirements.

6.2 Source of Forecasts

To project interest rates on bonds issued to the U.S. Treasury, BPA uses U.S. Treasury yield curve forecasts provided by the IHS Global Insights Group (GI). GI is also the source of price deflators that BPA treats as escalators for purposes of developing spending levels. GI develops the price deflators taking into account projections of Gross Domestic Product (GDP). The GDP consists of the sum of consumption, investment, government purchases, and net exports, excluding transfers to foreigners.

6.3 Interest Rate Projections

Projected interest rates for BPA bonds issued to the U.S. Treasury are based on GI's yield curve projections of U.S. Treasury market rates, plus a markup depending on the length of time to maturity. The markup estimate reflects an interagency agreement that the U.S. Treasury will price BPA bonds at a level comparable to the price for securities (bonds) issued by U.S. government corporations. The markup estimate reflects the average basis point markup on recent intermediate and long-term bonds issued by BPA.

6.4 Deflators

The current and cumulative price deflators used to escalate midyear dollars are derived from the fiscal and calendar year price deflators provided by GI. They are calculated as follows:

$$[(FY_1/100) \times 0.5] + 1 = \text{Cumulative Price Deflator}_1$$

Thus, the fiscal year GDP price deflator for the current year is divided by one hundred and multiplied by one-half. The result, when added to one, yields the cumulative price deflator for the first year.

$$[1 + (FY_t/100)] \times \text{Cumulative Price Deflator}_{t-1} = \text{Cumulative Price Deflator}_t, \text{ when } t > 1$$

Thus, the fiscal year GDP price deflator for a future year is divided by one hundred and added to one. The result, when multiplied by the cumulative price deflator from the previous year, yields the cumulative price deflator for each successive year.

memorandum

DATE: 2/17/2022

REPLY TO
ATTN OF: FTR-2

SUBJECT: FY 2022 Interest Rate and Inflation Forecast

TO: See Attached "cc:" List

Please see the attached BPA interest rate and inflation forecast for the period FY 2022 through 2051.

These forecasts provide an internally consistent basis for BPA decisions regarding debt management, budget formulation, financial analyses, capital budgeting, and strategic planning efforts. The FY 2022 forecast consists of the following tables:

- Table 1: 30 Year Borrowing Rate Comparison
- Table 2: 15 Year Borrowing Rate Comparison
- Table 3: 5 Year Borrowing Rate Comparison
- Table 4: Appropriations Borrowing Rates
- Table 5: BPA Agency Borrowing Rates
- Table 6: Third-Party Tax-Exempt Borrowing Rates
- Table 7: Third-Party Taxable Borrowing Rates
- Table 8: FERC (Bank Prime) Borrowing Rates and 3-Month London Interbank Offered (LIBOR) Borrowing Rates
- Table 9: Inflation Forecast and Comparison
- Table 10: Employment Cost Index

Borrowing Rate Forecast Methodology

A table of US Treasury interest rates for calendar years (CY) 2022-2051 is established using:

- an average of all available data for CY 2021 from Bloomberg's Bi550 US Treasury BVAL curve and
- the 2021-2050 projections from the Global Insight's (GI) fourth-quarter November 2021 Long-Term Economic Outlook

This table is then converted to BPA fiscal years (FY) by combining 75% of the current year's CY rate and 25% of the previous year's CY rate. For example, the value for BPA FY 2023 consists of 75% CY 2023 and 25% of CY 2022.

BPA's borrowing rate projections, tables 4 through 7, reflect a spread compared to the Treasury yield curve. The spread is calculated from historical data, not including any call features, and is then applied to the BPA FY Treasury table.

The FERC and LIBOR rates, table 8, are established by using the CY projections from GI's fourth-quarter November 2021 Long-Term Economic Outlook and then converted into BPA FY.

Inflation Forecast Methodology

BPA inflation assumptions reflect projected changes in the U.S. GDP Price Deflator. The GDP Price Deflator is the broadest measure of inflation in the U.S. economy. GDP reflects the value of all goods and services produced by domestic and foreign capital and labor within the United States. Major components of GDP include: total consumption, investment, government purchases, and net exports. The real GDP calculations reflect both the changing mix of the components in GDP and the relative price changes in these components.

This index assumes a base year of 2021. The projected change in the GDP price deflator and comparison with the FY 2021 inflation forecast is summarized in table 9. Column A shows the projected trend in GDP inflation rates between 2022-2051 on a CY basis and in column B by BPA FY. Column C provides the cumulative price index projections. The forecast expresses FY dollar values as mid-year dollar values. Columns D and E show last year's projections while columns F and G show a comparison between the two years of projections.

The Employment Cost Index (ECI) is an additional forecast for 2022. The ECI addresses the unique pressures on future labor costs the broader GDP Price Deflator fails to capture. The ECI, compared to similar labor cost indices, is robustly resistant to variations in labor force composition. The table format previously described concerning the GDP price deflator table is applicable here; subsequent additions of the forecast will include preceding forecast comparisons.

If you are unsure forecast applies to your analysis, consult "BPA Policy 210-1 Interest Rate" in the BPA Policy Library. To ensure that you are using the most up to date forecast, check the site below.

If you have questions concerning the FY 2022 Interest Rate and Inflation Forecasts, please contact Michael Edwards at mmedwards@bpa.gov or (503) 230-3673.

Michael D. Edwards

Michael D. Edwards
Financial Analyst
Revenue Requirement, Repayment, and Financial Strategy

Table 1
30 Year Borrowing Rate Comparison
 FY 2022 Forecast of Appropriation, BPA Agency, Third-Part Taxable,
 and Third-Party Tax-Exempt Borrowing Rates

BPA Fiscal Years 2022-2051

Year	A Appropriation Rate	B BPA Agency Rate	C Third-Party Tax-Exempt Rate	D Third-Party Taxable Rate
2022	1.88	2.61	2.30	3.09
2023	2.55	3.02	2.73	3.48
2024	2.89	3.33	3.06	3.76
2025	3.15	3.57	3.32	3.97
2026	3.34	3.73	3.50	4.11
2027	3.42	3.82	3.59	4.20
2028	3.46	3.86	3.63	4.24
2029	3.49	3.89	3.66	4.27
2030	3.51	3.90	3.67	4.28
2031	3.51	3.91	3.68	4.29
2032	3.51	3.91	3.68	4.29
2033	3.51	3.91	3.68	4.29
2034	3.51	3.91	3.68	4.29
2035	3.51	3.91	3.68	4.29
2036	3.51	3.91	3.68	4.29
2037	3.51	3.91	3.68	4.29
2038	3.51	3.91	3.68	4.29
2039	3.51	3.91	3.68	4.29
2040	3.51	3.91	3.68	4.29
2041	3.51	3.91	3.68	4.29
2042	3.51	3.91	3.68	4.29
2043	3.51	3.91	3.68	4.29
2044	3.51	3.91	3.68	4.29
2045	3.51	3.91	3.68	4.29
2046	3.51	3.91	3.68	4.29
2047	3.51	3.91	3.68	4.29
2048	3.51	3.91	3.68	4.29
2049	3.51	3.91	3.68	4.29
2050	3.51	3.91	3.68	4.29
2051	3.51	3.91	3.68	4.29

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).

2/ FY 2022 Appropriation rates are determined in accordance with BPA Appropriations Refinancing Act, 16 U.S.C. 8381 enacted on April 26, 1996, and are independent of the Global Insight Treasury Yield forecasts.

Table 2

15 Year Borrowing Rate Comparison

FY 2022 Forecast of Appropriation, BPA Agency, Third-Part Taxable,
and Third-Party Tax-Exempt Borrowing Rates

BPA Fiscal Years 2022-2051

Year	A Appropriation Rate	B BPA Agency Rate	C Third-Party Tax-Exempt Rate	D Third-Party Taxable Rate
2022	1.64	2.11	1.82	2.55
2023	2.25	2.56	2.25	2.97
2024	2.58	2.89	2.56	3.28
2025	2.85	3.15	2.80	3.53
2026	3.03	3.34	2.97	3.69
2027	3.12	3.43	3.06	3.78
2028	3.16	3.47	3.10	3.82
2029	3.19	3.50	3.13	3.84
2030	3.20	3.51	3.14	3.86
2031	3.20	3.51	3.14	3.86
2032	3.20	3.51	3.15	3.86
2033	3.20	3.51	3.15	3.86
2034	3.20	3.51	3.15	3.86
2035	3.20	3.51	3.15	3.86
2036	3.20	3.51	3.15	3.86
2037	3.20	3.51	3.15	3.86
2038	3.20	3.51	3.15	3.86
2039	3.20	3.51	3.15	3.86
2040	3.20	3.51	3.15	3.86
2041	3.20	3.51	3.15	3.86
2042	3.20	3.51	3.15	3.86
2043	3.20	3.51	3.15	3.86
2044	3.20	3.51	3.15	3.86
2045	3.20	3.51	3.15	3.86
2046	3.20	3.51	3.15	3.86
2047	3.20	3.51	3.15	3.86
2048	3.20	3.51	3.15	3.86
2049	3.20	3.51	3.15	3.86
2050	3.20	3.51	3.15	3.86
2051	3.20	3.51	3.15	3.86

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).

2/ FY 2022 Appropriation rates are determined in accordance with BPA Appropriations Refinancing Act, 16 U.S.C. 8381 enacted on April 26, 1996, and are independent of the Global Insight Treasury Yield forecasts.

Table 3

5 Year Borrowing Rate Comparison

FY 2022 Forecast of Appropriation, BPA Agency, Third-Part Taxable,
and Third-Party Tax-Exempt Borrowing Rates

BPA Fiscal Years 2022-2051

Year	A Appropriation Rate	B BPA Agency Rate	C Third-Party Tax-Exempt Rate	D Third-Party Taxable Rate
2022	0.89	1.25	1.09	1.60
2023	1.74	1.71	1.49	2.06
2024	2.14	2.16	1.86	2.50
2025	2.52	2.58	2.21	2.92
2026	2.76	2.86	2.42	3.19
2027	2.89	2.98	2.55	3.32
2028	2.93	3.02	2.59	3.36
2029	2.94	3.03	2.60	3.37
2030	2.95	3.04	2.60	3.37
2031	2.95	3.04	2.61	3.38
2032	2.95	3.04	2.61	3.38
2033	2.95	3.04	2.61	3.38
2034	2.95	3.04	2.61	3.38
2035	2.95	3.04	2.61	3.38
2036	2.95	3.04	2.61	3.38
2037	2.95	3.04	2.61	3.38
2038	2.95	3.04	2.61	3.38
2039	2.95	3.04	2.61	3.38
2040	2.95	3.04	2.61	3.38
2041	2.95	3.04	2.61	3.38
2042	2.95	3.04	2.61	3.38
2043	2.95	3.04	2.61	3.38
2044	2.95	3.04	2.61	3.38
2045	2.95	3.04	2.61	3.38
2046	2.95	3.04	2.61	3.38
2047	2.95	3.04	2.61	3.38
2048	2.95	3.04	2.61	3.38
2049	2.95	3.04	2.61	3.38
2050	2.95	3.04	2.61	3.38
2051	2.95	3.04	2.61	3.38

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).

2/ FY 2022 Appropriation rates are determined in accordance with BPA Appropriations Refinancing Act, 16 U.S.C. 8381 enacted on April 26, 1996, and are independent of the Global Insight Treasury Yield forecasts.

Table 4

Appropriations Borrowing Rates

BPA Fiscal Years 2022-2051

(continued on next page)

Year	Maturity														
	1 Year	2 Year	3 Year	4 Year	5 Year	6 Year	7 Year	8 Year	9 Year	10 Year	11 Year	12 Year	13 Year	14 Year	15 Year
2022	0.15	0.31	0.53	0.71	0.89	1.04	1.13	1.25	1.27	1.38	1.40	1.50	1.52	1.63	1.64
2023	0.97	1.28	1.43	1.59	1.74	1.82	1.90	1.99	2.07	2.15	2.17	2.19	2.21	2.23	2.25
2024	1.55	1.84	1.94	2.04	2.14	2.21	2.28	2.34	2.41	2.48	2.50	2.52	2.54	2.56	2.58
2025	2.18	2.39	2.43	2.48	2.52	2.57	2.61	2.66	2.70	2.74	2.76	2.78	2.80	2.83	2.85
2026	2.62	2.73	2.74	2.75	2.76	2.79	2.83	2.86	2.89	2.92	2.94	2.96	2.99	3.01	3.03
2027	2.88	2.94	2.92	2.90	2.89	2.91	2.94	2.96	2.99	3.02	3.04	3.06	3.08	3.10	3.12
2028	2.96	2.99	2.97	2.95	2.93	2.95	2.98	3.01	3.03	3.06	3.08	3.10	3.12	3.14	3.16
2029	2.97	3.00	2.98	2.96	2.94	2.97	3.00	3.03	3.05	3.08	3.10	3.12	3.14	3.16	3.19
2030	2.97	3.00	2.98	2.96	2.95	2.98	3.01	3.04	3.07	3.10	3.12	3.14	3.16	3.18	3.20
2031	2.96	3.00	2.98	2.96	2.95	2.98	3.01	3.04	3.07	3.10	3.12	3.14	3.16	3.18	3.20
2032	2.96	2.99	2.98	2.96	2.95	2.98	3.01	3.04	3.07	3.10	3.12	3.14	3.16	3.18	3.20
2033	2.96	2.99	2.98	2.96	2.95	2.98	3.01	3.04	3.07	3.10	3.12	3.14	3.16	3.18	3.20
2034	2.96	2.99	2.98	2.96	2.95	2.98	3.01	3.04	3.07	3.10	3.12	3.14	3.16	3.18	3.20
2035	2.96	2.99	2.98	2.96	2.95	2.98	3.01	3.04	3.07	3.10	3.12	3.14	3.16	3.18	3.20
2036	2.96	2.99	2.98	2.96	2.95	2.98	3.01	3.04	3.07	3.10	3.12	3.14	3.16	3.18	3.20
2037	2.96	2.99	2.98	2.96	2.95	2.98	3.01	3.04	3.07	3.10	3.12	3.14	3.16	3.18	3.20
2038	2.96	2.99	2.98	2.96	2.95	2.98	3.01	3.04	3.07	3.10	3.12	3.14	3.16	3.18	3.20
2039	2.96	2.99	2.98	2.96	2.95	2.98	3.01	3.04	3.07	3.10	3.12	3.14	3.16	3.18	3.20
2040	2.96	2.99	2.98	2.96	2.95	2.98	3.01	3.04	3.07	3.10	3.12	3.14	3.16	3.18	3.20
2041	2.96	2.99	2.98	2.96	2.95	2.98	3.01	3.04	3.07	3.10	3.12	3.14	3.16	3.18	3.20
2042	2.96	2.99	2.98	2.96	2.95	2.98	3.01	3.04	3.07	3.10	3.12	3.14	3.16	3.18	3.20
2043	2.96	2.99	2.98	2.96	2.95	2.98	3.01	3.04	3.07	3.10	3.12	3.14	3.16	3.18	3.20
2044	2.96	2.99	2.98	2.96	2.95	2.98	3.01	3.04	3.07	3.10	3.12	3.14	3.16	3.18	3.20
2045	2.96	2.99	2.98	2.96	2.95	2.98	3.01	3.04	3.07	3.10	3.12	3.14	3.16	3.18	3.20
2046	2.96	2.99	2.98	2.96	2.95	2.98	3.01	3.04	3.07	3.10	3.12	3.14	3.16	3.18	3.20
2047	2.96	2.99	2.98	2.96	2.95	2.98	3.01	3.04	3.07	3.10	3.12	3.14	3.16	3.18	3.20
2048	2.96	2.99	2.98	2.96	2.95	2.98	3.01	3.04	3.07	3.10	3.12	3.14	3.16	3.18	3.20
2049	2.96	2.99	2.98	2.96	2.95	2.98	3.01	3.04	3.07	3.10	3.12	3.14	3.16	3.18	3.20
2050	2.96	2.99	2.98	2.96	2.95	2.98	3.01	3.04	3.07	3.10	3.12	3.14	3.16	3.18	3.20
2051	2.96	2.99	2.98	2.96	2.95	2.98	3.01	3.04	3.07	3.10	3.12	3.14	3.16	3.18	3.20

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).

2/ FY 2022 Appropriation rates are determined in accordance with BPA Appropriations

Refinancing Act, 16 U.S.C. 8381 enacted on April 26, 1996, and are independent

of the Global Insight Treasury Yield forecasts.

Table 4

Appropriations Borrowing Rates

BPA Fiscal Years 2022-2051

Maturity																
16 Year	17 Year	18 Year	19 Year	20 Year	21 Year	22 Year	23 Year	24 Year	25 Year	26 Year	27 Year	28 Year	29 Year	30 Year	50 Year	Year
1.75	1.75	1.79	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	2022
2.27	2.29	2.31	2.33	2.35	2.37	2.39	2.41	2.43	2.45	2.47	2.49	2.51	2.53	2.55	2.55	2023
2.60	2.62	2.64	2.66	2.68	2.70	2.72	2.74	2.76	2.78	2.80	2.82	2.84	2.86	2.89	2.89	2024
2.87	2.89	2.91	2.93	2.95	2.97	2.99	3.01	3.03	3.05	3.07	3.09	3.11	3.13	3.15	3.15	2025
3.05	3.07	3.09	3.11	3.13	3.15	3.17	3.19	3.21	3.23	3.25	3.27	3.29	3.31	3.34	3.34	2026
3.14	3.16	3.18	3.20	3.22	3.24	3.26	3.28	3.30	3.32	3.34	3.36	3.38	3.40	3.42	3.42	2027
3.18	3.20	3.22	3.24	3.26	3.28	3.30	3.32	3.34	3.36	3.38	3.40	3.42	3.44	3.46	3.46	2028
3.21	3.23	3.25	3.27	3.29	3.31	3.33	3.35	3.37	3.39	3.41	3.43	3.45	3.47	3.49	3.49	2029
3.22	3.24	3.26	3.28	3.30	3.32	3.34	3.36	3.38	3.40	3.42	3.44	3.46	3.48	3.51	3.51	2030
3.22	3.24	3.26	3.29	3.31	3.33	3.35	3.37	3.39	3.41	3.43	3.45	3.47	3.49	3.51	3.51	2031
3.23	3.25	3.27	3.29	3.31	3.33	3.35	3.37	3.39	3.41	3.43	3.45	3.47	3.49	3.51	3.51	2032
3.23	3.25	3.27	3.29	3.31	3.33	3.35	3.37	3.39	3.41	3.43	3.45	3.47	3.49	3.51	3.51	2033
3.23	3.25	3.27	3.29	3.31	3.33	3.35	3.37	3.39	3.41	3.43	3.45	3.47	3.49	3.51	3.51	2034
3.23	3.25	3.27	3.29	3.31	3.33	3.35	3.37	3.39	3.41	3.43	3.45	3.47	3.49	3.51	3.51	2035
3.23	3.25	3.27	3.29	3.31	3.33	3.35	3.37	3.39	3.41	3.43	3.45	3.47	3.49	3.51	3.51	2036
3.23	3.25	3.27	3.29	3.31	3.33	3.35	3.37	3.39	3.41	3.43	3.45	3.47	3.49	3.51	3.51	2037
3.23	3.25	3.27	3.29	3.31	3.33	3.35	3.37	3.39	3.41	3.43	3.45	3.47	3.49	3.51	3.51	2038
3.23	3.25	3.27	3.29	3.31	3.33	3.35	3.37	3.39	3.41	3.43	3.45	3.47	3.49	3.51	3.51	2039
3.23	3.25	3.27	3.29	3.31	3.33	3.35	3.37	3.39	3.41	3.43	3.45	3.47	3.49	3.51	3.51	2040
3.23	3.25	3.27	3.29	3.31	3.33	3.35	3.37	3.39	3.41	3.43	3.45	3.47	3.49	3.51	3.51	2041
3.23	3.25	3.27	3.29	3.31	3.33	3.35	3.37	3.39	3.41	3.43	3.45	3.47	3.49	3.51	3.51	2042
3.23	3.25	3.27	3.29	3.31	3.33	3.35	3.37	3.39	3.41	3.43	3.45	3.47	3.49	3.51	3.51	2043
3.23	3.25	3.27	3.29	3.31	3.33	3.35	3.37	3.39	3.41	3.43	3.45	3.47	3.49	3.51	3.51	2044
3.23	3.25	3.27	3.29	3.31	3.33	3.35	3.37	3.39	3.41	3.43	3.45	3.47	3.49	3.51	3.51	2045
3.23	3.25	3.27	3.29	3.31	3.33	3.35	3.37	3.39	3.41	3.43	3.45	3.47	3.49	3.51	3.51	2046
3.23	3.25	3.27	3.29	3.31	3.33	3.35	3.37	3.39	3.41	3.43	3.45	3.47	3.49	3.51	3.51	2047
3.23	3.25	3.27	3.29	3.31	3.33	3.35	3.37	3.39	3.41	3.43	3.45	3.47	3.49	3.51	3.51	2048
3.23	3.25	3.27	3.29	3.31	3.33	3.35	3.37	3.39	3.41	3.43	3.45	3.47	3.49	3.51	3.51	2049
3.23	3.25	3.27	3.29	3.31	3.33	3.35	3.37	3.39	3.41	3.43	3.45	3.47	3.49	3.51	3.51	2050
3.23	3.25	3.27	3.29	3.31	3.33	3.35	3.37	3.39	3.41	3.43	3.45	3.47	3.49	3.51	3.51	2051

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).

2/ FY 2022 Appropriation rates are determined in accordance with BPA Appropriations

Refinancing Act, 16 U.S.C. 8381 enacted on April 26, 1996, and are independent

of the Global Insight Treasury Yield forecasts.

Table 5
BPA Agency Borrowing Rates
 BPA Fiscal Years 2022-2051
 (continued on next page)

Year	Maturity															
	6 Month	1 Year	2 Year	3 Year	4 Year	5 Year	6 Year	7 Year	8 Year	9 Year	10 Year	11 Year	12 Year	13 Year	14 Year	15 Year
2022	0.10	0.24	0.53	0.77	1.01	1.25	1.39	1.53	1.66	1.80	1.94	1.97	2.01	2.04	2.07	2.11
2023	0.31	0.64	1.02	1.25	1.48	1.71	1.85	1.99	2.13	2.27	2.40	2.44	2.47	2.50	2.53	2.56
2024	0.87	1.34	1.69	1.84	2.00	2.16	2.27	2.39	2.51	2.62	2.74	2.77	2.80	2.83	2.86	2.89
2025	1.61	2.09	2.34	2.42	2.50	2.58	2.67	2.75	2.84	2.93	3.02	3.04	3.07	3.10	3.13	3.15
2026	2.25	2.65	2.78	2.81	2.83	2.86	2.93	3.00	3.07	3.14	3.21	3.23	3.26	3.28	3.31	3.34
2027	2.59	2.91	2.99	2.99	2.98	2.98	3.05	3.11	3.17	3.23	3.30	3.32	3.35	3.38	3.40	3.43
2028	2.73	2.99	3.04	3.04	3.03	3.02	3.09	3.15	3.21	3.28	3.34	3.37	3.39	3.42	3.45	3.47
2029	2.78	3.00	3.05	3.04	3.04	3.03	3.10	3.17	3.23	3.30	3.36	3.39	3.42	3.44	3.47	3.50
2030	2.80	2.99	3.05	3.05	3.04	3.04	3.11	3.18	3.24	3.31	3.38	3.40	3.43	3.46	3.48	3.51
2031	2.82	2.99	3.05	3.04	3.04	3.04	3.11	3.18	3.25	3.31	3.38	3.41	3.43	3.46	3.49	3.51
2032	2.83	2.99	3.05	3.04	3.04	3.04	3.11	3.18	3.25	3.32	3.38	3.41	3.44	3.46	3.49	3.51
2033	2.83	2.99	3.05	3.04	3.04	3.04	3.11	3.18	3.25	3.32	3.38	3.41	3.44	3.46	3.49	3.51
2034	2.83	2.99	3.05	3.04	3.04	3.04	3.11	3.18	3.25	3.32	3.38	3.41	3.44	3.46	3.49	3.51
2035	2.83	2.99	3.05	3.04	3.04	3.04	3.11	3.18	3.25	3.32	3.38	3.41	3.44	3.46	3.49	3.51
2036	2.83	2.99	3.05	3.04	3.04	3.04	3.11	3.18	3.25	3.32	3.38	3.41	3.44	3.46	3.49	3.51
2037	2.83	2.99	3.05	3.04	3.04	3.04	3.11	3.18	3.25	3.32	3.38	3.41	3.44	3.46	3.49	3.51
2038	2.83	2.99	3.05	3.04	3.04	3.04	3.11	3.18	3.25	3.32	3.38	3.41	3.44	3.46	3.49	3.51
2039	2.83	2.99	3.05	3.04	3.04	3.04	3.11	3.18	3.25	3.32	3.38	3.41	3.44	3.46	3.49	3.51
2040	2.83	2.99	3.05	3.04	3.04	3.04	3.11	3.18	3.25	3.32	3.38	3.41	3.44	3.46	3.49	3.51
2041	2.83	2.99	3.05	3.04	3.04	3.04	3.11	3.18	3.25	3.32	3.38	3.41	3.44	3.46	3.49	3.51
2042	2.83	2.99	3.05	3.04	3.04	3.04	3.11	3.18	3.25	3.32	3.38	3.41	3.44	3.46	3.49	3.51
2043	2.83	2.99	3.05	3.04	3.04	3.04	3.11	3.18	3.25	3.32	3.38	3.41	3.44	3.46	3.49	3.51
2044	2.83	2.99	3.05	3.04	3.04	3.04	3.11	3.18	3.25	3.32	3.38	3.41	3.44	3.46	3.49	3.51
2045	2.83	2.99	3.05	3.04	3.04	3.04	3.11	3.18	3.25	3.32	3.38	3.41	3.44	3.46	3.49	3.51
2046	2.83	2.99	3.05	3.04	3.04	3.04	3.11	3.18	3.25	3.32	3.38	3.41	3.44	3.46	3.49	3.51
2047	2.83	2.99	3.05	3.04	3.04	3.04	3.11	3.18	3.25	3.32	3.38	3.41	3.44	3.46	3.49	3.51
2048	2.83	2.99	3.05	3.04	3.04	3.04	3.11	3.18	3.25	3.32	3.38	3.41	3.44	3.46	3.49	3.51
2049	2.83	2.99	3.05	3.04	3.04	3.04	3.11	3.18	3.25	3.32	3.38	3.41	3.44	3.46	3.49	3.51
2050	2.83	2.99	3.05	3.04	3.04	3.04	3.11	3.18	3.25	3.32	3.38	3.41	3.44	3.46	3.49	3.51
2051	2.83	2.99	3.05	3.04	3.04	3.04	3.11	3.18	3.25	3.32	3.38	3.41	3.44	3.46	3.49	3.51

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).

Table 5
BPA Agency Borrowing Rates
 BPA Fiscal Years 2022-2051

Maturity																
16 Year	17 Year	18 Year	19 Year	20 Year	21 Year	22 Year	23 Year	24 Year	25 Year	26 Year	27 Year	28 Year	29 Year	30 Year	50 Year	Year
2.14	2.17	2.21	2.24	2.27	2.31	2.34	2.37	2.41	2.44	2.47	2.51	2.54	2.58	2.61	2.61	2022
2.59	2.62	2.65	2.68	2.71	2.74	2.77	2.80	2.83	2.86	2.89	2.92	2.95	2.99	3.02	3.02	2023
2.92	2.95	2.98	3.00	3.03	3.06	3.09	3.12	3.15	3.18	3.21	3.24	3.27	3.30	3.33	3.33	2024
3.18	3.21	3.24	3.26	3.29	3.32	3.35	3.38	3.40	3.43	3.46	3.49	3.51	3.54	3.57	3.57	2025
3.36	3.39	3.42	3.44	3.47	3.49	3.52	3.55	3.57	3.60	3.63	3.65	3.68	3.70	3.73	3.73	2026
3.45	3.48	3.51	3.53	3.56	3.58	3.61	3.63	3.66	3.69	3.71	3.74	3.76	3.79	3.82	3.82	2027
3.50	3.52	3.55	3.57	3.60	3.63	3.65	3.68	3.70	3.73	3.76	3.78	3.81	3.83	3.86	3.86	2028
3.52	3.55	3.57	3.60	3.63	3.65	3.68	3.70	3.73	3.76	3.78	3.81	3.83	3.86	3.89	3.89	2029
3.53	3.56	3.59	3.61	3.64	3.67	3.69	3.72	3.74	3.77	3.80	3.82	3.85	3.87	3.90	3.90	2030
3.54	3.57	3.59	3.62	3.64	3.67	3.70	3.72	3.75	3.78	3.80	3.83	3.85	3.88	3.91	3.91	2031
3.54	3.57	3.59	3.62	3.65	3.67	3.70	3.72	3.75	3.78	3.80	3.83	3.86	3.88	3.91	3.91	2032
3.54	3.57	3.59	3.62	3.65	3.67	3.70	3.72	3.75	3.78	3.80	3.83	3.86	3.88	3.91	3.91	2033
3.54	3.57	3.59	3.62	3.65	3.67	3.70	3.72	3.75	3.78	3.80	3.83	3.86	3.88	3.91	3.91	2034
3.54	3.57	3.59	3.62	3.65	3.67	3.70	3.72	3.75	3.78	3.80	3.83	3.86	3.88	3.91	3.91	2035
3.54	3.57	3.59	3.62	3.65	3.67	3.70	3.72	3.75	3.78	3.80	3.83	3.86	3.88	3.91	3.91	2036
3.54	3.57	3.59	3.62	3.65	3.67	3.70	3.72	3.75	3.78	3.80	3.83	3.86	3.88	3.91	3.91	2037
3.54	3.57	3.59	3.62	3.65	3.67	3.70	3.72	3.75	3.78	3.80	3.83	3.86	3.88	3.91	3.91	2038
3.54	3.57	3.59	3.62	3.65	3.67	3.70	3.72	3.75	3.78	3.80	3.83	3.86	3.88	3.91	3.91	2039
3.54	3.57	3.59	3.62	3.65	3.67	3.70	3.72	3.75	3.78	3.80	3.83	3.86	3.88	3.91	3.91	2040
3.54	3.57	3.59	3.62	3.65	3.67	3.70	3.72	3.75	3.78	3.80	3.83	3.86	3.88	3.91	3.91	2041
3.54	3.57	3.59	3.62	3.65	3.67	3.70	3.72	3.75	3.78	3.80	3.83	3.86	3.88	3.91	3.91	2042
3.54	3.57	3.59	3.62	3.65	3.67	3.70	3.72	3.75	3.78	3.80	3.83	3.86	3.88	3.91	3.91	2043
3.54	3.57	3.59	3.62	3.65	3.67	3.70	3.72	3.75	3.78	3.80	3.83	3.86	3.88	3.91	3.91	2044
3.54	3.57	3.59	3.62	3.65	3.67	3.70	3.72	3.75	3.78	3.80	3.83	3.86	3.88	3.91	3.91	2045
3.54	3.57	3.59	3.62	3.65	3.67	3.70	3.72	3.75	3.78	3.80	3.83	3.86	3.88	3.91	3.91	2046
3.54	3.57	3.59	3.62	3.65	3.67	3.70	3.72	3.75	3.78	3.80	3.83	3.86	3.88	3.91	3.91	2047
3.54	3.57	3.59	3.62	3.65	3.67	3.70	3.72	3.75	3.78	3.80	3.83	3.86	3.88	3.91	3.91	2048
3.54	3.57	3.59	3.62	3.65	3.67	3.70	3.72	3.75	3.78	3.80	3.83	3.86	3.88	3.91	3.91	2049
3.54	3.57	3.59	3.62	3.65	3.67	3.70	3.72	3.75	3.78	3.80	3.83	3.86	3.88	3.91	3.91	2050
3.54	3.57	3.59	3.62	3.65	3.67	3.70	3.72	3.75	3.78	3.80	3.83	3.86	3.88	3.91	3.91	2051

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).

Table 6
Third-Party Tax-Exempt Borrowing Rates
 BPA Fiscal Years 2022-2051
 (continued on next page)

Year	Maturity														
	1 Year	2 Year	3 Year	4 Year	5 Year	6 Year	7 Year	8 Year	9 Year	10 Year	11 Year	12 Year	13 Year	14 Year	15 Year
2022	0.22	0.51	0.71	0.90	1.09	1.21	1.32	1.43	1.54	1.66	1.69	1.72	1.75	1.79	1.82
2023	0.55	0.91	1.11	1.30	1.49	1.61	1.73	1.85	1.97	2.09	2.12	2.15	2.18	2.22	2.25
2024	1.18	1.49	1.62	1.74	1.86	1.97	2.07	2.18	2.28	2.39	2.42	2.46	2.49	2.52	2.56
2025	1.85	2.06	2.11	2.16	2.21	2.30	2.38	2.47	2.55	2.63	2.67	2.70	2.74	2.77	2.80
2026	2.33	2.42	2.42	2.42	2.42	2.49	2.57	2.64	2.71	2.79	2.82	2.86	2.90	2.93	2.97
2027	2.60	2.62	2.60	2.57	2.55	2.61	2.68	2.75	2.81	2.88	2.92	2.95	2.99	3.02	3.06
2028	2.68	2.68	2.65	2.62	2.59	2.65	2.72	2.79	2.86	2.92	2.96	3.00	3.03	3.07	3.10
2029	2.68	2.69	2.66	2.63	2.60	2.67	2.74	2.81	2.88	2.95	2.98	3.02	3.05	3.09	3.13
2030	2.68	2.68	2.66	2.63	2.60	2.68	2.75	2.82	2.89	2.96	3.00	3.03	3.07	3.10	3.14
2031	2.68	2.68	2.66	2.63	2.61	2.68	2.75	2.82	2.89	2.97	3.00	3.04	3.07	3.11	3.14
2032	2.68	2.68	2.66	2.63	2.61	2.68	2.75	2.82	2.89	2.97	3.00	3.04	3.07	3.11	3.15
2033	2.68	2.68	2.66	2.63	2.61	2.68	2.75	2.82	2.89	2.97	3.00	3.04	3.07	3.11	3.15
2034	2.68	2.68	2.66	2.63	2.61	2.68	2.75	2.82	2.89	2.97	3.00	3.04	3.07	3.11	3.15
2035	2.68	2.68	2.66	2.63	2.61	2.68	2.75	2.82	2.89	2.97	3.00	3.04	3.07	3.11	3.15
2036	2.68	2.68	2.66	2.63	2.61	2.68	2.75	2.82	2.89	2.97	3.00	3.04	3.07	3.11	3.15
2037	2.68	2.68	2.66	2.63	2.61	2.68	2.75	2.82	2.89	2.97	3.00	3.04	3.07	3.11	3.15
2038	2.68	2.68	2.66	2.63	2.61	2.68	2.75	2.82	2.89	2.97	3.00	3.04	3.07	3.11	3.15
2039	2.68	2.68	2.66	2.63	2.61	2.68	2.75	2.82	2.89	2.97	3.00	3.04	3.07	3.11	3.15
2040	2.68	2.68	2.66	2.63	2.61	2.68	2.75	2.82	2.89	2.97	3.00	3.04	3.07	3.11	3.15
2041	2.68	2.68	2.66	2.63	2.61	2.68	2.75	2.82	2.89	2.97	3.00	3.04	3.07	3.11	3.15
2042	2.68	2.68	2.66	2.63	2.61	2.68	2.75	2.82	2.89	2.97	3.00	3.04	3.07	3.11	3.15
2043	2.68	2.68	2.66	2.63	2.61	2.68	2.75	2.82	2.89	2.97	3.00	3.04	3.07	3.11	3.15
2044	2.68	2.68	2.66	2.63	2.61	2.68	2.75	2.82	2.89	2.97	3.00	3.04	3.07	3.11	3.15
2045	2.68	2.68	2.66	2.63	2.61	2.68	2.75	2.82	2.89	2.97	3.00	3.04	3.07	3.11	3.15
2046	2.68	2.68	2.66	2.63	2.61	2.68	2.75	2.82	2.89	2.97	3.00	3.04	3.07	3.11	3.15
2047	2.68	2.68	2.66	2.63	2.61	2.68	2.75	2.82	2.89	2.97	3.00	3.04	3.07	3.11	3.15
2048	2.68	2.68	2.66	2.63	2.61	2.68	2.75	2.82	2.89	2.97	3.00	3.04	3.07	3.11	3.15
2049	2.68	2.68	2.66	2.63	2.61	2.68	2.75	2.82	2.89	2.97	3.00	3.04	3.07	3.11	3.15
2050	2.68	2.68	2.66	2.63	2.61	2.68	2.75	2.82	2.89	2.97	3.00	3.04	3.07	3.11	3.15
2051	2.68	2.68	2.66	2.63	2.61	2.68	2.75	2.82	2.89	2.97	3.00	3.04	3.07	3.11	3.15

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).

Table 6
Third-Party Tax-Exempt Borrowing Rates
 BPA Fiscal Years 2022-2051

Maturity																
16 Year	17 Year	18 Year	19 Year	20 Year	21 Year	22 Year	23 Year	24 Year	25 Year	26 Year	27 Year	28 Year	29 Year	30 Year	50 Year	Year
1.85	1.88	1.91	1.95	1.98	2.01	2.04	2.07	2.11	2.14	2.17	2.20	2.23	2.27	2.30	2.30	2022
2.28	2.31	2.34	2.38	2.41	2.44	2.47	2.50	2.53	2.57	2.60	2.63	2.66	2.69	2.73	2.73	2023
2.59	2.62	2.66	2.69	2.72	2.76	2.79	2.83	2.86	2.89	2.93	2.96	2.99	3.03	3.06	3.06	2024
2.84	2.87	2.91	2.94	2.98	3.01	3.05	3.08	3.11	3.15	3.18	3.22	3.25	3.29	3.32	3.32	2025
3.00	3.04	3.07	3.11	3.15	3.18	3.22	3.25	3.29	3.32	3.36	3.40	3.43	3.47	3.50	3.50	2026
3.09	3.13	3.16	3.20	3.23	3.27	3.31	3.34	3.38	3.41	3.45	3.48	3.52	3.55	3.59	3.59	2027
3.14	3.17	3.21	3.24	3.28	3.31	3.35	3.38	3.42	3.46	3.49	3.53	3.56	3.60	3.63	3.63	2028
3.16	3.20	3.23	3.27	3.30	3.34	3.37	3.41	3.45	3.48	3.52	3.55	3.59	3.62	3.66	3.66	2029
3.17	3.21	3.25	3.28	3.32	3.35	3.39	3.42	3.46	3.50	3.53	3.57	3.60	3.64	3.67	3.67	2030
3.18	3.22	3.25	3.29	3.32	3.36	3.39	3.43	3.47	3.50	3.54	3.57	3.61	3.64	3.68	3.68	2031
3.18	3.22	3.25	3.29	3.32	3.36	3.40	3.43	3.47	3.50	3.54	3.57	3.61	3.65	3.68	3.68	2032
3.18	3.22	3.25	3.29	3.32	3.36	3.40	3.43	3.47	3.50	3.54	3.57	3.61	3.65	3.68	3.68	2033
3.18	3.22	3.25	3.29	3.32	3.36	3.40	3.43	3.47	3.50	3.54	3.57	3.61	3.65	3.68	3.68	2034
3.18	3.22	3.25	3.29	3.32	3.36	3.40	3.43	3.47	3.50	3.54	3.57	3.61	3.65	3.68	3.68	2035
3.18	3.22	3.25	3.29	3.32	3.36	3.40	3.43	3.47	3.50	3.54	3.57	3.61	3.65	3.68	3.68	2036
3.18	3.22	3.25	3.29	3.32	3.36	3.40	3.43	3.47	3.50	3.54	3.57	3.61	3.65	3.68	3.68	2037
3.18	3.22	3.25	3.29	3.32	3.36	3.40	3.43	3.47	3.50	3.54	3.57	3.61	3.65	3.68	3.68	2038
3.18	3.22	3.25	3.29	3.32	3.36	3.40	3.43	3.47	3.50	3.54	3.57	3.61	3.65	3.68	3.68	2039
3.18	3.22	3.25	3.29	3.32	3.36	3.40	3.43	3.47	3.50	3.54	3.57	3.61	3.65	3.68	3.68	2040
3.18	3.22	3.25	3.29	3.32	3.36	3.40	3.43	3.47	3.50	3.54	3.57	3.61	3.65	3.68	3.68	2041
3.18	3.22	3.25	3.29	3.32	3.36	3.40	3.43	3.47	3.50	3.54	3.57	3.61	3.65	3.68	3.68	2042
3.18	3.22	3.25	3.29	3.32	3.36	3.40	3.43	3.47	3.50	3.54	3.57	3.61	3.65	3.68	3.68	2043
3.18	3.22	3.25	3.29	3.32	3.36	3.40	3.43	3.47	3.50	3.54	3.57	3.61	3.65	3.68	3.68	2044
3.18	3.22	3.25	3.29	3.32	3.36	3.40	3.43	3.47	3.50	3.54	3.57	3.61	3.65	3.68	3.68	2045
3.18	3.22	3.25	3.29	3.32	3.36	3.40	3.43	3.47	3.50	3.54	3.57	3.61	3.65	3.68	3.68	2046
3.18	3.22	3.25	3.29	3.32	3.36	3.40	3.43	3.47	3.50	3.54	3.57	3.61	3.65	3.68	3.68	2047
3.18	3.22	3.25	3.29	3.32	3.36	3.40	3.43	3.47	3.50	3.54	3.57	3.61	3.65	3.68	3.68	2048
3.18	3.22	3.25	3.29	3.32	3.36	3.40	3.43	3.47	3.50	3.54	3.57	3.61	3.65	3.68	3.68	2049
3.18	3.22	3.25	3.29	3.32	3.36	3.40	3.43	3.47	3.50	3.54	3.57	3.61	3.65	3.68	3.68	2050
3.18	3.22	3.25	3.29	3.32	3.36	3.40	3.43	3.47	3.50	3.54	3.57	3.61	3.65	3.68	3.68	2051

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).

Table 7
Third-Party Taxable Borrowing Rates
 BPA Fiscal Years 2022-2051
 (continued on next page)

Year	Maturity														
	1 Year	2 Year	3 Year	4 Year	5 Year	6 Year	7 Year	8 Year	9 Year	10 Year	11 Year	12 Year	13 Year	14 Year	15 Year
2022	0.50	0.82	1.08	1.34	1.60	1.75	1.90	2.06	2.21	2.36	2.40	2.44	2.47	2.51	2.55
2023	0.91	1.31	1.56	1.81	2.06	2.21	2.36	2.51	2.66	2.81	2.84	2.87	2.91	2.94	2.97
2024	1.61	1.97	2.15	2.32	2.50	2.62	2.75	2.87	3.00	3.12	3.15	3.18	3.22	3.25	3.28
2025	2.37	2.62	2.72	2.82	2.92	3.01	3.10	3.19	3.28	3.38	3.41	3.44	3.47	3.50	3.53
2026	2.92	3.06	3.10	3.15	3.19	3.26	3.33	3.40	3.47	3.54	3.57	3.60	3.63	3.66	3.69
2027	3.19	3.26	3.28	3.30	3.32	3.38	3.45	3.51	3.57	3.64	3.67	3.69	3.72	3.75	3.78
2028	3.27	3.32	3.33	3.34	3.36	3.42	3.49	3.55	3.62	3.68	3.71	3.74	3.76	3.79	3.82
2029	3.27	3.33	3.34	3.35	3.37	3.44	3.50	3.57	3.64	3.70	3.73	3.76	3.79	3.82	3.84
2030	3.27	3.33	3.34	3.36	3.37	3.44	3.51	3.58	3.65	3.72	3.75	3.77	3.80	3.83	3.86
2031	3.27	3.32	3.34	3.36	3.38	3.45	3.51	3.58	3.65	3.72	3.75	3.78	3.81	3.83	3.86
2032	3.27	3.32	3.34	3.36	3.38	3.45	3.51	3.58	3.65	3.72	3.75	3.78	3.81	3.84	3.86
2033	3.27	3.32	3.34	3.36	3.38	3.45	3.51	3.58	3.65	3.72	3.75	3.78	3.81	3.84	3.86
2034	3.27	3.32	3.34	3.36	3.38	3.45	3.51	3.58	3.65	3.72	3.75	3.78	3.81	3.84	3.86
2035	3.27	3.32	3.34	3.36	3.38	3.45	3.51	3.58	3.65	3.72	3.75	3.78	3.81	3.84	3.86
2036	3.27	3.32	3.34	3.36	3.38	3.45	3.51	3.58	3.65	3.72	3.75	3.78	3.81	3.84	3.86
2037	3.27	3.32	3.34	3.36	3.38	3.45	3.51	3.58	3.65	3.72	3.75	3.78	3.81	3.84	3.86
2038	3.27	3.32	3.34	3.36	3.38	3.45	3.51	3.58	3.65	3.72	3.75	3.78	3.81	3.84	3.86
2039	3.27	3.32	3.34	3.36	3.38	3.45	3.51	3.58	3.65	3.72	3.75	3.78	3.81	3.84	3.86
2040	3.27	3.32	3.34	3.36	3.38	3.45	3.51	3.58	3.65	3.72	3.75	3.78	3.81	3.84	3.86
2041	3.27	3.32	3.34	3.36	3.38	3.45	3.51	3.58	3.65	3.72	3.75	3.78	3.81	3.84	3.86
2042	3.27	3.32	3.34	3.36	3.38	3.45	3.51	3.58	3.65	3.72	3.75	3.78	3.81	3.84	3.86
2043	3.27	3.32	3.34	3.36	3.38	3.45	3.51	3.58	3.65	3.72	3.75	3.78	3.81	3.84	3.86
2044	3.27	3.32	3.34	3.36	3.38	3.45	3.51	3.58	3.65	3.72	3.75	3.78	3.81	3.84	3.86
2045	3.27	3.32	3.34	3.36	3.38	3.45	3.51	3.58	3.65	3.72	3.75	3.78	3.81	3.84	3.86
2046	3.27	3.32	3.34	3.36	3.38	3.45	3.51	3.58	3.65	3.72	3.75	3.78	3.81	3.84	3.86
2047	3.27	3.32	3.34	3.36	3.38	3.45	3.51	3.58	3.65	3.72	3.75	3.78	3.81	3.84	3.86
2048	3.27	3.32	3.34	3.36	3.38	3.45	3.51	3.58	3.65	3.72	3.75	3.78	3.81	3.84	3.86
2049	3.27	3.32	3.34	3.36	3.38	3.45	3.51	3.58	3.65	3.72	3.75	3.78	3.81	3.84	3.86
2050	3.27	3.32	3.34	3.36	3.38	3.45	3.51	3.58	3.65	3.72	3.75	3.78	3.81	3.84	3.86
2051	3.27	3.32	3.34	3.36	3.38	3.45	3.51	3.58	3.65	3.72	3.75	3.78	3.81	3.84	3.86

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).

Table 7
Third-Party Taxable Borrowing Rates
 BPA Fiscal Years 2022-2051

Maturity																
16 Year	17 Year	18 Year	19 Year	20 Year	21 Year	22 Year	23 Year	24 Year	25 Year	26 Year	27 Year	28 Year	29 Year	30 Year	50 Year	Year
2.58	2.62	2.66	2.69	2.73	2.76	2.80	2.84	2.87	2.91	2.95	2.98	3.02	3.06	3.09	3.09	2022
3.01	3.04	3.07	3.11	3.14	3.17	3.21	3.24	3.27	3.31	3.34	3.37	3.41	3.44	3.48	3.48	2023
3.31	3.34	3.38	3.41	3.44	3.47	3.51	3.54	3.57	3.60	3.63	3.67	3.70	3.73	3.76	3.76	2024
3.56	3.59	3.62	3.65	3.68	3.71	3.74	3.77	3.80	3.83	3.86	3.89	3.92	3.95	3.97	3.97	2025
3.71	3.74	3.77	3.80	3.83	3.86	3.88	3.91	3.94	3.97	4.00	4.03	4.05	4.08	4.11	4.11	2026
3.80	3.83	3.86	3.89	3.92	3.94	3.97	4.00	4.03	4.06	4.08	4.11	4.14	4.17	4.20	4.20	2027
3.85	3.88	3.90	3.93	3.96	3.99	4.02	4.04	4.07	4.10	4.13	4.16	4.18	4.21	4.24	4.24	2028
3.87	3.90	3.93	3.96	3.99	4.01	4.04	4.07	4.10	4.13	4.15	4.18	4.21	4.24	4.27	4.27	2029
3.89	3.91	3.94	3.97	4.00	4.03	4.06	4.08	4.11	4.14	4.17	4.20	4.22	4.25	4.28	4.28	2030
3.89	3.92	3.95	3.98	4.00	4.03	4.06	4.09	4.12	4.15	4.17	4.20	4.23	4.26	4.29	4.29	2031
3.89	3.92	3.95	3.98	4.01	4.03	4.06	4.09	4.12	4.15	4.18	4.20	4.23	4.26	4.29	4.29	2032
3.89	3.92	3.95	3.98	4.01	4.03	4.06	4.09	4.12	4.15	4.18	4.20	4.23	4.26	4.29	4.29	2033
3.89	3.92	3.95	3.98	4.01	4.03	4.06	4.09	4.12	4.15	4.18	4.20	4.23	4.26	4.29	4.29	2034
3.89	3.92	3.95	3.98	4.01	4.03	4.06	4.09	4.12	4.15	4.18	4.20	4.23	4.26	4.29	4.29	2035
3.89	3.92	3.95	3.98	4.01	4.03	4.06	4.09	4.12	4.15	4.18	4.20	4.23	4.26	4.29	4.29	2036
3.89	3.92	3.95	3.98	4.01	4.03	4.06	4.09	4.12	4.15	4.18	4.20	4.23	4.26	4.29	4.29	2037
3.89	3.92	3.95	3.98	4.01	4.03	4.06	4.09	4.12	4.15	4.18	4.20	4.23	4.26	4.29	4.29	2038
3.89	3.92	3.95	3.98	4.01	4.03	4.06	4.09	4.12	4.15	4.18	4.20	4.23	4.26	4.29	4.29	2039
3.89	3.92	3.95	3.98	4.01	4.03	4.06	4.09	4.12	4.15	4.18	4.20	4.23	4.26	4.29	4.29	2040
3.89	3.92	3.95	3.98	4.01	4.03	4.06	4.09	4.12	4.15	4.18	4.20	4.23	4.26	4.29	4.29	2041
3.89	3.92	3.95	3.98	4.01	4.03	4.06	4.09	4.12	4.15	4.18	4.20	4.23	4.26	4.29	4.29	2042
3.89	3.92	3.95	3.98	4.01	4.03	4.06	4.09	4.12	4.15	4.18	4.20	4.23	4.26	4.29	4.29	2043
3.89	3.92	3.95	3.98	4.01	4.03	4.06	4.09	4.12	4.15	4.18	4.20	4.23	4.26	4.29	4.29	2044
3.89	3.92	3.95	3.98	4.01	4.03	4.06	4.09	4.12	4.15	4.18	4.20	4.23	4.26	4.29	4.29	2045
3.89	3.92	3.95	3.98	4.01	4.03	4.06	4.09	4.12	4.15	4.18	4.20	4.23	4.26	4.29	4.29	2046
3.89	3.92	3.95	3.98	4.01	4.03	4.06	4.09	4.12	4.15	4.18	4.20	4.23	4.26	4.29	4.29	2047
3.89	3.92	3.95	3.98	4.01	4.03	4.06	4.09	4.12	4.15	4.18	4.20	4.23	4.26	4.29	4.29	2048
3.89	3.92	3.95	3.98	4.01	4.03	4.06	4.09	4.12	4.15	4.18	4.20	4.23	4.26	4.29	4.29	2049
3.89	3.92	3.95	3.98	4.01	4.03	4.06	4.09	4.12	4.15	4.18	4.20	4.23	4.26	4.29	4.29	2050
3.89	3.92	3.95	3.98	4.01	4.03	4.06	4.09	4.12	4.15	4.18	4.20	4.23	4.26	4.29	4.29	2051

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).

Table 8
FERC (Bank Prime) and 3-Month LIBOR Borrowing Rates
 BPA Fiscal Years 2022-2051

Year	A FERC Rate	B 3-Month LIBOR Rate
2022	3.25	0.22
2023	3.45	0.48
2024	3.96	1.00
2025	4.61	1.64
2026	5.24	2.23
2027	5.58	2.56
2028	5.72	2.71
2029	5.75	2.74
2030	5.75	2.75
2031	5.75	2.75
2032	5.75	2.76
2033	5.75	2.76
2034	5.75	2.76
2035	5.75	2.76
2036	5.75	2.76
2037	5.75	2.76
2038	5.75	2.76
2039	5.75	2.76
2040	5.75	2.76
2041	5.75	2.76
2042	5.75	2.76
2043	5.75	2.76
2044	5.75	2.76
2045	5.75	2.76
2046	5.75	2.76
2047	5.75	2.76
2048	5.75	2.76
2049	5.75	2.76
2050	5.75	2.76
2051	5.75	2.76

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).

Table 9
Inflation Forecast (GDP Deflator) and Comparison
 BPA Fiscal Years 2022-2051

Year	A 2022 Calendar Year GDP Price Deflator	B 2022 Fiscal Year GDP Price Deflator	C 2022 Fiscal Year Cumulative Price Deflator (Base Year 2021)	D 2021 Fiscal Year GDP Price Deflator	E 2021 Fiscal Year Cumulative Price Deflator (Base Year 2021)	F Change in the GDP Price Deflator (B-D)	G Change in the Cumulative Price Deflator (C-E)
2022	3.32%	3.47%	1.017	1.99%	1.029	1.48%	-0.011
2023	2.24%	2.50%	1.043	2.06%	1.050	0.44%	-0.007
2024	2.47%	2.41%	1.068	2.08%	1.072	0.33%	-0.004
2025	2.47%	2.47%	1.094	2.10%	1.094	0.37%	0.000
2026	2.39%	2.41%	1.121	2.16%	1.118	0.25%	0.003
2027	2.40%	2.40%	1.148	2.27%	1.143	0.13%	0.004
2028	2.39%	2.39%	1.175	2.36%	1.170	0.03%	0.005
2029	2.37%	2.37%	1.203	2.39%	1.198	-0.01%	0.005
2030	2.31%	2.32%	1.231	2.40%	1.227	-0.08%	0.004
2031	2.29%	2.29%	1.259	2.33%	1.256	-0.04%	0.003
2032	2.23%	2.24%	1.287	2.29%	1.284	-0.05%	0.003
2033	2.25%	2.25%	1.316	2.28%	1.314	-0.04%	0.003
2034	2.26%	2.25%	1.346	2.27%	1.344	-0.02%	0.002
2035	2.27%	2.26%	1.376	2.27%	1.374	0.00%	0.002
2036	2.26%	2.26%	1.408	2.25%	1.405	0.01%	0.003
2037	2.27%	2.27%	1.439	2.23%	1.436	0.03%	0.003
2038	2.27%	2.27%	1.472	2.23%	1.468	0.04%	0.004
2039	2.27%	2.27%	1.506	2.23%	1.501	0.04%	0.005
2040	2.28%	2.28%	1.540	2.25%	1.535	0.03%	0.005
2041	2.27%	2.27%	1.575	2.23%	1.569	0.05%	0.006
2042	2.29%	2.28%	1.611	2.24%	1.604	0.04%	0.007
2043	2.30%	2.30%	1.648	2.27%	1.641	0.03%	0.007
2044	2.30%	2.30%	1.686	2.28%	1.678	0.02%	0.008
2045	2.30%	2.30%	1.725	2.28%	1.716	0.02%	0.008
2046	2.31%	2.31%	1.764	2.28%	1.756	0.03%	0.009
2047	2.31%	2.31%	1.805	2.29%	1.796	0.02%	0.010
2048	2.32%	2.32%	1.847	2.30%	1.837	0.02%	0.010
2049	2.32%	2.32%	1.890	2.31%	1.880	0.01%	0.010
2050	2.33%	2.33%	1.934	2.34%	1.923	-0.01%	0.011
2051	2.33%	2.33%	1.979				

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).

Except for Column A which represents a standard Calendar Year.

2/ Fiscal Year Cumulative Price Deflator escalates to midyear dollars. The first year, 2022, is determined as follows: $1.017 = (.0347 * .5) + 1$.

An example of subsequent year cumulative growth, such as in 2022, is found as: $1.043 = (1 + .0250) * 1.01735$

Table 10

Employment Cost Index (ECI) Forecast
 BPA Fiscal Years 2022-2051

Year	A	B	C
	2022 Calendar Year ECI	2022 Fiscal Year ECI	2022 Fiscal Year Cumulative ECI (Base Year 2021)
2022	5.33%	4.93%	1.025
2023	4.55%	4.74%	1.073
2024	4.04%	4.17%	1.118
2025	3.93%	3.96%	1.162
2026	3.87%	3.88%	1.207
2027	3.84%	3.85%	1.254
2028	3.80%	3.81%	1.301
2029	3.77%	3.78%	1.351
2030	3.75%	3.75%	1.401
2031	3.72%	3.73%	1.454
2032	3.74%	3.74%	1.508
2033	3.67%	3.69%	1.564
2034	3.61%	3.62%	1.620
2035	3.59%	3.60%	1.678
2036	3.54%	3.55%	1.738
2037	3.54%	3.54%	1.800
2038	3.54%	3.54%	1.863
2039	3.54%	3.54%	1.929
2040	3.54%	3.54%	1.997
2041	3.53%	3.53%	2.068
2042	3.53%	3.53%	2.141
2043	3.53%	3.53%	2.217
2044	3.53%	3.53%	2.295
2045	3.54%	3.54%	2.376
2046	3.54%	3.54%	2.460
2047	3.54%	3.54%	2.547
2048	3.54%	3.54%	2.637
2049	3.54%	3.54%	2.731
2050	3.54%	3.54%	2.827
2051	3.54%	3.54%	2.927

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).

Except for Column A which represents a standard Calendar Year.

2/ Fiscal Year Cumulative ECI escalates to midyear dollars.

The first year, 2022, is determined as follows: $1.025 = (.0493 * .5) + 1$.

An example of subsequent year cumulative growth, such as in 2022, is found as:

$$1.073 = (1 + .0474) * 1.0246$$

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7. PROJECTED NEW BONDS ISSUED TO TREASURY

7.1 Purpose

This chapter documents all the bonds that BPA has issued and those it projects it will issue to the U.S. Treasury to finance capital investments.

7.2 Method

New bonds projected to be issued for the cost evaluation period are based on IPR/CIR capital program outlays. Half of the capital program is assumed to be financed with Treasury bonds. The other half is assumed to be financed through the lease purchase program. *See* Ch. 8.

New long-term debt consists of bonds issued by BPA to the U.S. Treasury reflecting projected outlays for BPA transmission, construction, and environmental programs during the cost evaluation period (FY 2023–2025). All bonds projected for issuance are entered into the projected portions of the repayment study.

Projected bonds reflect a borrowing plan that incorporates timing differences between capital spending and the actual borrowing. BPA does not typically issue new bonds every month to finance capital spending. Instead, it uses current reserves and replenishes reserves as needed. The amount yet to be borrowed is classified as “deferred borrowing.” As a result, the amount borrowed in any year can vary significantly from the actual capital spending in that year. For the purposes of the repayment modeling, all deferred borrowing is assumed to be reduced to zero by the end of the rate period.

**TABLE 7-1
PROJECTED FEDERAL BORROWING
(\$000s)**

	A	B	C	D	E
	FISCAL YEAR	DESCRIPTION	INTEREST RATE	TERM	TOTAL BORROWING
1	2023	Construction	2.99%	29	262,000
2		Construction	0.98%	2	73,438
3		Construction	3.02%	30	79,562
4		Construction (AS)	1.71%	5	13,000
5		Environment	2.56%	15	6,000
6		Construction	0.62%	1	97,212
7		Construction	3.02%	27	55,788
8		Total			587,000
9					
10	2024	Construction	3.30%	29	165,667
11		Construction (AS)	2.16%	5	15,000
12		Environment	2.89%	15	6,000
13		Construction	3.33%	30	165,667
14		Construction	3.24%	27	165,667
15		Total			518,001
16					
17	2025	Construction	3.51%	28	80,333
18		Construction	3.51%	28	74,855
19		Construction	3.54%	29	80,333
20		Construction (AS)	2.58%	5	15,000
21		Construction (AS)	2.58%	5	15,896
22		Environment	3.15%	15	6,000
23		Environment	3.15%	15	9,248
24		Construction	3.57%	30	160,667
25		Construction	3.54%	30	160,667
26		Total			603,000

**TABLE 7-2
PROJECTED CAPITAL SPENDING
(\$000s)**

		A	B	C
		2023	2024	2025
1	Construction /1	607,604	552,440	537,133
2	Environment	6,199	6,227	6,252
3	Construction (AS)	<u>13,181</u>	<u>15,056</u>	<u>14,893</u>
4	Total	626,984	573,723	558,279

1/ FY23 Projected capital spend includes \$109m of debt transfer for Grand Coulee assets from Generation

**TABLE 7-3
PROJECTED MASTER LEASE DRAWS
(\$000s)**

	A	B	C	D	E
	FISCAL YEAR	DESCRIPTION	INTEREST RATE	TERM	TOTAL BORROWING
1	2022	Master Lease	3.19%	1	204
2		Master Lease	3.04%	2	210
3		Master Lease	3.04%	3	<u>216</u>
4		Master Lease	3.04%	4	223
5		Master Lease	3.04%	5	230
6		Master Lease	3.04%	6	237
7		Master Lease	3.04%	7	244
8		Master Lease	3.04%	8	251
9		Master Lease	3.04%	9	259

8. NON-FEDERAL PAYMENT OBLIGATIONS

8.1 Introduction

There are two forms of non-Federal payment obligations associated with transmission assets in this rate proposal. One is a lease-purchase arrangement for capitalized asset purchases. The other is the functional reassignment to transmission of debt service payment obligations associated with non-Federal, Energy Northwest (EN) bonds.

8.2 Capital Leases

BPA entered into a lease-purchase agreement with the Northwest Infrastructure Financing Corporation (NIFC) to provide for the construction of the 500-kV Schultz-Wautoma transmission line. Since the completion of that project, BPA has entered into additional lease-purchase agreements with other NIFC entities, the Port of Morrow, and the Idaho Energy Resources Authority for other capital projects. The resulting payment streams are treated as debt service in the repayment study. BPA also has several capital leases such as those for the Teton-Swan Valley and the Goshen-Drummond lines. Table 8-1 displays the consolidated payment stream of actual capital leases.

BPA does not project new capital lease lines of credit in the 2024-2025 rate period although existing lines may be drawn upon. Existing lines of credit ultimately will be converted to long-term bonds.

8.3 Debt Service Reassignment

Debt Service Reassignment (DSR) is an accounting and ratemaking mechanism created to make full use of the Debt Optimization Program (DOP). It allows the use of cash flows generated by DOP actions for advanced amortization payments of transmission debt. In return, DSR ensures that Transmission revenues repay the full cost of the associated EN debt. DOP and DSR ended in FY 2009, but the associated financial obligations exist through FY 2024.

Under DOP, the proceeds from EN refinancing bonds are used to pay principal on the currently maturing EN bonds in a given fiscal year. Since BPA power rates were set to recover the originally expected EN principal payments on the maturing bonds, and the associated debt service requirement was expected to decrease the EN budget (when the principal was paid from the proceeds of the newly issued refinancing bonds), funds in the BPA Fund then became available for other purposes. The amount made available equals the principal of the amortized EN bonds. BPA uses these funds to amortize Federal obligations associated with generation and transmission assets ahead of schedule, thereby replenishing or creating future opportunities to replenish BPA's available U.S. Treasury borrowing authority.

DSR is applicable when BPA uses the funds made available from DOP to early-amortize Federal Transmission obligations. The stream of annual all-in costs from the DSR transaction is assigned to Transmission Services and recovered in transmission rates. The all-in costs include debt service on tax-exempt and taxable bonds and other costs associated with the DSR transaction, which are described later. Conversely, the costs

attached to these EN refinancing bonds are no longer assigned for recovery from Power revenues.

Transmission's total DSR payment obligation and the related relief of Power's payment obligations are shown in Table 8-2. Transmission's total principal obligation can be higher or lower than the total principal relief for Power if premium or discount bonds are issued. The interest associated with outstanding obligations may change over time if DSR bonds are refinanced for interest savings.

TABLE 8-1
LEASE PURCHASE PAYMENT STREAM
(\$000s)

INTEREST		A	B	C	D	E	F	G	H
		<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>
1	Capital Leases	5,877	5,761	5,643	5,521	5,394	5,264	5,134	5,000
2	Lease Purchase Bonds	55,957	54,138	51,657	48,454	45,581	42,627	40,590	40,590
3	Lease Purchase LOC	2,344	2,649	2,649	2,649	2,649	2,649	2,649	2,649
4	Adjustments	<u>(5,478)</u>	<u>(4,322)</u>	<u>(816)</u>	<u>(831)</u>	<u>(830)</u>	<u>(868)</u>	<u>(863)</u>	<u>(858)</u>
5	Total	58,700	58,226	59,133	55,793	52,794	49,672	47,509	47,380
PRINCIPAL		A	B	C	D	E	F	G	H
		<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>
6	Capital Leases	2,944	2,936	2,956	3,059	3,136	3,077	3,094	3,194
7	Lease Purchase Bonds	71,720	89,505	107,770	108,285	85,715	75,000	-	-
8	Lease Purchase LOC	-	-	-	-	-	-	-	-
9	Premiums/Discounts	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
10	Total	74,664	92,441	110,726	111,344	88,851	78,077	3,094	3,194

TABLE 8-2
RELIEF OF GENERATION & TRANSMISSION'S DSR OBLIGATION
(\$000s)

	A	B	C	D	E	F	
	Relief of Generation Obligation			Transmission DSR Payment Obligation			
BPA FY	Principal	Interest	Total	Principal	Interest	Total	
1	2004	-	16,366	16,366	-	15,088	15,088
2	2005	-	27,505	27,505	-	25,240	25,240
3	2006	-	35,780	35,780	-	33,041	33,041
4	2007	674	45,812	46,486	716	42,809	43,524
5	2008	4,271	57,069	61,340	4,518	51,369	55,887
6	2009	9,950	61,506	71,456	10,432	56,154	66,586
7	2010	12	62,109	62,121	12	57,173	57,185
8	2011	147	61,999	62,146	154	57,327	57,480
9	2012	39,287	59,879	99,165	41,165	55,051	96,216
10	2013	157,982	57,078	215,060	165,827	51,887	217,714
11	2014	166,651	48,411	215,062	175,119	44,348	219,466
12	2015	4,959	36,010	40,969	185,160	34,324	219,484
13	2016	5,512	26,317	31,828	185,303	24,128	209,431
14	2017	3,506	18,312	21,818	199,991	14,351	214,341
15	2018	4,499	11,561	16,060	191,504	7,288	198,792
16	2019	210	3,911	4,121	4,838	4,536	9,373
17	2020	1,111	3,337	4,448	19,592	1,463	21,055
18	2021	1,861	1,620	3,481	20,571	(811)	19,760
19	2022	1,681	1,236	2,917	21,596	(1,797)	19,799
20	2023	1,748	815	2,563	22,678	(2,826)	19,853
21	2024	1,350	359	1,709	17,640	(2,721)	14,919
22	Total	405,410	636,993	1,042,403	1,266,815	567,419	1,834,234

9. REPAYMENT PERIOD REPLACEMENTS

9.1 Introduction

Consistent with the requirements of Department of Energy Order RA 6120.2, each repayment study includes funding for replacements to the transmission system during the repayment period. The purpose of these investments is to maintain the existing revenue-generating capability of the system. This schedule of replacements for the study year is assigned the interest rates of the projected long-term borrowing for the study year.

9.2 Transmission Replacements

BPA's Transmission replacements are based on BPA's plant in service forecast for the rate period. This forecast identifies spending on system replacements by year. The forecasts for lines substations, communications, and control equipment are summed by year. The result is considered the replacement investment for the year.

9.3 Replacement Credits

Replacement credits are calculated for two sets of customer-funded plant, the AC Intertie and facilities constructed for the dedicated use of a customer through the Projects Funded in Advance mechanism.

The cost evaluation period data for the AC Intertie is determined by multiplying the total replacements for each year by the average proportion of actual plant that is attributed to the AC Intertie. The result is then multiplied by 22 percent, the AC Intertie capacity owners' share of the Intertie. The results are the future replacements for the total AC.

BPA receives funds from customers for the construction of facilities that are dedicated to the use of those customers, known as Projects Funded in Advance (PFIA). Although the customer-financed facilities are BPA assets, the customer is responsible for the future cost of replacement of these facilities. As with the AC Intertie, BPA calculates the future replacement cost of customer-financed facilities. Because the customer will provide the up-front funding for the replacements, that funding is applied as a credit against future replacement costs in the repayment study. The replacement credit for these facilities is calculated as a percentage of the total replacement cost for each account based on the portion of plant in each account that has been funded through customer advances.

**TABLE 9-1
FUTURE REPLACEMENTS FOR FY 2024
(\$000s)**

		A	B	C
	FY	AMOUNT	RATE	DUE
1	2025	210,960	3.329%	2060
2	2026	210,960	3.329%	2061
3	2027	210,960	3.329%	2062
4	2028	210,960	3.329%	2063
5	2029	210,960	3.329%	2064
6	2030	210,960	3.329%	2065
7	2031	210,960	3.329%	2066
8	2032	210,960	3.329%	2067
9	2033	210,960	3.329%	2068
10	2034	210,960	3.329%	2069
11	2035	210,960	3.329%	2070
12	2036	210,960	3.329%	2071
13	2037	210,960	3.329%	2072
14	2038	210,960	3.329%	2073
15	2039	210,960	3.329%	2074
16	2040	210,960	3.329%	2075
17	2041	210,960	3.329%	2076
18	2042	210,960	3.329%	2077
19	2043	210,960	3.329%	2078
20	2044	210,960	3.329%	2079
21	2045	210,960	3.329%	2080
22	2046	210,960	3.329%	2081
23	2047	210,960	3.329%	2082
24	2048	210,960	3.329%	2083
25	2049	210,960	3.329%	2084
26	2050	210,960	3.329%	2085
27	2051	210,960	3.329%	2086
28	2052	210,960	3.329%	2087
29	2053	210,960	3.329%	2088
30	2054	210,960	3.329%	2089
31	2055	210,960	3.329%	2090
32	2056	210,960	3.329%	2091
33	2057	210,960	3.329%	2092
34	2058	210,960	3.329%	2093
35	2059	210,960	3.329%	2094

**TABLE 9-2
FUTURE REPLACEMENTS FOR FY 2025
(\$000s)**

		A	B	C
	FY	AMOUNT	RATE	DUE
1	2026	222,840	3.568%	2061
2	2027	222,840	3.568%	2062
3	2028	222,840	3.568%	2063
4	2029	222,840	3.568%	2064
5	2030	222,840	3.568%	2065
6	2031	222,840	3.568%	2066
7	2032	222,840	3.568%	2067
8	2033	222,840	3.568%	2068
9	2034	222,840	3.568%	2069
10	2035	222,840	3.568%	2070
11	2036	222,840	3.568%	2071
12	2037	222,840	3.568%	2072
13	2038	222,840	3.568%	2073
14	2039	222,840	3.568%	2074
15	2040	222,840	3.568%	2075
16	2041	222,840	3.568%	2076
17	2042	222,840	3.568%	2077
18	2043	222,840	3.568%	2078
19	2044	222,840	3.568%	2079
20	2045	222,840	3.568%	2080
21	2046	222,840	3.568%	2081
22	2047	222,840	3.568%	2082
23	2048	222,840	3.568%	2083
24	2049	222,840	3.568%	2084
25	2050	222,840	3.568%	2085
26	2051	222,840	3.568%	2086
27	2052	222,840	3.568%	2087
28	2053	222,840	3.568%	2088
29	2054	222,840	3.568%	2089
30	2055	222,840	3.568%	2090
31	2056	222,840	3.568%	2091
32	2057	222,840	3.568%	2092
33	2058	222,840	3.568%	2093
34	2059	222,840	3.568%	2094
35	2060	222,840	3.568%	2095

**TABLE 9-3
REPLACEMENT CREDITS
(\$000s)**

		A	B	C	D	E	F
		AC INTERTIE		PFIA		TOTAL	
		2024 STUDY	2025 STUDY	2024 STUDY	2025 STUDY	2024 STUDY	2025 STUDY
1	2025	(3,295)	-	(5,485)	-	(8,780)	-
2	2026	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
3	2027	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
4	2028	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
5	2029	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
6	2030	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
7	2031	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
8	2032	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
9	2033	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
10	2034	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
11	2035	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
12	2036	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
13	2037	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
14	2038	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
15	2039	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
16	2040	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
17	2041	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
18	2042	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
19	2043	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
20	2044	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
21	2045	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
22	2046	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
23	2047	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
24	2048	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
25	2049	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
26	2050	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
27	2051	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
28	2052	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
29	2053	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
30	2054	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
31	2055	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
32	2056	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
33	2057	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
34	2058	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
35	2059	(3,295)	(3,481)	(5,485)	(5,794)	(8,780)	(9,275)
36	2060	-	(3,481)	-	(5,794)	-	(9,275)

10. REPAYMENT STUDY INPUT DATA

**TABLE 10-1
HISTORICAL INVESTMENTS
(\$000s)**

	A	B	C	D	E	F	G	H
	PROJECT	IN SERVICE DATE	DUE DATE	INTEREST RATE	ORIGINAL PRINCIPAL	CURRENT PRINCIPAL	Roll Maturity Date	Rollover Rate
1	Bonneville Power	09/1940	09/1985	2.500%	6,812	0		
2	Bonneville Power	09/1941	09/1986	2.500%	18,906	0		
3	Bonneville Power	09/1941	09/1986	2.500%	461	0		
4	Bonneville Power	09/1942	09/1987	2.500%	8,446	0		
5	Bonneville Power	09/1942	09/1987	2.500%	1,052	0		
6	Bonneville Power	09/1943	09/1988	2.500%	16,083	0		
7	Bonneville Power	09/1943	09/1988	2.500%	4,538	0		
8	Bonneville Power	09/1944	09/1989	2.500%	583	0		
9	Bonneville Power	09/1944	09/1989	2.500%	249	0		
10	Bonneville Power	09/1945	09/1990	2.500%	1,306	0		
11	Bonneville Power	09/1945	09/1990	2.500%	3,366	0		
12	Bonneville Power	09/1946	09/1991	2.500%	2,488	0		
13	Bonneville Power	09/1946	09/1991	2.500%	732	0		
14	Bonneville Power	09/1947	09/1992	2.500%	1,330	0		
15	Bonneville Power	09/1947	09/1992	2.500%	1,773	0		
16	Bonneville Power	09/1948	09/1993	2.500%	7,468	0		
17	Bonneville Power	09/1948	09/1993	2.500%	2,290	0		
18	Bonneville Power	09/1949	09/1994	2.500%	6,809	0		
19	Bonneville Power	09/1949	09/1994	2.500%	2,719	0		
20	Bonneville Power	09/1950	09/1995	2.500%	24,111	0		
21	Bonneville Power	09/1950	09/1995	2.500%	6,124	0		
22	Bonneville Power	09/1951	09/1996	2.500%	7,040	0		
23	Bonneville Power	09/1951	09/1996	2.500%	13,266	0		
24	Bonneville Power	09/1952	09/1997	2.500%	18,610	0		
25	Bonneville Power	09/1952	09/1997	2.500%	8,979	0		
26	Bonneville Power	09/1953	09/1998	6.330%	11,605	0		
27	Bonneville Power	09/1953	09/1998	6.330%	23,550	0		
28	Bonneville Power	09/1954	09/1999	6.510%	23,614	0		
29	Bonneville Power	09/1954	09/1999	6.510%	17,370	0		
30	Bonneville Power	09/1955	09/2000	6.620%	11,827	0		
31	Bonneville Power	09/1955	09/2000	6.620%	10,283	0		
32	Bonneville Power	09/1956	09/2001	6.710%	14,573	0		
33	Bonneville Power	09/1956	09/2001	6.710%	32,221	0		
34	Bonneville Power	09/1957	09/2002	6.790%	7,933	0		
35	Bonneville Power	09/1957	09/2002	6.790%	15,980	0		
36	Bonneville Power	09/1958	09/2003	6.840%	15,593	0		
37	Bonneville Power	09/1958	09/2003	6.840%	10,654	0		
38	Bonneville Power	09/1959	09/2004	6.880%	8,157	0		
39	Bonneville Power	09/1959	09/2004	6.880%	8,863	0		
40	Bonneville Power	09/1960	09/2005	6.910%	3,598	0		
41	Bonneville Power	09/1960	09/2005	6.910%	4,218	0		
42	Bonneville Power	09/1961	09/2006	6.950%	4,468	0		
43	Bonneville Power	09/1961	09/2006	6.950%	11,271	0		
44	Bonneville Power	09/1962	09/2007	6.980%	19,597	0		
45	Bonneville Power	09/1962	09/2007	6.980%	4,877	0		
46	Bonneville Power	09/1963	09/2008	7.020%	4,876	0		
47	Bonneville Power	09/1963	09/2008	7.020%	4,330	0		
48	Bonneville Power	09/1963	09/2008	7.020%	904	0		
49	Bonneville Power	09/1963	09/2008	7.020%	803	0		
50	Bonneville Power	09/1964	09/2009	7.060%	4,151	0		
51	Bonneville Power	09/1964	09/2009	7.060%	5,738	0		
52	Bonneville Power	09/1965	09/2010	7.090%	3,706	0		
53	Bonneville Power	09/1965	09/2010	7.090%	7,248	0		
54	Bonneville Power	09/1965	09/2010	7.090%	5,202	0		
55	Bonneville Power	09/1965	09/2010	7.090%	10,171	0		
56	Bonneville Power	09/1966	09/2011	7.130%	11,830	0		
57	Bonneville Power	09/1966	09/2011	7.130%	3,049	0		
58	Bonneville Power	09/1966	09/2011	7.130%	6,647	0		
59	Bonneville Power	09/1966	09/2011	7.130%	1,714	0		
60	Bonneville Power	09/1967	09/2012	7.160%	19,003	0		
61	Bonneville Power	09/1967	09/2012	7.160%	4,566	0		
62	Bonneville Power	09/1967	09/2012	7.160%	14,300	0		
63	Bonneville Power	09/1967	09/2012	7.160%	3,436	0		

**TABLE 10-1
HISTORICAL INVESTMENTS
(\$000s)**

	A	B	C	D	E	F	G	H
	PROJECT	IN SERVICE DATE	DUE DATE	INTEREST RATE	ORIGINAL PRINCIPAL	CURRENT PRINCIPAL	Roll Maturity Date	Rollover Rate
64	Bonneville Power	09/1968	09/2013	7.200%	41,070	0		
65	Bonneville Power	09/1968	09/2013	7.200%	8,076	0		
66	Bonneville Power	09/1968	09/2013	7.200%	23,202	0		
67	Bonneville Power	09/1968	09/2013	7.200%	4,562	0		
68	Bonneville Power	09/1969	09/2014	7.230%	42,237	0		
69	Bonneville Power	09/1969	09/2014	7.230%	22,537	0		
70	Bonneville Power	09/1969	09/2014	7.230%	384	0		
71	Bonneville Power	09/1969	09/2014	7.230%	205	0		
72	Bonneville Power	09/1970	09/2015	7.270%	64,977	0		
73	Bonneville Power	09/1970	09/2015	7.270%	7,995	0		
74	Bonneville Power	09/1970	09/2015	7.270%	24,412	0		
75	Bonneville Power	09/1970	09/2015	7.270%	3,003	0		
76	Bonneville Power	09/1971	09/2016	7.290%	12,025	0		
77	Bonneville Power	09/1971	09/2016	7.290%	17,766	0		
78	Bonneville Power	09/1971	09/2016	7.290%	12,051	0		
79	Bonneville Power	09/1971	09/2016	7.290%	17,805	0		
80	Bonneville Power	09/1972	09/2017	7.290%	29,326	0		
81	Bonneville Power	09/1972	09/2017	7.290%	21,170	0		
82	Bonneville Power	09/1972	09/2017	7.290%	3,980	0		
83	Bonneville Power	09/1972	09/2017	7.290%	2,873	0		
84	Bonneville Power	09/1973	09/2018	7.280%	33,788	0		
85	Bonneville Power	09/1973	09/2018	7.280%	21,656	0		
86	Bonneville Power	09/1973	09/2018	7.280%	16,368	0		
87	Bonneville Power	09/1973	09/2018	7.280%	10,491	0		
88	Bonneville Power	09/1974	09/2019	7.270%	12,079	0		
89	Bonneville Power	09/1974	09/2019	7.270%	20,984	0		
90	Bonneville Power	09/1974	09/2019	7.270%	12,563	0		
91	Bonneville Power	09/1974	09/2019	7.270%	21,826	0		
92	Bonneville Power	09/1975	09/2020	7.250%	32,026	0		
93	Bonneville Power	09/1975	09/2020	7.250%	21,916	0		
94	Bonneville Power	09/1975	09/2020	7.250%	17,158	0		
95	Bonneville Power	09/1975	09/2020	7.250%	11,742	0		
96	Bonneville Power	09/1976	09/2021	7.230%	61,025	0		
97	Bonneville Power	09/1976	09/2021	7.230%	2,212	0		
98	Bonneville Power	09/1977	09/2022	7.210%	3,948	0		
99	Bonneville Power	09/1977	09/2022	7.210%	5,380	0		
100	Bonneville Power	09/1977	09/2022	7.210%	33,702	0		
101	Bonneville Power	09/1977	09/2022	7.210%	4,981	0		
102	Construction	09/1978	09/2013	8.950%	17,770	0		
103	Construction	09/1978	09/2013	8.950%	24,222	0		
104	Construction	09/1978	09/2013	8.950%	3,389	0		
105	Construction	09/1978	09/2013	8.950%	4,619	0		
106	Construction	06/1979	06/2014	9.450%	7,010	0		
107	Construction	06/1979	06/2014	9.450%	9,804	0		
108	Construction	06/1979	06/2014	9.450%	26,690	0		
109	Construction	06/1979	06/2014	9.450%	21,977	0		
110	Construction	06/1979	06/2014	9.450%	6,026	0		
111	Construction	06/1979	06/2014	9.450%	1,371	0		
112	Construction	06/1979	06/2014	9.450%	1,870	0		
113	Construction	06/1979	06/2014	9.450%	150	0		
114	Construction	06/1979	06/2014	9.450%	102	0		
115	Construction	09/1979	09/2014	9.900%	21,228	0		
116	Construction	09/1979	09/2014	9.900%	14,340	0		
117	Construction	09/1979	09/2014	9.900%	10,610	0		
118	Construction	09/1979	09/2014	9.900%	2,888	0		
119	Construction	09/1979	09/2014	9.900%	98	0		
120	Construction	09/1979	09/2014	9.900%	66	0		
121	Construction	09/1979	09/2014	9.900%	605	0		
122	Construction	09/1979	09/2014	9.900%	165	0		
123	Construction	09/1980	09/2015	13.000%	39,696	0		
124	Construction	09/1980	09/2015	13.000%	10,806	0		
125	Construction	09/1980	09/2015	13.000%	44,811	0		
126	Construction	09/1980	09/2015	13.000%	1,469	0		

**TABLE 10-1
HISTORICAL INVESTMENTS
(\$000s)**

	A	B	C	D	E	F	G	H
	PROJECT	IN SERVICE DATE	DUE DATE	INTEREST RATE	ORIGINAL PRINCIPAL	CURRENT PRINCIPAL	Roll Maturity Date	Rollover Rate
127	Construction	09/1980	09/2015	13.000%	9,292	0		
128	Construction	09/1980	09/2015	13.000%	4,253	0		
129	Construction	09/1980	09/2015	13.000%	2,263	0		
130	Construction	09/1980	09/2015	13.000%	616	0		
131	Construction	09/1980	09/2015	13.000%	1,707	0		
132	Construction	09/1980	09/2015	13.000%	56	0		
133	Construction	09/1980	09/2015	13.000%	21	0		
134	Construction	09/1980	09/2015	13.000%	10	0		
135	Construction	09/1981	09/2016	16.600%	119,775	0		
136	Construction	09/1981	09/2016	16.600%	54,821	0		
137	Construction	09/1981	09/2016	16.600%	277	0		
138	Construction	09/1981	09/2016	16.600%	127	0		
139	Construction	12/1981	12/2016	14.400%	34,221	0		
140	Construction	12/1981	12/2016	14.400%	15,663	0		
141	Construction	12/1981	12/2016	14.400%	80	0		
142	Construction	12/1981	12/2016	14.400%	36	0		
143	Construction	04/1982	04/2017	14.400%	9,975	0		
144	Construction	04/1982	04/2017	14.400%	4,566	0		
145	Construction	04/1982	04/2017	14.400%	46,980	0		
146	Construction	04/1982	04/2017	14.400%	37,455	0		
147	Construction	04/1982	04/2017	14.400%	23	0		
148	Construction	04/1982	04/2017	14.400%	11	0		
149	Construction	04/1982	04/2017	14.400%	551	0		
150	Construction	04/1982	04/2017	14.400%	439	0		
151	Construction	07/1982	07/2017	14.150%	3,677	0		
152	Construction	07/1982	07/2017	14.150%	2,932	0		
153	Construction	07/1982	07/2017	14.150%	77,807	0		
154	Construction	07/1982	07/2017	14.150%	43	0		
155	Construction	07/1982	07/2017	14.150%	34	0		
156	Construction	07/1982	07/2017	14.150%	402	0		
157	Construction	07/1982	07/2017	14.150%	105	0		
158	Construction	11/1982	11/2017	10.850%	205	0		
159	Construction	11/1982	11/2017	10.850%	54	0		
160	Construction	11/1982	11/2017	10.850%	39,741	0		
161	Construction	06/1983	06/2018	11.700%	154	0		
162	Construction	06/1983	06/2018	11.700%	29,806	0		
163	Construction	06/1983	06/2018	11.700%	40	0		
164	Construction	09/1983	09/2018	12.250%	814	0		
165	Construction	09/1983	09/2018	12.250%	37,235	0		
166	Construction	09/1983	09/2018	12.250%	6,708	0		
167	Construction	09/1983	09/2018	12.250%	4	0		
168	Construction	09/1983	09/2018	12.250%	1	0		
169	Construction	09/1983	09/2018	12.250%	203	0		
170	Construction	09/1983	09/2018	12.250%	35	0		
171	Construction	11/1983	11/2018	12.300%	25,283	0		
172	Construction	11/1983	11/2018	12.300%	4,555	0		
173	Construction	11/1983	11/2018	12.300%	138	0		
174	Construction	11/1983	11/2018	12.300%	24	0		
175	Construction	09/1984	09/2019	13.050%	50,567	0		
176	Construction	09/1984	09/2019	13.050%	9,109	0		
177	Construction	09/1984	09/2019	13.050%	276	0		
178	Construction	09/1984	09/2019	13.050%	48	0		
179	Construction	06/1985	06/2029	11.250%	15,182	0		
180	Construction	06/1985	06/2029	11.250%	460	0		
181	Construction	06/1985	06/2029	11.250%	80	0		
182	Construction	06/1985	06/2030	11.250%	84,278	0		
183	Construction	03/1986	03/1996	8.150%	870	0		
184	Construction	03/1986	03/1996	8.150%	157	0		
185	Construction	03/1986	03/1996	8.150%	30,161	0		
186	Construction	03/1986	03/1996	8.150%	68,194	0		
187	Construction	03/1986	03/1996	8.150%	5	0		
188	Construction	03/1986	03/1996	8.150%	1	0		
189	Construction	03/1986	03/1996	8.150%	443	0		

**TABLE 10-1
HISTORICAL INVESTMENTS
(\$000s)**

	A	B	C	D	E	F	G	H
	PROJECT	IN SERVICE DATE	DUE DATE	INTEREST RATE	ORIGINAL PRINCIPAL	CURRENT PRINCIPAL	Roll Maturity Date	Rollover Rate
190	Construction	03/1986	03/1996	8.150%	169	0		
191	Construction	06/1986	06/2031	8.950%	5,161	0		
192	Construction	06/1986	06/2031	8.950%	11,668	0		
193	Construction	06/1986	06/2031	8.950%	180,054	0		
194	Construction	06/1986	06/2031	8.950%	3,117	0		
195	Construction	06/1986	06/2031	8.950%	40,000	0		
196	Construction	06/1986	06/2031	8.950%	57,354	0		
197	Construction	06/1986	06/2031	8.950%	76	0		
198	Construction	06/1986	06/2031	8.950%	29	0		
199	Construction	06/1986	06/2031	8.950%	1,819	0		
200	Construction	06/1986	06/2031	8.950%	722	0		
201	Construction	04/1987	04/2032	9.300%	43,236	0		
202	Construction	04/1987	04/2032	9.300%	54,409	0		
203	Construction	04/1987	04/2032	9.300%	111	0		
204	Construction	04/1987	04/2032	9.300%	281	0		
205	Construction	04/1987	04/2032	9.300%	554	0		
206	Construction	04/1987	04/2032	9.300%	1,409	0		
207	Construction	06/1987	06/1992	8.350%	96,519	0		
208	Construction	06/1987	06/1992	8.350%	2,498	0		
209	Construction	06/1987	06/1992	8.350%	983	0		
210	Construction	07/1987	07/2017	9.550%	4,113	0		
211	Construction	07/1987	07/2017	9.550%	86,958	0		
212	Construction	07/1987	07/2017	9.550%	569	0		
213	Construction	07/1987	07/2017	9.550%	38	0		
214	Construction	07/1987	07/2017	9.550%	3,274	0		
215	Construction	07/1987	07/2017	9.550%	48	0		
216	Construction	07/1987	07/2032	9.550%	618	0		
217	Construction	07/1987	07/2032	9.550%	112	0		
218	Construction	07/1987	07/2032	9.550%	7,903	0		
219	Construction	07/1987	07/2032	9.550%	3,109	0		
220	Construction	07/1987	07/2032	9.550%	37,342	0		
221	Construction	07/1987	07/2032	9.550%	285	0		
222	Construction	07/1987	07/2032	9.550%	631	0		
223	Construction	02/1988	02/2018	9.500%	283	0		
224	Construction	02/1988	02/2018	9.500%	43,417	0		
225	Construction	02/1988	02/2033	9.500%	28,513	0		
226	Construction	02/1988	02/2033	9.500%	27,887	0		
227	Construction	02/1988	02/2033	9.500%	20,677	0		
228	Construction	02/1988	02/2033	9.500%	22,923	0		
229	Construction	02/1988	02/2033	9.500%	45,870	0		
230	Construction	02/1988	02/2033	9.500%	954	0		
231	Construction	02/1988	02/2033	9.500%	933	0		
232	Construction	02/1988	02/2033	9.500%	518	0		
233	Construction	02/1988	02/2033	9.500%	1,725	0		
234	Construction	06/1988	06/2033	9.900%	9,018	0		
235	Construction	06/1988	06/2033	9.900%	30,004	0		
236	Construction	06/1988	06/2033	9.900%	226	0		
237	Construction	06/1988	06/2033	9.900%	752	0		
238	Construction	05/1989	05/1999	8.950%	16,909	0		
239	Construction	05/1989	05/1999	8.950%	56,257	0		
240	Construction	05/1989	05/1999	8.950%	424	0		
241	Construction	05/1989	05/1999	8.950%	1,410	0		
242	Construction	01/1990	01/2030	9.250%	41,894	0		
243	Construction	01/1990	01/2030	9.250%	1,149	0		
244	Construction	01/1990	01/2030	9.250%	3,824	0		
245	Construction	01/1990	01/2030	9.250%	29	0		
246	Construction	01/1990	01/2030	9.250%	96	0		
247	Construction	01/1990	01/2030	9.250%	3,008	0		
248	Construction	02/1991	02/1995	7.550%	54,145	0		
249	Construction	02/1991	02/1995	7.550%	5,855	0		
250	Construction	04/1992	04/1995	6.200%	80,000	0		
251	Construction	04/1992	04/1997	7.000%	50,000	0		
252	Construction	04/1992	04/1997	7.000%	28,300	0		

**TABLE 10-1
HISTORICAL INVESTMENTS
(\$000s)**

	A	B	C	D	E	F	G	H
	PROJECT	IN SERVICE DATE	DUE DATE	INTEREST RATE	ORIGINAL PRINCIPAL	CURRENT PRINCIPAL	Roll Maturity Date	Rollover Rate
253	Construction	04/1992	04/2032	8.800%	147,521	0		
254	Construction	04/1992	04/2032	8.800%	2,479	0		
255	Construction	07/1992	07/2032	8.130%	150,000	0		
256	Construction	08/1992	08/2000	6.600%	107,800	0		
257	Construction	08/1992	08/2007	7.250%	107,700	0		
258	Construction	10/1992	10/1997	6.050%	50,000	0		
259	Construction	02/1993	02/2033	7.800%	130,000	0		
260	Construction	04/1993	04/2033	7.500%	100,000	0		
261	Construction	08/1993	08/2033	6.950%	110,000	0		
262	Construction	10/1993	10/2033	6.850%	50,000	0		
263	Construction	10/1993	10/2033	6.850%	108,400	0		
264	Construction	01/1994	01/2034	7.050%	50,000	0		
265	Construction	05/1994	05/1998	7.100%	43,155	0		
266	Construction	05/1994	05/1998	7.100%	49,489	0		
267	Construction	05/1994	05/1998	7.100%	4,456	0		
268	Construction	05/1994	05/2034	8.200%	50,000	0		
269	Construction	09/1994	09/1999	7.650%	55,000	0		
270	Construction	01/1995	01/2001	8.350%	55,000	0		
271	Construction	08/1995	08/2025	7.700%	65,000	0		
272	Construction	08/1996	08/2006	7.050%	70,000	0		
273	Construction	05/1997	05/2005	6.900%	80,000	0		
274	Construction	08/1997	08/2007	6.650%	111,254	0		
275	Construction	04/1998	04/2008	6.000%	75,300	0		
276	Construction	04/1998	04/2028	6.650%	50,000	0		
277	Construction	05/1998	05/2009	6.000%	72,700	0		
278	Construction	05/1998	05/2011	6.200%	40,000	0		
279	Construction	05/1998	05/2032	6.700%	98,900	0		
280	Construction	08/1998	08/2028	5.850%	106,500	106,500		
281	Construction	08/1998	08/2028	5.850%	112,300	112,300		
282	Construction	05/1999	05/2004	5.950%	26,200	0		
283	Construction	09/1999	09/2002	6.200%	40,000	0		
284	Construction	11/1999	11/2002	6.400%	40,000	0		
285	Construction	01/2000	01/2005	7.150%	53,500	0		
286	Construction	08/2000	08/2003	6.850%	15,300	0		
287	Construction	09/2000	09/2006	6.750%	40,000	0		
288	Construction	01/2001	01/2005	5.650%	20,000	0		
289	Construction	06/2001	06/2011	5.950%	25,000	0		
290	Construction	08/2001	08/2011	5.750%	50,000	0		
291	Construction	06/2002	06/2005	3.750%	60,000	0		
292	Construction	09/2002	09/2006	3.050%	100,000	0		
293	Construction	11/2002	11/2005	2.800%	40,000	0		
294	Construction	04/2003	04/2007	2.900%	40,000	0		
295	Construction	04/2003	04/2033	5.550%	40,000	0		
296	Construction	07/2003	07/2006	2.300%	75,000	0		
297	Construction	07/2003	07/2007	2.950%	25,000	0		
298	Construction	09/2003	09/2006	2.500%	20,000	0		
299	Construction	01/2004	01/2008	2.950%	65,000	0		
300	Construction	04/2004	04/2007	2.950%	65,000	0		
301	Construction	07/2004	07/2007	3.450%	50,000	0		
302	Construction	07/2004	07/2008	3.800%	25,000	0		
303	Construction	09/2004	09/2007	3.100%	30,000	0		
304	Construction	09/2004	09/2034	5.600%	40,000	0		
305	Construction	01/2005	01/2035	5.400%	40,000	0		
306	Construction	04/2005	04/2035	5.500%	40,000	0		
307	Construction	06/2005	06/2009	4.000%	40,000	0		
308	Construction	09/2005	09/2035	5.250%	45,000	0		
309	Construction	03/2006	03/2009	5.050%	20,000	0		
310	Construction	07/2006	07/2009	5.350%	70,000	0		
311	Construction	09/2006	09/2010	4.950%	20,000	0		
312	Construction	01/2007	01/2010	5.100%	25,000	0		
313	Construction	03/2007	03/2012	4.850%	40,000	0		
314	Construction	06/2007	06/2037	6.400%	35,000	0		
315	Construction	07/2007	07/2010	5.200%	50,000	0		

**TABLE 10-1
HISTORICAL INVESTMENTS
(\$000s)**

	A	B	C	D	E	F	G	H
	PROJECT	IN SERVICE DATE	DUE DATE	INTEREST RATE	ORIGINAL PRINCIPAL	CURRENT PRINCIPAL	Roll Maturity Date	Rollover Rate
316	Construction	05/2008	05/2011	3.358%	40,000	0		
317	Construction	07/2008	07/2012	3.913%	30,000	0		
318	Construction	09/2008	09/2011	3.151%	25,000	0		
319	Construction	01/2009	01/2020	3.830%	50,000	0		
320	Construction	01/2009	01/2022	4.200%	20,000	0		
321	Construction	04/2009	04/2022	4.253%	35,000	0		
322	Construction	06/2009	06/2039	5.192%	35,000	35,000		
323	Construction	07/2009	07/2019	4.026%	46,940	0		
324	Construction	09/2009	09/2019	3.699%	35,000	0		
325	Construction	10/2009	10/2018	3.719%	23,000	0		
326	Construction	10/2009	10/2019	3.842%	43,000	0		
327	Construction	11/2009	11/2018	3.533%	15,000	0		
328	Construction	12/2009	12/2018	4.069%	13,000	0		
329	Construction	01/2010	01/2019	3.714%	30,000	0		
330	Construction	02/2010	02/2019	0.165%	10,000	0		
331	Construction	03/2010	03/2021	4.188%	15,000	0		
332	Construction	04/2010	04/2021	4.094%	22,000	0		
333	Construction	05/2010	05/2021	3.694%	22,000	0		
334	Construction	06/2010	06/2021	3.374%	22,000	0		
335	Construction	07/2010	07/2020	3.118%	50,000	0		
336	Construction	07/2010	07/2022	3.372%	30,000	0		
337	Construction	08/2010	08/2022	0.165%	5,000	0		
338	Construction	08/2010	08/2022	3.029%	20,000	0		
339	Construction	09/2010	09/2023	3.161%	46,000	46,000		
340	Construction	10/2010	10/2025	3.494%	45,000	45,000		
341	Construction	01/2011	01/2036	4.952%	50,000	50,000		
342	Construction	02/2011	02/2038	4.935%	55,000	55,000		
343	Construction	04/2011	04/2039	4.794%	40,000	40,000		
344	Construction	05/2011	09/2011	0.076%	40,000	0		
345	Construction	05/2011	09/2011	0.076%	40,000	0		
346	Construction	06/2011	06/2036	4.629%	50,000	50,000		
347	Construction	06/2011	06/2040	4.775%	25,000	25,000		
348	Construction	06/2011	09/2011	0.072%	25,000	0		
349	Construction	08/2011	08/2029	4.238%	50,000	50,000		
350	Construction	08/2011	08/2032	4.355%	98,900	98,900		
351	Construction	08/2011	08/2033	4.386%	40,000	40,000		
352	Construction	08/2011	08/2034	4.416%	40,000	40,000		
353	Construction	08/2011	08/2035	4.446%	40,000	40,000		
354	Construction	08/2011	08/2035	4.446%	40,000	40,000		
355	Construction	08/2011	08/2035	4.446%	45,000	45,000		
356	Construction	08/2011	08/2039	4.295%	50,000	0		
357	Construction	09/2011	09/2040	3.796%	35,000	0		
358	Construction	10/2011	10/2039	0.069%	45,000	0		
359	Construction	01/2012	01/2040	1.580%	30,000	0		
360	Construction	03/2012	09/2012	0.210%	40,000	0		
361	Construction	03/2012	03/2024	0.128%	45,000	0		
362	Construction	05/2012	05/2027	1.598%	17,000	17,000		
363	Construction	06/2012	09/2015	0.671%	26,000	0		
364	Construction	06/2012	06/2037	3.503%	35,000	0		
365	Construction	08/2012	08/2015	0.589%	37,000	0		
366	Construction	09/2012	09/2017	0.891%	36,400	0		
367	Construction	09/2012	09/2039	3.627%	39,000	0		
368	Construction	11/2012	10/2042	5.687%	55,000	0		
369	Construction	01/2013	01/2043	6.194%	30,000	0		
370	Construction	02/2013	02/2043	5.993%	15,000	0		
371	Construction	03/2013	03/2043	5.958%	18,000	0		
372	Construction	04/2013	04/2043	5.633%	28,000	0		
373	Construction	05/2013	05/2043	6.192%	20,000	0		
374	Construction	06/2013	06/2043	6.938%	36,000	0		
375	Construction	08/2013	02/2014	0.090%	39,000	0		
376	Construction	08/2013	08/2034	7.413%	20,000	0		
377	Construction	09/2013	02/2014	0.021%	5,000	0		
378	Construction	09/2013	09/2034	4.214%	9,000	9,000		

**TABLE 10-1
HISTORICAL INVESTMENTS
(\$000s)**

	A	B	C	D	E	F	G	H
	PROJECT	IN SERVICE DATE	DUE DATE	INTEREST RATE	ORIGINAL PRINCIPAL	CURRENT PRINCIPAL	Roll Maturity Date	Rollover Rate
379	Construction	10/2013	10/2035	4.222%	64,000	64,000		
380	Construction	11/2013	09/2014	0.140%	14,000	0		
381	Construction	11/2013	10/2029	4.093%	55,000	55,000		
382	Construction	11/2013	01/2031	4.162%	30,000	30,000		
383	Construction	11/2013	02/2031	4.166%	15,000	15,000		
384	Construction	11/2013	03/2031	4.171%	18,000	18,000		
385	Construction	11/2013	04/2034	4.311%	28,000	28,000		
386	Construction	11/2013	08/2034	4.324%	6,000	6,000		
387	Construction	11/2013	05/2035	4.354%	20,000	20,000		
388	Construction	11/2013	06/2036	4.397%	36,000	36,000		
389	Construction	11/2013	11/2035	4.365%	15,000	15,000		
390	Construction	12/2013	02/2014	0.052%	9,000	0		
391	Construction	12/2013	12/2035	4.472%	10,000	10,000		
392	Construction	01/2014	12/2018	1.943%	33,000	0		
393	Construction	01/2014	12/2018	1.943%	30,000	0		
394	Construction	01/2014	12/2018	1.943%	31,000	0		
395	Construction	01/2014	12/2018	1.943%	48,000	0		
396	Construction	01/2014	06/2014	0.083%	10,000	0		
397	Construction	01/2014	01/2043	4.380%	15,000	15,000		
398	Construction	02/2014	09/2014	0.077%	53,000	0		
399	Construction	04/2014	02/2034	0.668%	45,000	45,000		
400	Construction	04/2014	03/2034	1.133%	45,000	18,300		
401	Construction	04/2014	10/2039	1.681%	45,000	0		
402	Construction	05/2014	05/2036	1.669%	29,000	0		
403	Construction	06/2014	06/2015	0.303%	11,000	0		
404	Construction	06/2014	06/2015	0.303%	63,000	0		
405	Construction	06/2014	11/2032	1.669%	21,000	0		
406	Construction	07/2014	04/2032	1.681%	9,000	0		
407	Construction	08/2014	06/2015	0.262%	14,000	0		
408	Construction	08/2014	07/2035	1.580%	10,000	0		
409	Construction	08/2014	08/2035	0.668%	15,000	15,000		
410	Construction	09/2014	04/2028	1.491%	17,000	17,000		
411	Construction	09/2014	09/2028	3.094%	3,000	3,000		
412	Construction	10/2014	06/2015	0.180%	23,000	0		
413	Construction	10/2014	10/2023	2.521%	20,000	20,000		
414	Construction	11/2014	06/2015	0.168%	18,000	0		
415	Construction	11/2014	11/2023	2.361%	20,000	20,000		
416	Construction	12/2014	12/2022	2.274%	16,000	16,000		
417	Construction	12/2014	12/2022	2.274%	4,000	4,000		
418	Construction	01/2015	06/2015	0.151%	35,000	0		
419	Construction	02/2015	06/2015	0.149%	30,000	0		
420	Construction	02/2015	02/2026	2.416%	19,000	19,000		
421	Construction	03/2015	03/2024	2.200%	17,000	17,000		
422	Construction	03/2015	03/2026	2.370%	15,000	15,000		
423	Construction	03/2015	03/2030	2.626%	3,000	3,000		
424	Construction	04/2015	06/2015	0.118%	20,000	0		
425	Construction	04/2015	04/2023	2.163%	3,000	3,000		
426	Construction	04/2015	04/2023	2.163%	12,000	12,000		
427	Construction	05/2015	05/2022	2.103%	11,000	0		
428	Construction	05/2015	05/2022	2.103%	14,000	0		
429	Construction	06/2015	02/2016	0.261%	11,000	0		
430	Construction	06/2015	02/2016	0.261%	63,000	0		
431	Construction	06/2015	02/2016	0.261%	14,000	0		
432	Construction	06/2015	02/2016	0.261%	23,000	0		
433	Construction	06/2015	02/2016	0.261%	18,000	0		
434	Construction	06/2015	02/2016	0.261%	35,000	0		
435	Construction	06/2015	02/2016	0.261%	30,000	0		
436	Construction	06/2015	02/2016	0.261%	20,000	0		
437	Construction	06/2015	06/2023	2.443%	11,000	11,000		
438	Construction	06/2015	06/2023	2.443%	8,000	8,000		
439	Construction	07/2015	02/2016	0.272%	25,000	0		
440	Construction	07/2015	07/2026	2.707%	18,000	18,000		
441	Construction	07/2015	07/2026	2.707%	10,000	10,000		

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HISTORICAL INVESTMENTS
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	A	B	C	D	E	F	G	H
	PROJECT	IN SERVICE DATE	DUE DATE	INTEREST RATE	ORIGINAL PRINCIPAL	CURRENT PRINCIPAL	Roll Maturity Date	Rollover Rate
442	Construction	08/2015	02/2016	0.286%	13,000	0		
443	Construction	08/2015	08/2025	2.598%	11,000	11,000		
444	Construction	08/2015	08/2025	2.598%	14,000	14,000		
445	Construction	09/2015	09/2030	2.905%	15,000	15,000		
446	Construction	10/2015	02/2016	0.216%	12,000	0		
447	Construction	10/2015	06/2034	1.630%	21,000	0		
448	Construction	10/2015	08/2034	0.668%	19,000	19,000		
449	Construction	10/2015	10/2034	3.198%	2,000	2,000		
450	Construction	12/2015	12/2026	2.762%	9,000	9,000		
451	Construction	12/2015	12/2026	2.762%	29,000	29,000		
452	Construction	01/2016	01/2027	2.352%	13,000	13,000		
453	Construction	02/2016	04/2016	0.436%	25,000	0		
454	Construction	02/2016	04/2016	0.436%	14,000	0		
455	Construction	02/2016	04/2016	0.436%	250,000	0		
456	Construction	02/2016	02/2027	2.236%	13,000	13,000		
457	Construction	03/2016	03/2026	2.177%	6,000	6,000		
458	Construction	03/2016	03/2026	2.177%	12,000	12,000		
459	Construction	05/2016	05/2025	2.101%	20,000	20,000		
460	Construction	07/2016	07/2025	1.713%	48,000	48,000		
461	Construction	07/2017	07/2041	3.164%	19,000	19,000		
462	Construction	07/2017	07/2042	3.181%	14,000	14,000		
463	Construction	07/2017	07/2043	3.198%	23,000	23,000		
464	Construction	07/2017	07/2044	3.215%	17,000	17,000		
465	Construction	07/2017	07/2045	3.230%	27,000	27,000		
466	Construction	08/2017	08/2037	2.902%	30,000	30,000		
467	Construction	08/2017	08/2038	2.929%	7,000	7,000		
468	Construction	08/2017	08/2041	2.991%	13,000	13,000		
469	Construction	08/2017	08/2043	3.024%	10,000	10,000		
470	Construction	08/2017	08/2046	3.066%	22,000	22,000		
471	Construction	08/2017	08/2047	3.076%	18,000	18,000		
472	Construction	09/2017	01/2018	1.181%	36,400	0		
473	Construction	09/2017	09/2041	3.156%	17,000	17,000		
474	Construction	09/2017	09/2043	3.193%	14,000	14,000		
475	Construction	09/2017	09/2044	3.209%	9,000	9,000		
476	Construction	09/2017	09/2047	3.247%	10,000	10,000		
477	Construction	08/2018	02/2048	0.668%	12,000	12,000		
478	Construction	08/2018	04/2048	1.681%	19,000	0		
479	Construction	08/2018	05/2048	1.669%	21,000	0		
480	Construction	09/2018	10/2047	1.681%	4,000	0		
481	Construction	09/2018	11/2047	1.669%	24,000	0		
482	Construction	09/2018	04/2048	1.681%	67,000	0		
483	Construction	09/2018	05/2048	1.669%	42,000	0		
484	Construction	09/2018	06/2048	1.630%	63,800	0		
485	Construction	01/2019	01/2023	2.603%	6,000	6,000		
486	Construction	07/2019	07/2037	2.680%	46,940	46,940		
487	Construction	08/2019	08/2021	0.037%	50,000	0		
488	Construction	08/2019	08/2021	0.119%	32,000	0		
489	Construction	08/2019	08/2022	1.374%	36,000	0		
490	Construction	09/2019	09/2020	0.302%	35,000	0		
491	Construction	10/2019	09/2020	0.302%	43,000	0		
492	Construction	11/2019	03/2037	2.349%	36,000	36,000		
493	Construction	11/2019	06/2038	2.429%	37,000	37,000		
494	Construction	11/2019	09/2039	2.495%	39,000	39,000		
495	Construction	01/2020	09/2020	0.302%	50,000	0		
496	Construction	04/2020	04/2039	1.594%	45,000	45,000		
497	Construction	04/2020	04/2046	1.776%	9,000	9,000		
498	Construction	04/2020	04/2046	1.776%	48,000	48,000		
499	Construction	04/2020	04/2047	1.792%	4,000	4,000		
500	Construction	04/2020	04/2047	1.792%	72,000	72,000		
501	Construction	04/2020	04/2048	1.806%	19,000	19,000		
502	Construction	04/2020	04/2048	1.806%	67,000	67,000		
503	Construction	05/2020	11/2032	1.231%	21,000	21,000		
504	Construction	05/2020	05/2036	1.513%	29,000	29,000		

**TABLE 10-1
HISTORICAL INVESTMENTS
(\$000s)**

	A	B	C	D	E	F	G	H
	PROJECT	IN SERVICE DATE	DUE DATE	INTEREST RATE	ORIGINAL PRINCIPAL	CURRENT PRINCIPAL	Roll Maturity Date	Rollover Rate
505	Construction	05/2020	05/2046	1.931%	26,000	26,000		
506	Construction	05/2020	11/2047	1.949%	24,000	24,000		
507	Construction	05/2020	05/2048	1.953%	21,000	21,000		
508	Construction	05/2020	05/2048	1.953%	42,000	42,000		
509	Construction	06/2020	06/2033	1.238%	21,000	21,000		
510	Construction	06/2020	06/2047	1.805%	20,000	20,000		
511	Construction	06/2020	06/2047	1.805%	30,000	30,000		
512	Construction	06/2020	06/2049	1.812%	63,800	63,800		
513	Construction	07/2020	07/2033	1.157%	10,000	10,000		
514	Construction	07/2020	01/2040	1.421%	30,000	30,000		
515	Construction	07/2020	07/2045	1.626%	19,000	19,000		
516	Construction	08/2020	02/2049	1.990%	11,000	11,000		
517	Construction	08/2020	08/2049	1.992%	39,000	39,000		
518	Construction	03/2021	09/2022	2.345%	4,000	4,000		
519	Construction	03/2021	03/2041	2.347%	6,000	6,000		
520	Construction	03/2021	03/2042	2.400%	46,000	46,000		
521	Construction	03/2021	09/2044	2.515%	34,000	34,000		
522	Construction	03/2021	09/2045	2.550%	14,000	14,000		
523	Construction	05/2021	05/2043	2.344%	45,000	45,000		
524	Construction	05/2021	11/2044	2.408%	42,000	42,000		
525	Construction	06/2021	06/2023	0.239%	15,000	15,000		
526	Construction	06/2021	06/2041	2.083%	40,000	40,000		
527	Construction	06/2021	06/2045	2.240%	34,000	34,000		
528	Construction	07/2021	07/2023	0.179%	23,000	23,000		
529	Construction	07/2021	07/2024	0.363%	39,000	39,000		
530	Construction	07/2021	01/2046	2.025%	27,000	27,000		
531	Construction	08/2021	08/2022	0.087%	17,000	0		
532	Construction	08/2021	08/2042	1.925%	33,000	33,000		
533	Construction	08/2021	08/2044	2.006%	39,000	39,000		
534	Construction	02/2022	08/2041	2.715%	35,000	35,000		
535	Construction	02/2022	08/2042	2.743%	30,000	30,000		
536	Construction	02/2022	02/2050	2.822%	31,000	31,000		
537	Construction	02/2022	08/2040	2.682%	40,000	40,000		
538	Construction	02/2022	02/2043	2.750%	32,000	32,000		
539	Construction	05/2022	05/2029	2.948%	33,000	33,000		
540	Construction	05/2022	05/2030	3.019%	30,000	30,000		
541	Construction	06/2022	06/2040	3.811%	32,000	32,000		
542	Construction	06/2022	06/2044	3.890%	34,000	34,000		
543	Construction	08/2022	08/2046	3.254%	28,000	28,000		
544	Construction	08/2022	08/2049	3.254%	30,000	30,000		
545	Construction	08/2022	02/2050	3.254%	36,000	36,000		
546	Construction	08/2022	02/2050	3.254%	25,000	25,000		
547	Construction (AS)	10/1992	10/2032	8.350%	99,962	0		
548	Construction (AS)	07/1995	07/2025	7.700%	49,933	0		
549	Construction (AS)	01/1996	01/2003	5.900%	54,378	0		
550	Construction (AS)	01/1997	01/2004	6.800%	22,600	0		
551	Construction (AS)	08/1998	08/2008	5.750%	36,819	0		
552	Construction (AS)	02/1999	02/2014	5.900%	59,050	0		
553	Construction (AS)	07/2000	07/2004	7.000%	39,052	0		
554	Construction (AS)	01/2001	01/2010	6.050%	59,932	0		
555	Construction (AS)	03/2002	03/2005	4.600%	108,010	0		
556	Construction (AS)	10/2002	10/2005	3.000%	4,938	0		
557	Construction (AS)	01/2004	01/2007	2.500%	46,643	0		
558	Construction (AS)	11/2004	11/2008	3.750%	27,010	0		
559	Construction (AS)	09/2006	09/2010	4.950%	5,319	0		
560	Construction (AS)	01/2008	01/2012	3.200%	30,000	0		
561	Construction (AS)	09/2008	09/2012	3.444%	25,000	0		
562	Construction (AS)	09/2009	09/2014	2.746%	14,000	0		
563	Construction (AS)	02/2010	02/2015	0.165%	7,500	0		
564	Construction (AS)	08/2010	08/2015	1.619%	15,000	0		
565	Construction (AS)	06/2011	06/2016	1.957%	13,000	0		
566	Construction (AS)	08/2011	08/2016	1.423%	6,500	0		
567	Construction (AS)	01/2012	09/2012	0.146%	30,000	0		

**TABLE 10-1
HISTORICAL INVESTMENTS
(\$000s)**

	A	B	C	D	E	F	G	H
	PROJECT	IN SERVICE DATE	DUE DATE	INTEREST RATE	ORIGINAL PRINCIPAL	CURRENT PRINCIPAL	Roll Maturity Date	Rollover Rate
568	Construction (AS)	06/2012	09/2015	0.671%	14,300	0		
569	Construction (AS)	11/2012	11/2018	1.109%	9,750	0		
570	Construction (AS)	04/2013	04/2017	0.622%	4,550	0		
571	Construction (AS)	06/2013	06/2019	1.962%	5,000	0		
572	Construction (AS)	08/2013	08/2019	2.279%	3,000	0		
573	Construction (AS)	10/2013	10/2019	2.039%	7,800	0		
574	Construction (AS)	01/2014	01/2020	2.183%	3,250	0		
575	Construction (AS)	02/2014	09/2014	0.117%	59,050	0		
576	Construction (AS)	04/2014	03/2020	1.896%	2,600	0		
577	Construction (AS)	05/2014	04/2020	1.681%	1,300	0		
578	Construction (AS)	07/2014	07/2020	1.580%	1,950	0		
579	Construction (AS)	11/2014	11/2020	1.809%	3,900	0		
580	Construction (AS)	12/2014	12/2020	1.922%	1,950	0		
581	Construction (AS)	02/2015	02/2021	1.761%	3,250	0		
582	Construction (AS)	05/2015	05/2021	1.898%	3,900	0		
583	Construction (AS)	10/2015	10/2021	1.942%	5,200	0		
584	Construction (AS)	02/2016	02/2022	1.631%	5,000	0		
585	Construction (AS)	06/2016	09/2016	0.436%	13,000	0		
586	Construction (AS)	04/2017	01/2018	1.051%	4,550	0		
587	Construction (AS)	09/2018	03/2024	3.078%	7,800	7,800		
588	Construction (AS)	08/2019	08/2022	1.374%	7,000	0		
589	Construction (AS)	10/2019	09/2020	0.302%	7,800	0		
590	Construction (AS)	11/2019	05/2021	0.119%	5,000	0		
591	Construction (AS)	01/2020	09/2020	0.302%	3,250	0		
592	Construction (AS)	03/2020	09/2020	0.326%	2,600	0		
593	Construction (AS)	04/2020	09/2020	0.240%	1,300	0		
594	Construction (AS)	07/2020	07/2025	0.407%	6,000	6,000		
595	Construction (AS)	05/2021	11/2026	0.933%	2,000	2,000		
596	Construction (AS)	02/2022	08/2027	2.000%	8,000	8,000		
597	Construction (AS)	05/2022	05/2027	2.858%	4,000	4,000		
598	Construction (AS)	08/2022	08/2028	3.254%	19,000	19,000		
599	Environment	11/1996	11/2011	6.950%	40,000	0		
600	Environment	01/2001	01/2010	6.050%	30,000	0		
601	Environment	09/2002	09/2006	3.050%	30,000	0		
602	Environment	03/2006	03/2009	5.050%	20,000	0		
603	Environment	09/2008	09/2011	3.151%	10,000	0		
604	Environment	02/2010	02/2025	4.279%	10,000	10,000		
605	Environment	05/2012	05/2027	1.598%	13,000	13,000		
606	Environment	11/2012	11/2027	5.046%	5,000	0		
607	Environment	10/2013	10/2028	3.880%	6,000	6,000		
608	Environment	11/2013	11/2027	3.967%	5,000	5,000		
609	Environment	01/2014	01/2029	3.896%	3,000	3,000		
610	Environment	07/2014	07/2029	2.922%	3,000	3,000		
611	Environment	01/2015	01/2024	1.908%	4,000	4,000		
612	Environment	10/2015	09/2027	1.896%	5,000	0		
613	Environment	05/2016	05/2025	2.101%	5,000	5,000		
614	Environment	09/2018	11/2032	1.669%	7,000	0		
615	Environment	08/2019	08/2020	0.155%	5,000	0		
616	Environment	11/2019	09/2023	0.112%	8,000	0		
617	Environment	03/2020	09/2027	1.025%	5,000	5,000		
618	Environment	05/2020	11/2032	1.231%	7,000	7,000		
619	Environment	03/2021	03/2031	1.804%	13,000	13,000		
620	Environment	02/2022	08/2035	2.444%	7,000	7,000		
621	Environment	08/2022	08/2037	3.254%	11,000	11,000		
622	Technology (T)	02/2015	02/2021	1.761%	23,000	0		
623	Technology (T)	10/2015	09/2018	1.976%	5,000	0		
624	Technology (T)	09/2018	09/2021	0.128%	5,000	0		
625	Technology (T)	02/2022	02/2027	1.967%	9,000	9,000		
626	Totals:				15,097,798	3,844,540		

TABLE 10-2
PROJECTED FEDERAL INVESTMENTS
(\$000s)

	A	B	C	D	F	E
	PROJECT	ORIGINAL PRINCIPAL	CURRENT PRINCIPAL	INTEREST RATE	IN SERVICE DATE	DUE DATE
1	Construction	\$262,000	\$262,000	2.99	4/30/2023	4/30/2052
2	Construction	\$73,438	\$73,438	0.98	5/31/2023	5/31/2025
3	Construction	\$79,562	\$79,562	3.02	5/31/2023	5/31/2053
4	Construction	\$97,212	\$97,212	0.62	6/30/2023	6/30/2024
5	Construction	\$55,788	\$55,788	3.02	6/30/2023	6/30/2050
6	Construction (AS)	\$13,000	\$13,000	1.71	5/31/2023	5/31/2028
7	Environment	<u>\$6,000</u>	<u>\$6,000</u>	2.56	5/31/2023	5/31/2038
8	2023 Total	\$587,000	\$587,000			
9	Construction	\$165,667	\$165,667	3.33	8/31/2024	8/31/2054
10	Construction	\$165,667	\$165,667	3.24	9/30/2024	9/30/2051
11	Construction	\$165,667	\$165,667	3.30	5/31/2024	5/31/2053
12	Construction (AS)	\$15,000	\$15,000	2.16	5/31/2024	5/31/2029
13	Environment	\$6,000	\$6,000	2.89	5/31/2024	5/31/2039
14	2024 Total	\$518,001	\$518,001			
15	Construction	\$80,333	\$80,333	3.51	5/31/2025	5/31/2053
16	Construction	\$74,855	\$74,855	3.51	5/31/2025	5/31/2053
17	Construction	\$80,333	\$80,333	3.54	5/31/2025	5/31/2054
18	Construction	\$160,667	\$160,667	3.57	8/31/2025	8/31/2055
19	Construction	\$160,667	\$160,667	3.54	9/30/2025	9/30/2055
20	Construction (AS)	\$15,000	\$15,000	2.58	5/31/2025	5/31/2030
21	Construction (AS)	\$15,896	\$15,896	2.58	5/31/2025	5/31/2030
22	Environment	\$6,000	\$6,000	3.15	5/31/2025	5/31/2040
23	Environment	\$9,248	\$9,248	3.15	5/31/2025	5/31/2040
24	2025 Total	\$603,000	\$603,000			

11. REPAYMENT STUDY RESULTS

TABLE 11-1
SUMMARY OF INTEREST (\$000S) (FY 2024)

	A	B	C	D	E	F	G	H
1	General Project	Specific Project	2023	2024	2025	2026	2027	2028
2	BPA Borrowing	(Less Interest Income)	(227)	(452)	(456)	(459)	(502)	(526)
3		Construction	111,849	117,960	132,615	126,306	118,467	111,637
4		Interest Accrual	23,936	25,692	25,075	23,912	22,884	21,115
5		Interest Accrual Reversal	(19,803)	(23,936)	(25,692)	(25,075)	(23,912)	(22,884)
6		Construction (AS)	1,174	1,276	1,480	1,456	1,446	1,163
7		Interest Accrual	189	297	293	293	235	108
8		Interest Accrual Reversal	(114)	(189)	(297)	(293)	(293)	(235)
9		Environment	2,351	2,466	2,387	2,070	2,070	1,711
10		Interest Accrual	475	521	449	449	380	313
11		Interest Accrual Reversal	(424)	(475)	(521)	(449)	(449)	(380)
12		Technology (T)	177	177	177	177	88	-
13		Interest Accrual	15	15	15	15	-	-
14		Interest Accrual Reversal	(15)	(15)	(15)	(15)	(15)	-
15			BPA Borrowing Subtotal:	119,582	123,338	135,511	128,386	120,398
16	Federal Transmission Replacement	Replacements	-	-	3,511	10,534	17,557	24,580
17		Federal Transmission Replacement Subtotal:	-	-	3,511	10,534	17,557	24,580
18	Total		119,582	123,338	139,022	138,920	137,955	136,604

TABLE 11-1
SUMMARY OF INTEREST (\$000S) (FY 2024)

	A	B	I	J	K	L	M	N
1	General Project	Specific Project	2029	2030	2031	2032	2033	2034
2	BPA Borrowing	(Less Interest Income)	(658)	(665)	(669)	(670)	(673)	(515)
3		Construction	101,895	88,826	77,241	65,711	52,721	44,623
4		Interest Accrual	19,260	16,744	13,721	11,430	10,914	10,312
5		Interest Accrual Reversal	(21,115)	(19,260)	(16,744)	(13,721)	(11,430)	(10,914)
6		Construction (AS)	324	-	-	-	-	-
7		Interest Accrual	-	-	-	-	-	-
8		Interest Accrual Reversal	(108)	-	-	-	-	-
9		Environment	1,437	1,175	1,058	761	540	497
10		Interest Accrual	183	183	183	153	124	124
11		Interest Accrual Reversal	(313)	(183)	(183)	(183)	(153)	(124)
12		Technology (T)	-	-	-	-	-	-
13		Interest Accrual	-	-	-	-	-	-
14		Interest Accrual Reversal	-	-	-	-	-	-
15		BPA Borrowing Subtotal:	100,904	86,820	74,606	63,481	52,044	44,003
16	Federal Transmission Replacement	Replacements	31,603	38,626	45,649	52,671	59,694	66,717
17		Federal Transmission Replacement Subtotal:	31,603	38,626	45,649	52,671	59,694	66,717
18	Total		132,507	125,446	120,255	116,152	111,738	110,720

TABLE 11-1
SUMMARY OF INTEREST (\$000S) (FY 2024)

	A	B	O	P	Q	R	S	T
1	General Project	Specific Project	2035	2036	2037	2038	2039	2040
2	BPA Borrowing	(Less Interest Income)	(477)	(480)	(536)	(545)	(549)	(552)
3		Construction	40,386	35,385	26,864	19,649	13,451	8,572
4		Interest Accrual	8,457	5,854	5,029	4,354	3,071	1,587
5		Interest Accrual Reversal	(10,312)	(8,457)	(5,854)	(5,029)	(4,354)	(3,071)
6		Construction (AS)	-	-	-	-	-	-
7		Interest Accrual	-	-	-	-	-	-
8		Interest Accrual Reversal	-	-	-	-	-	-
9		Environment	497	327	327	153	-	-
10		Interest Accrual	109	109	51	-	-	-
11		Interest Accrual Reversal	(124)	(109)	(109)	(51)	-	-
12		Technology (T)	-	-	-	-	-	-
13		Interest Accrual	-	-	-	-	-	-
14		Interest Accrual Reversal	-	-	-	-	-	-
15			BPA Borrowing Subtotal:	38,537	32,628	25,772	18,531	11,620
16	Federal Transmission Replacement	Replacements	73,740	80,763	87,786	94,809	101,831	108,854
17		Federal Transmission Replacement Subtotal:	73,740	80,763	87,786	94,809	101,831	108,854
18	Total		112,277	113,391	113,558	113,339	113,452	115,390

**TABLE 11-1
SUMMARY OF INTEREST (\$000S) (FY 2024)**

	A	B	U	V	W	X	Y	Z
1	General Project	Specific Project	2041	2042	2043	2044	2045	2046
2	BPA Borrowing	(Less Interest Income)	(539)	(572)	(557)	(561)	(568)	(576)
3		Construction	3,786	-	-	-	-	-
4		Interest Accrual	-	-	-	-	-	-
5		Interest Accrual Reversal	(1,587)	-	-	-	-	-
6		Construction (AS)	-	-	-	-	-	-
7		Interest Accrual	-	-	-	-	-	-
8		Interest Accrual Reversal	-	-	-	-	-	-
9		Environment	-	-	-	-	-	-
10		Interest Accrual	-	-	-	-	-	-
11		Interest Accrual Reversal	-	-	-	-	-	-
12		Technology (T)	-	-	-	-	-	-
13		Interest Accrual	-	-	-	-	-	-
14		Interest Accrual Reversal	-	-	-	-	-	-
15			BPA Borrowing Subtotal:	1,660	(572)	(557)	(561)	(568)
16	Federal Transmission Replacement	Replacements	115,525	117,525	115,371	113,323	111,122	108,734
17		Federal Transmission Replacement Subtotal:	115,525	117,525	115,371	113,323	111,122	108,734
18	Total		117,185	116,953	114,815	112,762	110,553	108,158

TABLE 11-1
SUMMARY OF INTEREST (\$000S) (FY 2024)

	A	B	AA	AB	AC	AD	AE	AF
1	General Project	Specific Project	2047	2048	2049	2050	2051	2052
2	BPA Borrowing	(Less Interest Income)	(620)	(765)	(770)	(776)	(782)	(788)
3		Construction	-	-	-	-	-	-
4		Interest Accrual	-	-	-	-	-	-
5		Interest Accrual Reversal	-	-	-	-	-	-
6		Construction (AS)	-	-	-	-	-	-
7		Interest Accrual	-	-	-	-	-	-
8		Interest Accrual Reversal	-	-	-	-	-	-
9		Environment	-	-	-	-	-	-
10		Interest Accrual	-	-	-	-	-	-
11		Interest Accrual Reversal	-	-	-	-	-	-
12		Technology (T)	-	-	-	-	-	-
13		Interest Accrual	-	-	-	-	-	-
14		Interest Accrual Reversal	-	-	-	-	-	-
15			BPA Borrowing Subtotal:	(620)	(765)	(770)	(776)	(782)
16	Federal Transmission Replacement	Replacements	105,790	100,908	94,445	87,764	80,856	73,714
17		Federal Transmission Replacement Subtotal:	105,790	100,908	94,445	87,764	80,856	73,714
18	Total		105,170	100,143	93,675	86,988	80,074	72,926

**TABLE 11-1
SUMMARY OF INTEREST (\$000S) (FY 2024)**

	A	B	AG	AH	AI	AJ	AK	AL	AM	AN
1	General Project	Specific Project	2053	2054	2055	2056	2057	2058	2059	Total
2	BPA Borrowing	(Less Interest Income)	(794)	(800)	(807)	(814)	(821)	(828)	(836)	(23,182)
3		Construction	-	-	-	-	-	-	-	1,297,943
4		Interest Accrual	-	-	-	-	-	-	-	253,348
5		Interest Accrual Reversal	-	-	-	-	-	-	-	(273,151)
6		Construction (AS)	-	-	-	-	-	-	-	8,319
7		Interest Accrual	-	-	-	-	-	-	-	1,417
8		Interest Accrual Reversal	-	-	-	-	-	-	-	(1,531)
9		Environment	-	-	-	-	-	-	-	19,829
10		Interest Accrual	-	-	-	-	-	-	-	3,808
11		Interest Accrual Reversal	-	-	-	-	-	-	-	(4,232)
12		Technology (T)	-	-	-	-	-	-	-	794
13		Interest Accrual	-	-	-	-	-	-	-	60
14		Interest Accrual Reversal	-	-	-	-	-	-	-	(75)
15		BPA Borrowing Subtotal:	(794)	(800)	(807)	(814)	(821)	(828)	(836)	1,283,346
16	Federal Transmission Replacement	Replacements	66,330	58,696	50,803	42,643	34,206	25,484	16,466	2,418,631
17		Federal Transmission Replacement Subtotal:	66,330	58,696	50,803	42,643	34,206	25,484	16,466	2,418,631
18	Total		65,536	57,896	49,996	41,829	33,386	24,656	15,630	3,701,977

**TABLE 11-2
INTEREST CALCULATION SUMMARY (\$000S) (FY 2024)**

A	B	C	D	E	F	G	H	I
Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
1	2023 Construction	Historical	3,691,940	3.030%	111,849	-	(729)	111,120
2	2023 Construction	New	568,000	-	-	-	4,862	4,862
3	2023 Construction (AS)	Historical	46,800	2.508%	1,174	-	-	1,174
4	2023 Construction (AS)	New	13,000	-	-	-	75	75
5	2023 Environment	Historical	92,000	2.555%	2,351	-	-	2,351
6	2023 Environment	New	6,000	-	-	-	51	51
7	2023 Technology (T)	Historical	9,000	1.962%	177	-	-	177
8	2023 Float	Historical	-	-	(227)	-	-	(227)
9	FY 2023	Subtotal:	4,426,740		115,323	-	4,259	119,582
10	2024 Construction	Historical	4,050,561	2.912%	117,960	-	(541)	117,418
11	2024 Construction	New	331,334	-	-	-	2,298	2,298
12	2024 Construction (AS)	Historical	59,800	2.134%	1,276	-	-	1,276
13	2024 Construction (AS)	New	15,000	-	-	-	108	108
14	2024 Environment	Historical	98,000	2.517%	2,466	-	(13)	2,454
15	2024 Environment	New	6,000	-	-	-	58	58
16	2024 Technology (T)	Historical	9,000	1.962%	177	-	-	177
17	2024 Float	Historical	-	-	(452)	-	-	(452)
18	FY 2024	Subtotal:	4,569,695		121,427	-	1,910	123,338
19	2025 Construction	Historical	4,354,350	3.046%	132,615	-	(617)	131,998
20	2025 Construction (AS)	Historical	67,000	2.209%	1,480	-	(4)	1,476
21	2025 Environment	Historical	100,000	2.387%	2,387	-	(71)	2,316
22	2025 Replacements	New	210,960	1.664%	3,511	-	-	3,511
23	2025 Technology (T)	Historical	9,000	1.962%	177	-	-	177
24	2025 Float	Historical	-	-	(456)	-	-	(456)
25	FY 2025	Subtotal:	4,741,310		139,715	-	(692)	139,022
26	2026 Construction	Historical	4,178,973	3.022%	126,306	-	(1,163)	125,143
27	2026 Construction (AS)	Historical	61,000	2.386%	1,456	-	-	1,456
28	2026 Environment	Historical	85,000	2.435%	2,070	-	-	2,070
29	2026 Replacements	Historical	210,960	3.329%	7,023	-	-	7,023
30	2026 Replacements	New	210,960	1.664%	3,511	-	-	3,511
31	2026 Technology (T)	Historical	9,000	1.962%	177	-	-	177
32	2026 Float	Historical	-	-	(459)	-	-	(459)
33	FY 2026	Subtotal:	4,755,893		140,083	-	(1,163)	138,920
34	2027 Construction	Historical	3,983,890	2.974%	118,467	-	(1,029)	117,438
35	2027 Construction (AS)	Historical	61,000	2.371%	1,446	-	(58)	1,388
36	2027 Environment	Historical	85,000	2.435%	2,070	-	(70)	2,000
37	2027 Replacements	Historical	421,920	3.329%	14,046	-	-	14,046
38	2027 Replacements	New	210,960	1.664%	3,511	-	-	3,511
39	2027 Technology (T)	Historical	9,000	0.978%	88	-	(15)	73
40	2027 Float	Historical	-	-	(502)	-	-	(502)
41	FY 2027	Subtotal:	4,771,770		139,127	-	(1,171)	137,955
42	2028 Construction	Historical	3,805,785	2.933%	111,637	-	(1,768)	109,869
43	2028 Construction (AS)	Historical	47,000	2.475%	1,163	-	(127)	1,036
44	2028 Environment	Historical	67,000	2.554%	1,711	-	(66)	1,645
45	2028 Replacements	Historical	632,880	3.329%	21,069	-	-	21,069
46	2028 Replacements	New	210,960	1.664%	3,511	-	-	3,511
47	2028 Float	Historical	-	-	(526)	-	-	(526)
48	FY 2028	Subtotal:	4,763,625		138,565	-	(1,962)	136,604
49	2029 Construction	Historical	3,622,585	2.813%	101,895	-	(1,856)	100,039
50	2029 Construction (AS)	Historical	15,000	2.158%	324	-	(108)	215
51	2029 Environment	Historical	62,000	2.318%	1,437	-	(130)	1,307
52	2029 Replacements	Historical	843,840	3.329%	28,091	-	-	28,091
53	2029 Replacements	New	210,960	1.664%	3,511	-	-	3,511
54	2029 Float	Historical	-	-	(658)	-	-	(658)
55	FY 2029	Subtotal:	4,754,385		134,601	-	(2,095)	132,507

**TABLE 11-2
INTEREST CALCULATION SUMMARY (\$000S) (FY 2024)**

A	B	C	D	E	F	G	H	I
Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
56	2030 Construction	Historical	3,343,692	2.657%	88,826	-	(2,516)	86,310
57	2030 Environment	Historical	50,000	2.350%	1,175	-	-	1,175
58	2030 Replacements	Historical	1,054,800	3.329%	35,114	-	-	35,114
59	2030 Replacements	New	210,960	1.664%	3,511	-	-	3,511
60	2030 Float	Historical	-	-	(665)	-	-	(665)
61	FY 2030	Subtotal:	4,659,452		127,961	-	(2,516)	125,446
62	2031 Construction	Historical	3,025,034	2.553%	77,241	-	(3,023)	74,218
63	2031 Environment	Historical	50,000	2.115%	1,058	-	-	1,058
64	2031 Replacements	Historical	1,265,760	3.329%	42,137	-	-	42,137
65	2031 Replacements	New	210,960	1.664%	3,511	-	-	3,511
66	2031 Float	Historical	-	-	(669)	-	-	(669)
67	FY 2031	Subtotal:	4,551,754		123,278	-	(3,023)	120,255
68	2032 Construction	Historical	2,711,365	2.424%	65,711	-	(2,291)	63,420
69	2032 Environment	Historical	37,000	2.058%	761	-	(30)	731
70	2032 Replacements	Historical	1,476,720	3.329%	49,160	-	-	49,160
71	2032 Replacements	New	210,960	1.664%	3,511	-	-	3,511
72	2032 Float	Historical	-	-	(670)	-	-	(670)
73	FY 2032	Subtotal:	4,436,045		118,473	-	(2,321)	116,152
74	2033 Construction	Historical	2,378,321	2.217%	52,721	-	(516)	52,205
75	2033 Environment	Historical	26,000	2.078%	540	-	(29)	512
76	2033 Replacements	Historical	1,687,680	3.329%	56,183	-	-	56,183
77	2033 Replacements	New	210,960	1.664%	3,511	-	-	3,511
78	2033 Float	Historical	-	-	(673)	-	-	(673)
79	FY 2033	Subtotal:	4,302,961		112,283	-	(545)	111,738
80	2034 Construction	Historical	2,038,766	2.189%	44,623	-	(602)	44,021
81	2034 Environment	Historical	19,000	2.617%	497	-	-	497
82	2034 Replacements	Historical	1,898,640	3.329%	63,206	-	-	63,206
83	2034 Replacements	New	210,960	1.664%	3,511	-	-	3,511
84	2034 Float	Historical	-	-	(515)	-	-	(515)
85	FY 2034	Subtotal:	4,167,366		111,322	-	(602)	110,720
86	2035 Construction	Historical	1,790,788	2.255%	40,386	-	(1,855)	38,531
87	2035 Environment	Historical	19,000	2.617%	497	-	(14)	483
88	2035 Replacements	Historical	2,109,600	3.329%	70,229	-	-	70,229
89	2035 Replacements	New	210,960	1.664%	3,511	-	-	3,511
90	2035 Float	Historical	-	-	(477)	-	-	(477)
91	FY 2035	Subtotal:	4,130,348		114,146	-	(1,870)	112,277
92	2036 Construction	Historical	1,573,161	2.249%	35,385	-	(2,603)	32,781
93	2036 Environment	Historical	12,000	2.723%	327	-	-	327
94	2036 Replacements	Historical	2,320,560	3.329%	77,251	-	-	77,251
95	2036 Replacements	New	210,960	1.664%	3,511	-	-	3,511
96	2036 Float	Historical	-	-	(480)	-	-	(480)
97	FY 2036	Subtotal:	4,116,681		115,994	-	(2,603)	113,391
98	2037 Construction	Historical	1,342,453	2.001%	26,864	-	(825)	26,039
99	2037 Environment	Historical	12,000	2.723%	327	-	(58)	269
100	2037 Replacements	Historical	2,531,520	3.329%	84,274	-	-	84,274
101	2037 Replacements	New	210,960	1.664%	3,511	-	-	3,511
102	2037 Float	Historical	-	-	(536)	-	-	(536)
103	FY 2037	Subtotal:	4,096,933		114,440	-	(883)	113,558
104	2038 Construction	Historical	1,081,743	1.816%	19,649	-	(676)	18,974
105	2038 Environment	Historical	6,000	2.558%	153	-	(51)	102
106	2038 Replacements	Historical	2,742,480	3.329%	91,297	-	-	91,297

**TABLE 11-2
INTEREST CALCULATION SUMMARY (\$000S) (FY 2024)**

A	B	C	D	E	F	G	H	I
Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
107	2038 Replacements	New	210,960	1.664%	3,511	-	-	3,511
108	2038 Float	Historical	-	-	(545)	-	-	(545)
109	FY 2038	Subtotal:	4,041,183		114,066	-	(727)	113,339
110	2039 Construction	Historical	811,011	1.659%	13,451	-	(1,282)	12,169
111	2039 Replacements	Historical	2,953,440	3.329%	98,320	-	-	98,320
112	2039 Replacements	New	210,960	1.664%	3,511	-	-	3,511
113	2039 Float	Historical	-	-	(549)	-	-	(549)
114	FY 2039	Subtotal:	3,975,411		114,734	-	(1,282)	113,452
115	2040 Construction	Historical	523,464	1.638%	8,572	-	(1,485)	7,088
116	2040 Replacements	Historical	3,164,400	3.329%	105,343	-	-	105,343
117	2040 Replacements	New	210,960	1.664%	3,511	-	-	3,511
118	2040 Float	Historical	-	-	(552)	-	-	(552)
119	FY 2040	Subtotal:	3,898,824		116,875	-	(1,485)	115,390
120	2041 Construction	Historical	238,582	1.587%	3,786	-	(1,587)	2,199
121	2041 Replacements	Historical	3,375,360	3.319%	112,013	-	-	112,013
122	2041 Replacements	New	210,960	1.664%	3,511	-	-	3,511
123	2041 Float	Historical	-	-	(539)	-	-	(539)
124	FY 2041	Subtotal:	3,824,902		118,771	-	(1,587)	117,185
125	2042 Replacements	Historical	3,565,134	3.198%	114,014	-	-	114,014
126	2042 Replacements	New	210,960	1.664%	3,511	-	-	3,511
127	2042 Float	Historical	-	-	(572)	-	-	(572)
128	FY 2042	Subtotal:	3,776,094		116,953	-	-	116,953
129	2043 Replacements	Historical	3,495,567	3.200%	111,860	-	-	111,860
130	2043 Replacements	New	210,960	1.664%	3,511	-	-	3,511
131	2043 Float	Historical	-	-	(557)	-	-	(557)
132	FY 2043	Subtotal:	3,706,527		114,815	-	-	114,815
133	2044 Replacements	Historical	3,435,718	3.196%	109,811	-	-	109,811
134	2044 Replacements	New	210,960	1.664%	3,511	-	-	3,511
135	2044 Float	Historical	-	-	(561)	-	-	(561)
136	FY 2044	Subtotal:	3,646,678		112,762	-	-	112,762
137	2045 Replacements	Historical	3,372,505	3.191%	107,610	-	-	107,610
138	2045 Replacements	New	210,960	1.664%	3,511	-	-	3,511
139	2045 Float	Historical	-	-	(568)	-	-	(568)
140	FY 2045	Subtotal:	3,583,465		110,553	-	-	110,553
141	2046 Replacements	Historical	3,303,478	3.185%	105,223	-	-	105,223
142	2046 Replacements	New	210,960	1.664%	3,511	-	-	3,511
143	2046 Float	Historical	-	-	(576)	-	-	(576)
144	FY 2046	Subtotal:	3,514,438		108,158	-	-	108,158
145	2047 Replacements	Historical	3,229,051	3.167%	102,279	-	-	102,279
146	2047 Replacements	New	210,960	1.664%	3,511	-	-	3,511
147	2047 Float	Historical	-	-	(620)	-	-	(620)
148	FY 2047	Subtotal:	3,440,011		105,170	-	-	105,170
149	2048 Replacements	Historical	3,126,621	3.115%	97,396	-	-	97,396
150	2048 Replacements	New	210,960	1.664%	3,511	-	-	3,511
151	2048 Float	Historical	-	-	(765)	-	-	(765)
152	FY 2048	Subtotal:	3,337,581		100,143	-	-	100,143
153	2049 Replacements	Historical	2,935,727	3.097%	90,934	-	-	90,934
154	2049 Replacements	New	210,960	1.664%	3,511	-	-	3,511
155	2049 Float	Historical	-	-	(770)	-	-	(770)
156	FY 2049	Subtotal:	3,146,687		93,675	-	-	93,675
157	2050 Replacements	Historical	2,738,365	3.077%	84,252	-	-	84,252
158	2050 Replacements	New	210,960	1.664%	3,511	-	-	3,511

**TABLE 11-2
INTEREST CALCULATION SUMMARY (\$000S) (FY 2024)**

A	B	C	D	E	F	G	H	I
Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
159	2050 Float	Historical	-	-	(776)	-	-	(776)
160	FY 2050	Subtotal:	2,949,325		86,988	-	-	86,988
161	2051 Replacements	Historical	2,534,316	3.052%	77,344	-	-	77,344
162	2051 Replacements	New	210,960	1.664%	3,511	-	-	3,511
163	2051 Float	Historical	-	-	(782)	-	-	(782)
164	FY 2051	Subtotal:	2,745,276		80,074	-	-	80,074
165	2052 Replacements	Historical	2,323,353	3.022%	70,203	-	-	70,203
166	2052 Replacements	New	210,960	1.664%	3,511	-	-	3,511
167	2052 Float	Historical	-	-	(788)	-	-	(788)
168	FY 2052	Subtotal:	2,534,313		72,926	-	-	72,926
169	2053 Replacements	Historical	2,105,242	2.984%	62,819	-	-	62,819
170	2053 Replacements	New	210,960	1.664%	3,511	-	-	3,511
171	2053 Float	Historical	-	-	(794)	-	-	(794)
172	FY 2053	Subtotal:	2,316,202		65,536	-	-	65,536
173	2054 Replacements	Historical	1,879,742	2.936%	55,185	-	-	55,185
174	2054 Replacements	New	210,960	1.664%	3,511	-	-	3,511
175	2054 Float	Historical	-	-	(800)	-	-	(800)
176	FY 2054	Subtotal:	2,090,702		57,896	-	-	57,896
177	2055 Replacements	Historical	1,646,600	2.872%	47,292	-	-	47,292
178	2055 Replacements	New	210,960	1.664%	3,511	-	-	3,511
179	2055 Float	Historical	-	-	(807)	-	-	(807)
180	FY 2055	Subtotal:	1,857,560		49,996	-	-	49,996
181	2056 Replacements	Historical	1,405,560	2.784%	39,132	-	-	39,132
182	2056 Replacements	New	210,960	1.664%	3,511	-	-	3,511
183	2056 Float	Historical	-	-	(814)	-	-	(814)
184	FY 2056	Subtotal:	1,616,520		41,829	-	-	41,829
185	2057 Replacements	Historical	1,156,352	2.654%	30,695	-	-	30,695
186	2057 Replacements	New	210,960	1.664%	3,511	-	-	3,511
187	2057 Float	Historical	-	-	(821)	-	-	(821)
188	FY 2057	Subtotal:	1,367,312		33,386	-	-	33,386
189	2058 Replacements	Historical	898,701	2.445%	21,972	-	-	21,972
190	2058 Replacements	New	210,960	1.664%	3,511	-	-	3,511
191	2058 Float	Historical	-	-	(828)	-	-	(828)
192	FY 2058	Subtotal:	1,109,661		24,656	-	-	24,656
193	2059 Replacements	Historical	632,320	2.049%	12,954	-	-	12,954
194	2059 Replacements	New	210,960	1.664%	3,511	-	-	3,511
195	2059 Float	Historical	-	-	(836)	-	-	(836)
196	FY 2059	Subtotal:	843,280		15,630	-	-	15,630
197	Grand Total:		\$130,566,912		\$3,722,333		(\$20,356)	\$3,701,977

**TABLE 11-3
SUMMARY OF AMORTIZATION (\$000S) (FY 2024)**

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	General Project	Specific Project	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
2		Construction	209,379	193,212	175,377	195,083	178,104	183,201	278,893	318,657	313,171	328,792	336,884
3		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-
4		Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-
5		Construction (AS)	-	7,800	6,000	-	14,000	32,000	15,000	-	-	-	-
6		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-
7		Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-
8	BPA Borrowing	Environment	-	4,000	15,000	-	18,000	5,000	12,000	-	13,000	11,000	7,000
9		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-
10		Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-
11		Technology (T)	-	-	-	-	9,000	-	-	-	-	-	-
12		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-
13		Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-
14		BPA Borrowing Subtotal:	209,379	205,012	196,377	195,083	219,104	220,201	305,893	318,657	326,171	339,792	343,884
15		Replacements	-	-	-	-	-	-	-	-	-	-	-
16		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-
17		Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-
18	Federal Transmission Replacement	Federal Transmission Replacement Subtotal:	-	-	-	-	-	-	-	-	-	-	-
19		Discounts	-	-	-	-	-	-	-	-	-	(499)	(4,251)
20	Make Whole Call	Premiums	12,958	-	1,021	5,140	7,575	21,727	17,277	11,603	9,339	113	-
21		Make Whole Call Subtotal:	12,958	-	1,021	5,140	7,575	21,727	17,277	11,603	9,339	(386)	(4,251)
22	Total		209,379	205,012	196,377	195,083	219,104	220,201	305,893	318,657	326,171	340,291	348,135

**TABLE 11-3
SUMMARY OF AMORTIZATION (\$000S) (FY 2024)**

	A	B	N	O	P	Q	R	S	T	U	V	W	X
1	General Project	Specific Project	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
2		Construction	247,731	217,627	227,287	255,332	258,262	266,547	267,055	238,582	-	-	-
3		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-
4		Reversal	-	-	-	-	-	-	-	-	-	-	-
5		Construction (AS)	-	-	-	-	-	-	-	-	-	-	-
6		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-
7		Reversal	-	-	-	-	-	-	-	-	-	-	-
8	BPA Borrowing	Environment	-	7,000	-	6,000	6,000	-	-	-	-	-	-
9		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-
10		Reversal	-	-	-	-	-	-	-	-	-	-	-
11		Technology (T)	-	-	-	-	-	-	-	-	-	-	-
12		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-
13		Reversal	-	-	-	-	-	-	-	-	-	-	-
14		BPA Borrowing Subtotal:	247,731	224,627	227,287	261,332	264,262	266,547	267,055	238,582	-	-	-
15		Replacements	-	-	-	-	-	-	-	21,186	280,527	270,809	274,173
16		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-
17	Federal Transmission Replacement	Reversal	-	-	-	-	-	-	-	-	-	-	-
18		Federal Transmission Replacement Subtotal:	-	-	-	-	-	-	-	21,186	280,527	270,809	274,173
19		Discounts	(2,671)	(247)	-	(3,421)	(5,377)	(12,471)	(21,000)	(17,827)	-	-	-
20	Make Whole Call	Premiums	-	-	-	-	-	-	-	-	-	-	-
21		Make Whole Call Subtotal:	(2,671)	(247)	-	(3,421)	(5,377)	(12,471)	(21,000)	(17,827)	-	-	-
22	Total		250,402	224,874	227,287	264,754	269,639	279,018	288,055	277,595	280,527	270,809	274,173

**TABLE 11-3
SUMMARY OF AMORTIZATION (\$000S) (FY 2024)**

	A	B	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI
1	General Project	Specific Project	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
2		Construction	-	-	-	-	-	-	-	-	-	-	-
3		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-
4		Reversal	-	-	-	-	-	-	-	-	-	-	-
5		Construction (AS)	-	-	-	-	-	-	-	-	-	-	-
6		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-
7		Reversal	-	-	-	-	-	-	-	-	-	-	-
8	BPA Borrowing	Environment	-	-	-	-	-	-	-	-	-	-	-
9		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-
10		Reversal	-	-	-	-	-	-	-	-	-	-	-
11		Technology (T)	-	-	-	-	-	-	-	-	-	-	-
12		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-
13		Reversal	-	-	-	-	-	-	-	-	-	-	-
14		BPA Borrowing Subtotal:	-	-	-	-	-	-	-	-	-	-	-
15		Replacements	279,987	285,386	313,390	401,854	408,322	415,009	421,923	429,071	436,461	444,101	452,001
16		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-
17	Federal Transmission Replacement	Reversal	-	-	-	-	-	-	-	-	-	-	-
18		Federal Transmission Replacement Subtotal:	279,987	285,386	313,390	401,854	408,322	415,009	421,923	429,071	436,461	444,101	452,001
19		Discounts	-	-	-	-	-	-	-	-	-	-	-
20	Make Whole Call	Premiums	-	-	-	-	-	-	-	-	-	-	-
21		Make Whole Call Subtotal:	-	-	-	-	-	-	-	-	-	-	-
22	Total		279,987	285,386	313,390	401,854	408,322	415,009	421,923	429,071	436,461	444,101	452,001

**TABLE 11-3
SUMMARY OF AMORTIZATION (\$000S) (FY 2024)**

	A	B	AJ	AK	AL	AM	AN
1	General Project	Specific Project	2056	2057	2058	2059	Total
2		Construction	-	-	-	-	4,689,176
3		Principal Accrual	-	-	-	-	-
4		Principal Accrual	-	-	-	-	-
5		Reversal	-	-	-	-	-
6		Construction (AS)	-	-	-	-	74,800
7		Principal Accrual	-	-	-	-	-
8		Principal Accrual	-	-	-	-	-
9		Reversal	-	-	-	-	-
10	BPA Borrowing	Environment	-	-	-	-	104,000
11		Principal Accrual	-	-	-	-	-
12		Principal Accrual	-	-	-	-	-
13		Reversal	-	-	-	-	-
14		Technology (T)	-	-	-	-	9,000
15		Principal Accrual	-	-	-	-	-
16		Principal Accrual	-	-	-	-	-
17		Reversal	-	-	-	-	-
18		BPA Borrowing	-	-	-	-	4,876,976
19		Subtotal:	-	-	-	-	4,876,976
20		Replacements	460,168	468,611	477,341	486,367	7,026,687
21		Principal Accrual	-	-	-	-	-
22		Principal Accrual	-	-	-	-	-
23		Reversal	-	-	-	-	-
24	Federal Transmission Replacement	Federal					
25		Transmission Replacement	460,168	468,611	477,341	486,367	7,026,687
26		Subtotal:					
27		Discounts	-	-	-	-	(67,765)
28		Premiums	-	-	-	-	86,753
29	Make Whole Call	Make Whole Call	-	-	-	-	18,989
30		Subtotal:	-	-	-	-	18,989
31	Total		460,168	468,611	477,341	486,367	11,971,428

**TABLE 11-4
APPLICATION OF AMORTIZATION (\$000S) (FY 2024)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
Fiscal Year	Project	Bond ID	Debt Type	In Service	Bond Due Date	Initial Principal	Current Principal	Original Rate	Effective Rate	Refinance Type	Refinanced Date	Rolled Maturity Date	Roll Rate	Principal Paid	Premium	Discount
1	2023	Construction	1116734	-	12/31/2014	12/31/2022	16,000	16,000	2.274%					16,000		
2	2023	Construction	1116735	-	12/31/2014	12/31/2022	4,000	4,000	2.274%					4,000		
3	2023	Construction	1116819	-	1/31/2019	1/31/2023	6,000	6,000	2.603%					6,000		
4	2023	Construction	1116758	-	4/30/2015	4/30/2023	3,000	3,000	2.163%					3,000		
5	2023	Construction	1116759	-	4/30/2015	4/30/2023	12,000	12,000	2.163%					12,000		
6	2023	Construction	1116763	-	6/30/2015	6/30/2023	11,000	11,000	2.443%					11,000		
7	2023	Construction	1116764	-	6/30/2015	6/30/2023	8,000	8,000	2.443%					8,000		
8	2023	Construction	1116874	-	6/30/2021	6/30/2023	15,000	15,000	0.239%					15,000		
9	2023	Construction	1116877	-	7/31/2021	7/31/2023	23,000	23,000	0.179%					23,000		
10	2023	Construction	1116637	-	9/30/2010	9/30/2023	46,000	46,000	3.161%					46,000		
11	2023	Construction	1116568	-	8/31/1998	8/31/2028	112,300	111,500	5.850%					65,379	12,958	
12		FY 2023 Subtotal:	-	-	-	-	256,300	255,500	-					209,379		12,958
13	2024	Construction	1116730	-	10/31/2014	10/31/2023	20,000	20,000	2.521%					20,000		
14	2024	Construction	1116732	-	11/30/2014	11/30/2023	20,000	20,000	2.361%					20,000		
15	2024	Environment	1116739	-	1/31/2015	1/31/2024	4,000	4,000	1.908%					4,000		
16	2024	Construction	1116745	-	3/31/2015	3/31/2024	17,000	17,000	2.200%					17,000		
17	2024	Construction (AS)	1116817	-	9/28/2018	3/31/2024	7,800	7,800	3.078%					7,800		
18	2024	Construction	1159988	-	6/30/2023	6/30/2024	-	97,212	0.620%					97,212		
19	2024	Construction	1116875	-	7/31/2021	7/31/2024	39,000	39,000	0.363%					39,000		
20		FY 2024 Subtotal:	-	-	-	-	107,800	205,012	-					205,012		
21	2025	Environment	1116626	-	2/28/2010	2/28/2025	10,000	10,000	4.279%					10,000		
22	2025	Construction	1116785	-	5/31/2016	5/31/2025	20,000	20,000	2.101%					20,000		
23	2025	Environment	1116784	-	5/31/2016	5/31/2025	5,000	5,000	2.101%					5,000		
24	2025	Construction	1160005	-	5/31/2023	5/31/2025	-	73,438	0.980%					73,438		
25	2025	Construction	1116786	-	7/31/2016	7/31/2025	48,000	48,000	1.713%					48,000		
26	2025	Construction (AS)	1116862	-	7/31/2020	7/31/2025	6,000	6,000	0.407%					6,000		
27	2025	Construction	1116767	-	8/31/2015	8/31/2025	11,000	11,000	2.598%					11,000		
28	2025	Construction	1116768	-	8/31/2015	8/31/2025	14,000	14,000	2.598%					14,000		
29	2025	Construction	1116568	-	8/31/1998	8/31/2028	112,300	46,121	5.850%					8,939	1,021	
30		FY 2025 Subtotal:	-	-	-	-	226,300	233,559	-					196,377	1,021	
31	2026	Construction	1116638	-	10/31/2010	10/31/2025	45,000	45,000	3.494%					45,000		
32	2026	Construction	1116742	-	2/28/2015	2/28/2026	19,000	19,000	2.416%					19,000		
33	2026	Construction	1116744	-	3/31/2015	3/31/2026	15,000	15,000	2.370%					15,000		
34	2026	Construction	1116782	-	3/31/2016	3/31/2026	6,000	6,000	2.177%					6,000		
35	2026	Construction	1116783	-	3/31/2016	3/31/2026	12,000	12,000	2.177%					12,000		
36	2026	Construction	1116765	-	7/31/2015	7/31/2026	18,000	18,000	2.707%					18,000		
37	2026	Construction	1116766	-	7/31/2015	7/31/2026	10,000	10,000	2.707%					10,000		
38	2026	Construction	1116567	-	8/31/1998	8/31/2028	106,500	106,500	5.850%					32,901	2,413	
39	2026	Construction	1116568	-	8/31/1998	8/31/2028	112,300	37,182	5.850%					37,182	2,727	
40		FY 2026 Subtotal:	-	-	-	-	343,800	268,682	-					195,083	5,140	
41	2027	Construction (AS)	1116871	-	5/31/2021	11/30/2026	2,000	2,000	0.933%					2,000		
42	2027	Construction	1116778	-	12/31/2015	12/31/2026	9,000	9,000	2.762%					9,000		
43	2027	Construction	1116779	-	12/31/2015	12/31/2026	29,000	29,000	2.762%					29,000		
44	2027	Construction	1116780	-	1/31/2016	1/31/2027	13,000	13,000	2.352%					13,000		
45	2027	Construction	1116781	-	2/29/2016	2/28/2027	13,000	13,000	2.236%					13,000		
46	2027	Technology (T)	1116886	-	2/28/2022	2/28/2027	9,000	9,000	1.967%					9,000		
47	2027	Construction	1116663	-	5/3/2012	5/31/2027	17,000	17,000	1.598%					17,000		
48	2027	Environment	1116664	-	5/3/2012	5/31/2027	13,000	13,000	1.598%					13,000		
49	2027	Construction (AS)	1116891	-	5/31/2022	5/31/2027	4,000	4,000	2.858%					4,000		
50	2027	Construction (AS)	1116888	-	2/28/2022	8/31/2027	8,000	8,000	2.000%					8,000		
51	2027	Environment	1116838	-	3/31/2020	9/30/2027	5,000	5,000	1.025%					5,000		
52	2027	Construction	1116567	-	8/31/1998	8/31/2028	106,500	73,599	5.850%					73,599	3,142	
53	2027	Construction	1116617	-	6/30/2009	6/30/2039	35,000	35,000	5.192%					23,506	4,433	
54		FY 2027 Subtotal:	-	-	-	-	263,500	230,599	-					219,104	7,575	
55	2028	Environment	1116696	-	11/20/2013	11/30/2027	5,000	5,000	3.967%					5,000		
56	2028	Construction	1116728	-	9/30/2014	4/30/2028	17,000	17,000	1.491%					17,000		
57	2028	Construction (AS)	1159935	-	5/31/2023	5/31/2028	-	13,000	1.714%					13,000		
58	2028	Construction (AS)	1116899	-	8/31/2022	8/31/2028	19,000	19,000	3.254%					19,000		
59	2028	Construction	1116727	-	9/30/2014	9/30/2028	3,000	3,000	3.094%					3,000		
60	2028	Construction	1116639	-	1/31/2011	1/31/2036	50,000	50,000	4.952%					50,000	6,118	
61	2028	Construction	1116640	-	2/28/2011	2/28/2038	55,000	55,000	4.935%					55,000	7,404	
62	2028	Construction	1116641	-	4/30/2011	4/30/2039	40,000	40,000	4.794%					40,000	5,254	
63	2028	Construction	1116617	-	6/30/2009	6/30/2039	35,000	11,494	5.192%					11,494	2,004	
64	2028	Construction	1116646	-	6/22/2011	6/30/2040	25,000	25,000	4.775%					6,706	947	
65		FY 2028 Subtotal:	-	-	-	-	249,000	238,494	-					220,201	21,727	
66	2029	Environment	1116702	-	10/31/2013	10/31/2028	6,000	6,000	3.880%					6,000		
67	2029	Environment	1116708	-	1/31/2014	1/31/2029	3,000	3,000	3.896%					3,000		
68	2029	Construction	1116889	-	5/31/2022	5/31/2029	33,000	33,000	2.948%					33,000		
69	2029	Construction (AS)	1159936	-	5/31/2024	5/31/2029	-	15,000	2.158%					15,000		
70	2029	Environment	1116723	-	7/31/2014	7/31/2029	3,000	3,000	2.922%					3,000		
71	2029	Construction	1116648	-	8/2/2011	8/31/2029	50,000	50,000	4.238%					50,000		
72	2029	Construction	1116652	-	8/2/2011	8/31/2035	40,000	40,000	4.446%					32,599	2,545	
73	2029	Construction	1116653	-	8/2/2011	8/31/2035	40,000	40,000	4.446%					40,000	3,123	
74	2029	Construction	1116654	-	8/2/2011	8/31/2035	45,000	45,000	4.446%					45,000	3,514	
75	2029	Construction	1116705	-	12/31/2013	12/31/2035	10,000	10,000	4.472%					10,000	816	
76	2029	Construction	1116645	-	6/22/2011	6/30/2036	50,000	50,000	4.629%					50,000	4,862	
77	2029	Construction	1116646	-	6/22/2011	6/30/2040	25,000	18,294	4.775%					18,294	2,416	
78		FY 2029 Subtotal:	-	-	-	-	305,000	313,294	-					305,893	17,277	

**TABLE 11-4
APPLICATION OF AMORTIZATION (\$000S) (FY 2024)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
Fiscal Year	Project	Bond ID	Debt Type	In Service	Bond Due Date	Initial Principal	Current Principal	Original Rate	Effective Rate	Refinance Type	Refinanced Date	Rolled Maturity Date	Roll Rate	Principal Paid	Premium	Discount
79	2030	Construction	1116694	-	11/20/2013	10/31/2029	55,000	55,000	4.093%					55,000		
80	2030	Construction	1116743	-	3/31/2015	3/31/2030	3,000	3,000	2.626%					3,000		
81	2030	Construction	1116890	-	5/31/2022	5/31/2030	30,000	30,000	3.019%					30,000		
82	2030	Construction	1116769	-	9/30/2015	9/30/2030	15,000	15,000	2.905%					15,000		
83	2030	Construction	1116649	-	8/2/2011	8/31/2032	98,900	98,900	4.355%					62,257	1,932	
84	2030	Construction	1116650	-	8/2/2011	8/31/2033	40,000	40,000	4.386%					40,000	1,755	
85	2030	Construction	1116651	-	8/2/2011	8/31/2034	40,000	40,000	4.416%					40,000	2,275	
86	2030	Construction	1116652	-	8/2/2011	8/31/2035	40,000	7,401	4.446%					7,401	519	
87	2030	Construction	1116704	-	11/30/2013	11/30/2035	15,000	15,000	4.365%					15,000	948	
88	2030	Construction	1116689	-	11/20/2013	6/30/2036	36,000	36,000	4.397%					36,000	2,717	
89	2030	Construction	1116707	-	1/31/2014	1/31/2043	15,000	15,000	4.380%					15,000	1,457	
90		FY 2030 Subtotal:	-	-	-	-	387,900	355,301	-					318,657	11,603	
91	2031	Construction	1116690	-	11/20/2013	1/31/2031	30,000	30,000	4.162%					30,000		
92	2031	Construction	1116692	-	11/20/2013	2/28/2031	15,000	15,000	4.166%					15,000		
93	2031	Environment	1116863	-	3/31/2021	3/31/2031	13,000	13,000	1.804%					13,000		
94	2031	Construction	1116693	-	11/20/2013	3/31/2031	18,000	18,000	4.171%					18,000		
95	2031	Construction	1116649	-	8/2/2011	8/31/2032	98,900	36,643	4.355%					36,643	724	
96	2031	Construction	1116695	-	11/20/2013	4/30/2034	28,000	28,000	4.311%					28,000	1,009	
97	2031	Construction	1116688	-	11/20/2013	8/31/2034	6,000	6,000	4.324%					6,000	251	
98	2031	Construction	1116680	-	9/30/2013	9/30/2034	9,000	9,000	4.214%					9,000	347	
99	2031	Construction	1116691	-	11/20/2013	5/31/2035	20,000	20,000	4.354%					20,000	980	
100	2031	Construction	1116701	-	10/31/2013	10/31/2035	64,000	64,000	4.222%					64,000	3,154	
101	2031	Construction	1116893	-	6/30/2022	6/30/2040	32,000	32,000	3.811%					32,000	1,296	
102	2031	Construction	1116892	-	6/30/2022	6/30/2044	34,000	34,000	3.890%					34,000	1,579	
103	2031	Construction	1159990	-	8/31/2024	8/31/2054	-	165,667	3.329%					20,527		
104		FY 2031 Subtotal:	-	-	-	-	367,900	471,310	-					326,171	9,339	
105	2032	Environment	1116898	-	8/31/2022	8/31/2037	11,000	11,000	3.254%					11,000	113	
106	2032	Construction	1116896	-	8/31/2022	8/31/2046	28,000	28,000	3.254%					17,986		499
107	2032	Construction	1159989	-	5/31/2024	5/31/2053	-	165,667	3.300%					165,667		
108	2032	Construction	1159990	-	8/31/2024	8/31/2054	-	145,140	3.329%					145,140		
109		FY 2032 Subtotal:	-	-	-	-	39,000	349,807	-					339,792	113	499
110	2033	Construction	1116848	-	5/31/2020	11/30/2032	21,000	21,000	1.231%					21,000		
111	2033	Environment	1116850	-	5/31/2020	11/30/2032	7,000	7,000	1.231%					7,000		
112	2033	Construction	1116853	-	6/30/2020	6/30/2033	21,000	21,000	1.238%					21,000		
113	2033	Construction	1116859	-	7/31/2020	7/31/2033	10,000	10,000	1.157%					10,000		
114	2033	Construction	1116796	-	7/31/2017	7/31/2045	27,000	27,000	3.230%					12,686		266
115	2033	Construction	1116896	-	8/31/2022	8/31/2046	28,000	9,515	3.254%					9,297		218
116	2033	Construction	1116806	-	9/30/2017	9/30/2047	10,000	10,000	3.247%					9,731		269
117	2033	Construction	1116895	-	8/31/2022	8/31/2049	30,000	30,000	3.254%					28,924		1,076
118	2033	Construction	1116894	-	8/31/2022	2/28/2050	36,000	36,000	3.254%					34,571		1,429
119	2033	Construction	1116897	-	8/31/2022	2/28/2050	25,000	25,000	3.254%					24,007		993
120	2033	Construction	1159991	-	9/30/2024	9/30/2051	-	165,667	3.241%					165,667		
121		FY 2033 Subtotal:	-	-	-	-	215,000	362,182	-					343,884		4,251
122	2034	Construction	1116714	-	4/30/2014	2/28/2034	45,000	45,000	0.668%					45,000		
123	2034	Construction	1116713	-	4/30/2014	3/31/2034	45,000	18,300	1.133%					18,300		
124	2034	Construction	1116775	-	10/31/2015	8/31/2034	19,000	19,000	0.668%					19,000		
125	2034	Construction	1116792	-	7/31/2017	7/31/2041	19,000	19,000	3.164%					18,981		19
126	2034	Construction	1116803	-	9/30/2017	9/30/2041	17,000	17,000	3.156%					16,974		26
127	2034	Construction	1116793	-	7/31/2017	7/31/2042	14,000	14,000	3.181%					13,932		68
128	2034	Construction	1116794	-	7/31/2017	7/31/2043	23,000	23,000	3.198%					22,783		217
129	2034	Construction	1116798	-	8/31/2017	8/31/2043	10,000	10,000	3.024%					1,030		25
130	2034	Construction	1116804	-	9/30/2017	9/30/2043	14,000	14,000	3.193%					13,862		138
131	2034	Construction	1116795	-	7/31/2017	7/31/2044	17,000	17,000	3.215%					16,749		251
132	2034	Construction	1116805	-	9/30/2017	9/30/2044	9,000	9,000	3.209%					8,863		137
133	2034	Construction	1116796	-	7/31/2017	7/31/2045	27,000	14,048	3.230%					13,810		237
134	2034	Construction	1116801	-	8/31/2017	8/31/2046	22,000	22,000	3.066%					21,183		817
135	2034	Construction	1116800	-	8/31/2017	8/31/2047	18,000	18,000	3.076%					17,263		737
136		FY 2034 Subtotal:	-	-	-	-	299,000	259,348	-					247,731		2,671
137	2035	Construction	1116776	-	10/31/2015	10/31/2034	2,000	2,000	3.198%					2,000		
138	2035	Construction	1116725	-	8/31/2014	8/31/2035	15,000	15,000	0.668%					15,000		
139	2035	Environment	1116887	-	2/28/2022	8/31/2035	7,000	7,000	2.444%					7,000		
140	2035	Construction	1116799	-	8/31/2017	8/31/2041	13,000	13,000	2.991%					12,904		
141	2035	Construction	1116798	-	8/31/2017	8/31/2043	10,000	8,945	3.024%					8,795		151
142	2035	Construction	1160002	-	6/30/2023	6/30/2050	-	55,788	3.016%					55,788		
143	2035	Construction	1159986	-	4/30/2023	4/30/2052	-	262,000	2.985%					43,579		
144	2035	Construction	1159987	-	5/31/2023	5/31/2053	-	79,562	3.016%					79,562		
145		FY 2035 Subtotal:	-	-	-	-	47,000	443,295	-					224,627		247
146	2036	Construction	1116847	-	5/31/2020	5/31/2036	29,000	29,000	1.513%					29,000		
147	2036	Construction	1159986	-	4/30/2023	4/30/2052	-	218,421	2.985%					198,287		
148		FY 2036 Subtotal:	-	-	-	-	29,000	247,421	-					227,287		

**TABLE 11-4
APPLICATION OF AMORTIZATION (\$000S) (FY 2024)**

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
	Fiscal Year	Project	Bond ID	Debt Type	In Service	Bond Due Date	Initial Principal	Current Principal	Original Rate	Effective Rate	Refinance Type	Refinanced Date	Rolled Maturity Date	Roll Rate	Principal Paid	Premium	Discount
149	2037	Construction	1116831	-	11/30/2019	3/31/2037	36,000	36,000	2.349%	2.349%					36,000		
150	2037	Construction	1116826	-	7/31/2019	7/31/2037	46,940	46,940	2.680%	2.680%					46,940		
151	2037	Construction	1116802	-	8/31/2017	8/31/2037	30,000	30,000	2.902%	2.902%					30,000		
152	2037	Construction	1116797	-	8/31/2017	8/31/2038	7,000	7,000	2.929%	2.929%					6,993		7
153	2037	Environment	1159922	-	5/31/2024	5/31/2039	-	6,000	2.887%	2.887%					6,000		
154	2037	Construction	1116882	-	2/17/2022	8/31/2041	35,000	35,000	2.715%	2.715%					25,325		354
155	2037	Construction	1116885	-	2/17/2022	8/31/2042	30,000	30,000	2.743%	2.743%					29,545		455
156	2037	Construction	1116883	-	2/28/2022	2/28/2043	32,000	32,000	2.750%	2.750%					31,370		630
157	2037	Construction	1116884	-	2/17/2022	2/28/2050	31,000	31,000	2.822%	2.822%					29,024		1,976
158	2037	Construction	1159986	-	4/30/2023	4/30/2052	-	20,134	2.985%	2.985%					20,134		
159		FY 2037 Subtotal:	-	-	-	-	247,940	274,074	-	-	-	-	-	-	261,332	-	3,421
160	2038	Environment	1159921	-	5/31/2023	5/31/2038	-	6,000	2.558%	2.558%					6,000		
161	2038	Construction	1116832	-	11/30/2019	6/30/2038	37,000	37,000	2.429%	2.429%					37,000		
162	2038	Construction	1116833	-	11/30/2019	9/30/2039	39,000	39,000	2.495%	2.495%					38,721		279
163	2038	Construction	1116881	-	2/28/2022	8/31/2040	40,000	40,000	2.682%	2.682%					39,650		350
164	2038	Construction	1116864	-	3/31/2021	3/31/2041	6,000	6,000	2.347%	2.347%					2,273		45
165	2038	Construction	1116882	-	2/17/2022	8/31/2041	35,000	9,321	2.715%	2.715%					9,219		102
166	2038	Construction	1116865	-	3/31/2021	3/31/2042	46,000	46,000	2.400%	2.400%					44,920		1,080
167	2038	Construction	1116866	-	3/31/2021	9/30/2044	34,000	34,000	2.515%	2.515%					32,854		1,146
168	2038	Construction	1116870	-	5/31/2021	11/30/2044	42,000	42,000	2.408%	2.408%					40,187		1,813
169	2038	Construction	1116867	-	3/31/2021	9/30/2045	14,000	14,000	2.550%	2.550%					13,438		562
170		FY 2038 Subtotal:	-	-	-	-	293,000	273,321	-	-	-	-	-	-	264,262	-	5,377
171	2039	Construction	1116839	-	4/30/2020	4/30/2039	45,000	45,000	1.594%	1.594%					45,000		
172	2039	Construction	1116864	-	3/31/2021	3/31/2041	6,000	3,682	2.347%	2.347%					3,633		49
173	2039	Construction	1116872	-	6/30/2021	6/30/2041	40,000	40,000	2.083%	2.083%					39,101		899
174	2039	Construction	1116869	-	5/31/2021	5/31/2043	45,000	45,000	2.344%	2.344%					43,854		1,146
175	2039	Construction	1116878	-	8/31/2021	8/31/2044	39,000	39,000	2.006%	2.006%					37,059		1,941
176	2039	Construction	1116873	-	6/30/2021	6/30/2045	34,000	34,000	2.240%	2.240%					32,350		1,650
177	2039	Construction	1116876	-	7/31/2021	1/31/2046	27,000	27,000	2.025%	2.025%					25,182		1,818
178	2039	Construction	1116857	-	8/31/2020	2/28/2049	11,000	11,000	1.990%	1.990%					5,662		674
179	2039	Construction	1116858	-	8/31/2020	8/31/2049	39,000	39,000	1.992%	1.992%					34,705		4,295
180		FY 2039 Subtotal:	-	-	-	-	286,000	283,682	-	-	-	-	-	-	266,547	-	12,471
181	2040	Construction	1116860	-	7/31/2020	1/31/2040	30,000	30,000	1.421%	1.421%					30,000		
182	2040	Construction	1116879	-	8/31/2021	8/31/2042	33,000	33,000	1.925%	1.925%					32,136		864
183	2040	Construction	1116846	-	5/31/2020	5/31/2046	26,000	26,000	1.931%	1.931%					24,431		1,569
184	2040	Construction	1116851	-	5/31/2020	11/30/2047	24,000	24,000	1.949%	1.949%					22,095		1,905
185	2040	Construction	1116845	-	4/30/2020	4/30/2048	67,000	67,000	1.806%	1.806%					39,582		4,009
186	2040	Construction	1116849	-	5/31/2020	5/31/2048	21,000	21,000	1.953%	1.953%					19,249		1,751
187	2040	Construction	1116852	-	5/31/2020	5/31/2048	42,000	42,000	1.953%	1.953%					38,498		3,502
188	2040	Construction	1116857	-	8/31/2020	2/28/2049	11,000	4,664	1.990%	1.990%					4,227		438
189	2040	Construction	1116856	-	6/30/2020	6/30/2049	63,800	63,800	1.812%	1.812%					56,837		6,963
190		FY 2040 Subtotal:	-	-	-	-	317,800	311,464	-	-	-	-	-	-	267,055	-	21,000
191	2041	Construction	1116861	-	7/31/2020	7/31/2045	19,000	19,000	1.626%	1.626%					17,938		1,062
192	2041	Construction	1116840	-	4/30/2020	4/30/2046	9,000	9,000	1.776%	1.776%					8,504		496
193	2041	Construction	1116841	-	4/30/2020	4/30/2046	48,000	48,000	1.776%	1.776%					45,355		2,645
194	2041	Construction	1116842	-	4/30/2020	4/30/2047	4,000	4,000	1.792%	1.792%					3,732		268
195	2041	Construction	1116843	-	4/30/2020	4/30/2047	72,000	72,000	1.792%	1.792%					67,177		4,823
196	2041	Construction	1116854	-	6/30/2020	6/30/2047	20,000	20,000	1.805%	1.805%					18,579		1,421
197	2041	Construction	1116855	-	6/30/2020	6/30/2047	30,000	30,000	1.805%	1.805%					27,869		2,131
198	2041	Construction	1116810	-	8/31/2018	2/28/2048	12,000	12,000	0.668%	0.668%					10,370		1,630
199	2041	Construction	1116844	-	4/30/2020	4/30/2048	19,000	19,000	1.806%	1.806%					17,498		1,502
200	2041	Construction	1116845	-	4/30/2020	4/30/2048	67,000	23,409	1.806%	1.806%					21,559		1,850
201	2041	Replacements	1107885	-	3/31/2025	3/31/2060	210,960	210,960	3.329%	3.329%					21,186		
202		FY 2041 Subtotal:	-	-	-	-	510,960	467,369	-	-	-	-	-	-	259,768	-	17,827
203	2042	Replacements	1107885	-	3/31/2025	3/31/2060	210,960	189,774	3.329%	3.329%					189,774		
204	2042	Replacements	1107886	-	3/31/2026	3/31/2061	210,960	210,960	3.329%	3.329%					90,753		
205		FY 2042 Subtotal:	-	-	-	-	421,920	400,734	-	-	-	-	-	-	280,527	-	
206	2043	Replacements	1107886	-	3/31/2026	3/31/2061	210,960	120,207	3.329%	3.329%					120,207		
207	2043	Replacements	1107887	-	3/31/2027	3/31/2062	210,960	210,960	3.329%	3.329%					150,602		
208		FY 2043 Subtotal:	-	-	-	-	421,920	331,167	-	-	-	-	-	-	270,809	-	
209	2044	Replacements	1107887	-	3/31/2027	3/31/2062	210,960	60,358	3.329%	3.329%					60,358		
210	2044	Replacements	1107888	-	3/31/2028	3/31/2063	210,960	210,960	3.329%	3.329%					210,960		
211	2044	Replacements	1107889	-	3/31/2029	3/31/2064	210,960	210,960	3.329%	3.329%					2,855		
212		FY 2044 Subtotal:	-	-	-	-	632,880	482,278	-	-	-	-	-	-	274,173	-	
213	2045	Replacements	1107889	-	3/31/2029	3/31/2064	210,960	208,105	3.329%	3.329%					208,105		
214	2045	Replacements	1107890	-	3/31/2030	3/31/2065	210,960	210,960	3.329%	3.329%					71,882		
215		FY 2045 Subtotal:	-	-	-	-	421,920	419,065	-	-	-	-	-	-	279,987	-	
216	2046	Replacements	1107890	-	3/31/2030	3/31/2065	210,960	139,078	3.329%	3.329%					139,078		
217	2046	Replacements	1107891	-	3/31/2031	3/31/2066	210,960	210,960	3.329%	3.329%					146,309		
218		FY 2046 Subtotal:	-	-	-	-	421,920	350,038	-	-	-	-	-	-	285,386	-	
219	2047	Replacements	1107891	-	3/31/2031	3/31/2066	210,960	64,651	3.329%	3.329%					64,651		
220	2047	Replacements	1107892	-	3/31/2032	3/31/2067	210,960	210,960	3.329%	3.329%					210,960		
221	2047	Replacements	1107893	-	3/31/2033	3/31/2068	210,960	210,960	3.329%	3.329%					37,779		
222		FY 2047 Subtotal:	-	-	-	-	632,880	486,571	-	-	-	-	-	-	313,390	-	

**TABLE 11-4
APPLICATION OF AMORTIZATION (\$000S) (FY 2024)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q		
Fiscal Year	Project	Bond ID	Debt Type	In Service	Bond Due Date	Initial Principal	Current Principal	Original Rate	Effective Rate	Refinance Type	Refinanced Date	Rolled Maturity Date	Roll Rate	Principal Paid	Premium	Discount		
223	2048	Replacements	1107893	-	3/31/2033	3/31/2068	210,960	173,181	3.329%	3.329%						173,181		
224	2048	Replacements	1107894	-	3/31/2034	3/31/2069	210,960	210,960	3.329%	3.329%						210,960		
225	2048	Replacements	1107895	-	3/31/2035	3/31/2070	210,960	210,960	3.329%	3.329%						17,713		
226		FY 2048 Subtotal:	-	-	-	-	632,880	595,101	-	-						401,854		
227	2049	Replacements	1107895	-	3/31/2035	3/31/2070	210,960	193,247	3.329%	3.329%						193,247		
228	2049	Replacements	1107896	-	3/31/2036	3/31/2071	210,960	210,960	3.329%	3.329%						210,960		
229	2049	Replacements	1107897	-	3/31/2037	3/31/2072	210,960	210,960	3.329%	3.329%						4,115		
230		FY 2049 Subtotal:	-	-	-	-	632,880	615,167	-	-						408,322		
231	2050	Replacements	1107897	-	3/31/2037	3/31/2072	210,960	206,845	3.329%	3.329%						206,845		
232	2050	Replacements	1107898	-	3/31/2038	3/31/2073	210,960	210,960	3.329%	3.329%						208,164		
233		FY 2050 Subtotal:	-	-	-	-	421,920	417,805	-	-						415,009		
234	2051	Replacements	1107898	-	3/31/2038	3/31/2073	210,960	2,796	3.329%	3.329%						2,796		
235	2051	Replacements	1107899	-	3/31/2039	3/31/2074	210,960	210,960	3.329%	3.329%						210,960		
236	2051	Replacements	1107900	-	3/31/2040	3/31/2075	210,960	210,960	3.329%	3.329%						208,167		
237		FY 2051 Subtotal:	-	-	-	-	632,880	424,716	-	-						421,923		
238	2052	Replacements	1107900	-	3/31/2040	3/31/2075	210,960	2,793	3.329%	3.329%						2,793		
239	2052	Replacements	1107901	-	3/31/2041	3/31/2076	210,960	210,960	3.329%	3.329%						210,960		
240	2052	Replacements	1107902	-	3/31/2042	3/31/2077	210,960	210,960	3.329%	3.329%						210,960		
241	2052	Replacements	1107903	-	3/31/2043	3/31/2078	210,960	210,960	3.329%	3.329%						4,358		
242		FY 2052 Subtotal:	-	-	-	-	843,840	635,673	-	-						429,071		
243	2053	Replacements	1107903	-	3/31/2043	3/31/2078	210,960	206,602	3.329%	3.329%						206,602		
244	2053	Replacements	1107904	-	3/31/2044	3/31/2079	210,960	210,960	3.329%	3.329%						210,960		
245	2053	Replacements	1107905	-	3/31/2045	3/31/2080	210,960	210,960	3.329%	3.329%						18,898		
246		FY 2053 Subtotal:	-	-	-	-	632,880	628,522	-	-						436,461		
247	2054	Replacements	1107905	-	3/31/2045	3/31/2080	210,960	192,062	3.329%	3.329%						192,062		
248	2054	Replacements	1107906	-	3/31/2046	3/31/2081	210,960	210,960	3.329%	3.329%						210,960		
249	2054	Replacements	1107907	-	3/31/2047	3/31/2082	210,960	210,960	3.329%	3.329%						41,080		
250		FY 2054 Subtotal:	-	-	-	-	632,880	613,982	-	-						444,101		
251	2055	Replacements	1107907	-	3/31/2047	3/31/2082	210,960	169,880	3.329%	3.329%						169,880		
252	2055	Replacements	1107908	-	3/31/2048	3/31/2083	210,960	210,960	3.329%	3.329%						210,960		
253	2055	Replacements	1107909	-	3/31/2049	3/31/2084	210,960	210,960	3.329%	3.329%						71,160		
254		FY 2055 Subtotal:	-	-	-	-	632,880	591,800	-	-						452,001		
255	2056	Replacements	1107909	-	3/31/2049	3/31/2084	210,960	139,800	3.329%	3.329%						139,800		
256	2056	Replacements	1107910	-	3/31/2050	3/31/2085	210,960	210,960	3.329%	3.329%						210,960		
257	2056	Replacements	1107911	-	3/31/2051	3/31/2086	210,960	210,960	3.329%	3.329%						109,408		
258		FY 2056 Subtotal:	-	-	-	-	632,880	561,720	-	-						460,168		
259	2057	Replacements	1107911	-	3/31/2051	3/31/2086	210,960	101,552	3.329%	3.329%						101,552		
260	2057	Replacements	1107912	-	3/31/2052	3/31/2087	210,960	210,960	3.329%	3.329%						210,960		
261	2057	Replacements	1107913	-	3/31/2053	3/31/2088	210,960	210,960	3.329%	3.329%						156,099		
262		FY 2057 Subtotal:	-	-	-	-	632,880	523,472	-	-						468,611		
263	2058	Replacements	1107913	-	3/31/2053	3/31/2088	210,960	54,861	3.329%	3.329%						54,861		
264	2058	Replacements	1107914	-	3/31/2054	3/31/2089	210,960	210,960	3.329%	3.329%						210,960		
265	2058	Replacements	1107915	-	3/31/2055	3/31/2090	210,960	210,960	3.329%	3.329%						210,960		
266	2058	Replacements	1107916	-	3/31/2056	3/31/2091	210,960	210,960	3.329%	3.329%						560		
267		FY 2058 Subtotal:	-	-	-	-	843,840	687,741	-	-						477,341		
268	2059	Replacements	1107916	-	3/31/2056	3/31/2091	210,960	210,400	3.329%	3.329%						210,400		
269	2059	Replacements	1107917	-	3/31/2057	3/31/2092	210,960	210,960	3.329%	3.329%						210,960		
270	2059	Replacements	1107918	-	3/31/2058	3/31/2093	210,960	210,960	3.329%	3.329%						65,007		
271		FY 2059 Subtotal:	-	-	-	-	632,880	632,320	-	-						486,367		
272	Grand Total						\$15,551,160	\$15,241,587								\$11,903,663	\$86,753	\$67,765

**TABLE 11-5
SUMMARY OF INTEREST (\$000S) (FY 2025)**

	A	B	C	D	E	F	G	H
1	General Project	Specific Project	2023	2024	2025	2026	2027	2028
2	BPA Borrowing	(Less Interest Income)	(227)	(452)	(672)	(682)	(745)	(780)
3		Construction	111,849	117,960	132,876	146,954	139,855	133,041
4		Interest Accrual	23,936	25,692	28,383	27,293	26,519	25,280
5		Interest Accrual Reversal	(19,803)	(23,936)	(25,692)	(28,383)	(27,293)	(26,519)
6		Construction (AS)	1,174	1,276	1,480	2,252	2,243	1,960
7		Interest Accrual	189	297	560	560	502	375
8		Interest Accrual Reversal	(114)	(189)	(297)	(560)	(560)	(502)
9		Environment	2,351	2,466	2,387	2,551	2,551	2,192
10		Interest Accrual	475	521	611	611	541	475
11		Interest Accrual Reversal	(424)	(475)	(521)	(611)	(611)	(541)
12		Technology (T)	177	177	177	177	88	-
13		Interest Accrual	15	15	15	15	-	-
14		Interest Accrual Reversal	(15)	(15)	(15)	(15)	(15)	-
15		BPA Borrowing Subtotal:	119,582	123,338	139,293	150,161	143,076	134,981
16	Federal Transmission	Replacements	-	-	-	3,975	11,926	19,877
17	Replacement	Federal Transmission Replacement Subtotal:	-	-	-	3,975	11,926	19,877
18	Total		119,582	123,338	139,293	154,136	155,002	154,858

**TABLE 11-5
SUMMARY OF INTEREST (\$000S) (FY 2025)**

	A	B	I	J	K	L	M	N
1	General Project	Specific Project	2029	2030	2031	2032	2033	2034
2	BPA Borrowing	(Less Interest Income)	(982)	(987)	(993)	(994)	(999)	(748)
3		Construction	125,466	112,601	101,825	89,684	79,368	71,985
4		Interest Accrual	22,802	20,692	18,624	16,306	14,982	13,515
5		Interest Accrual Reversal	(25,280)	(22,802)	(20,692)	(18,624)	(16,306)	(14,982)
6		Construction (AS)	1,121	797	-	-	-	-
7		Interest Accrual	267	-	-	-	-	-
8		Interest Accrual Reversal	(375)	(267)	-	-	-	-
9		Environment	1,918	1,656	1,539	1,421	1,378	1,335
10		Interest Accrual	344	344	344	344	315	315
11		Interest Accrual Reversal	(475)	(344)	(344)	(344)	(344)	(315)
12		Technology (T)	-	-	-	-	-	-
13		Interest Accrual	-	-	-	-	-	-
14		Interest Accrual Reversal	-	-	-	-	-	-
15		BPA Borrowing Subtotal:	124,805	111,690	100,303	87,793	78,395	71,105
16	Federal Transmission	Replacements	27,828	35,779	43,730	51,681	59,632	67,583
17	Replacement	Federal Transmission Replacement Subtotal:	27,828	35,779	43,730	51,681	59,632	67,583
18	Total		152,633	147,470	144,033	139,474	138,027	138,688

**TABLE 11-5
SUMMARY OF INTEREST (\$000S) (FY 2025)**

	A	B	O	P	Q	R	S	T
1	General Project	Specific Project	2035	2036	2037	2038	2039	2040
2	BPA Borrowing	(Less Interest Income)	(687)	(699)	(781)	(792)	(798)	(802)
3		Construction	64,716	60,983	53,298	45,864	39,779	34,449
4		Interest Accrual	12,773	11,041	10,484	10,104	9,381	7,973
5		Interest Accrual Reversal	(13,515)	(12,773)	(11,041)	(10,484)	(10,104)	(9,381)
6		Construction (AS)	-	-	-	-	-	-
7		Interest Accrual	-	-	-	-	-	-
8		Interest Accrual Reversal	-	-	-	-	-	-
9		Environment	1,335	986	808	808	654	-
10		Interest Accrual	301	271	271	219	-	-
11		Interest Accrual Reversal	(315)	(301)	(271)	(271)	(219)	-
12		Technology (T)	-	-	-	-	-	-
13		Interest Accrual	-	-	-	-	-	-
14		Interest Accrual Reversal	-	-	-	-	-	-
15		BPA Borrowing Subtotal:	64,607	59,507	52,767	45,448	38,692	32,240
16	Federal Transmission	Replacements	75,534	83,485	91,436	99,387	107,338	115,289
17	Replacement	Federal Transmission Replacement Subtotal:	75,534	83,485	91,436	99,387	107,338	115,289
18	Total		140,141	142,992	144,203	144,835	146,030	147,529

**TABLE 11-5
SUMMARY OF INTEREST (\$000S) (FY 2025)**

	A	B	U	V	W	X	Y	Z
1	General Project	Specific Project	2041	2042	2043	2044	2045	2046
2	BPA Borrowing	(Less Interest Income)	(783)	(832)	(799)	(804)	(807)	(811)
3		Construction	29,517	22,766	14,783	9,968	5,225	1,800
4		Interest Accrual	6,026	4,210	3,168	2,142	737	-
5		Interest Accrual Reversal	(7,973)	(6,026)	(4,210)	(3,168)	(2,142)	(737)
6		Construction (AS)	-	-	-	-	-	-
7		Interest Accrual	-	-	-	-	-	-
8		Interest Accrual Reversal	-	-	-	-	-	-
9		Environment	-	-	-	-	-	-
10		Interest Accrual	-	-	-	-	-	-
11		Interest Accrual Reversal	-	-	-	-	-	-
12		Technology (T)	-	-	-	-	-	-
13		Interest Accrual	-	-	-	-	-	-
14		Interest Accrual Reversal	-	-	-	-	-	-
15		BPA Borrowing Subtotal:	26,787	20,118	12,941	8,138	3,013	252
16	Federal Transmission	Replacements	123,239	131,190	139,141	147,092	155,043	160,812
17	Replacement	Federal Transmission Replacement Subtotal:	123,239	131,190	139,141	147,092	155,043	160,812
18	Total		150,027	151,309	152,083	155,230	158,056	161,064

**TABLE 11-5
SUMMARY OF INTEREST (\$000S) (FY 2025)**

	A	B	AA	AB	AC	AD	AE	AF
1	General Project	Specific Project	2047	2048	2049	2050	2051	2052
2	BPA Borrowing	(Less Interest Income)	(875)	(1,094)	(1,100)	(1,106)	(1,112)	(1,118)
3		Construction	-	-	-	-	-	-
4		Interest Accrual	-	-	-	-	-	-
5		Interest Accrual Reversal	-	-	-	-	-	-
6		Construction (AS)	-	-	-	-	-	-
7		Interest Accrual	-	-	-	-	-	-
8		Interest Accrual Reversal	-	-	-	-	-	-
9		Environment	-	-	-	-	-	-
10		Interest Accrual	-	-	-	-	-	-
11		Interest Accrual Reversal	-	-	-	-	-	-
12		Technology (T)	-	-	-	-	-	-
13		Interest Accrual	-	-	-	-	-	-
14		Interest Accrual Reversal	-	-	-	-	-	-
15		BPA Borrowing Subtotal:	(875)	(1,094)	(1,100)	(1,106)	(1,112)	(1,118)
16	Federal Transmission	Replacements	161,995	159,234	154,853	150,312	145,606	140,729
17	Replacement	Federal Transmission Replacement Subtotal:	161,995	159,234	154,853	150,312	145,606	140,729
18	Total		161,120	158,140	153,753	149,206	144,494	139,611

**TABLE 11-5
SUMMARY OF INTEREST (\$000S) (FY 2025)**

	A	B	AG	AH	AI	AJ	AK	AL
1	General Project	Specific Project	2053	2054	2055	2056	2057	2058
2	BPA Borrowing	(Less Interest Income)	(1,124)	(1,131)	(1,138)	(1,145)	(1,153)	(1,160)
3		Construction	-	-	-	-	-	-
4		Interest Accrual	-	-	-	-	-	-
5		Interest Accrual Reversal	-	-	-	-	-	-
6		Construction (AS)	-	-	-	-	-	-
7		Interest Accrual	-	-	-	-	-	-
8		Interest Accrual Reversal	-	-	-	-	-	-
9		Environment	-	-	-	-	-	-
10		Interest Accrual	-	-	-	-	-	-
11		Interest Accrual Reversal	-	-	-	-	-	-
12		Technology (T)	-	-	-	-	-	-
13		Interest Accrual	-	-	-	-	-	-
14		Interest Accrual Reversal	-	-	-	-	-	-
15		BPA Borrowing Subtotal:	(1,124)	(1,131)	(1,138)	(1,145)	(1,153)	(1,160)
16	Federal Transmission	Replacements	135,675	130,436	125,008	119,381	113,550	107,507
17	Replacement	Federal Transmission Replacement Subtotal:	135,675	130,436	125,008	119,381	113,550	107,507
18	Total		134,550	129,305	123,869	118,236	112,398	106,347

**TABLE 11-5
SUMMARY OF INTEREST (\$000S) (FY 2025)**

	A	B	AM	AN	AO
1	General Project	Specific Project	2059	2060	Total
2	BPA Borrowing	(Less Interest Income)	(1,168)	(1,186)	(34,267)
3		Construction	-	-	1,746,613
4		Interest Accrual	-	-	342,064
5		Interest Accrual Reversal	-	-	(361,867)
6		Construction (AS)	-	-	12,303
7		Interest Accrual	-	-	2,752
8		Interest Accrual Reversal	-	-	(2,866)
9		Environment	-	-	28,336
10		Interest Accrual	-	-	6,301
11		Interest Accrual Reversal	-	-	(6,725)
12		Technology (T)	-	-	794
13		Interest Accrual	-	-	60
14		Interest Accrual Reversal	-	-	(75)
15		BPA Borrowing Subtotal:	(1,168)	(1,186)	1,733,422
16	Federal Transmission	Replacements	101,244	94,691	3,591,220
17	Replacement	Federal Transmission Replacement Subtotal:	101,244	94,691	3,591,220
18	Total		100,076	93,506	5,324,642

**TABLE 11-6
INTEREST CALCULATION SUMMARY
(\$000s)(FY 2025)**

A	B	C	D	E	F	G	H	I
Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
1	2023 Construction	Historical	3,691,940	3.030%	111,849	-	(729)	111,120
2	2023 Construction	New	568,000	-	-	-	4,862	4,862
3	2023 Construction (AS)	Historical	46,800	2.508%	1,174	-	-	1,174
4	2023 Construction (AS)	New	13,000	-	-	-	75	75
5	2023 Environment	Historical	92,000	2.555%	2,351	-	-	2,351
6	2023 Environment	New	6,000	-	-	-	51	51
7	2023 Technology (T)	Historical	9,000	1.962%	177	-	-	177
8	2023 Float	Historical	-	-	(227)	-	-	(227)
9	FY 2023	Subtotal:	4,426,740		115,323	-	4,259	119,582
10	2024 Construction	Historical	4,050,561	2.912%	117,960	-	(541)	117,418
11	2024 Construction	New	331,334	-	-	-	2,298	2,298
12	2024 Construction (AS)	Historical	59,800	2.134%	1,276	-	-	1,276
13	2024 Construction (AS)	New	15,000	-	-	-	108	108
14	2024 Environment	Historical	98,000	2.517%	2,466	-	(13)	2,454
15	2024 Environment	New	6,000	-	-	-	58	58
16	2024 Technology (T)	Historical	9,000	1.962%	177	-	-	177
17	2024 Float	Historical	-	-	(452)	-	-	(452)
18	FY 2024	Subtotal:	4,569,695		121,427	-	1,910	123,338
19	2025 Construction	Historical	4,354,350	3.052%	132,876	-	(572)	132,304
20	2025 Construction	New	396,188	-	-	-	3,264	3,264
21	2025 Construction (AS)	Historical	67,000	2.209%	1,480	-	(4)	1,476
22	2025 Construction (AS)	New	30,896	-	-	-	267	267
23	2025 Environment	Historical	100,000	2.387%	2,387	-	(71)	2,316
24	2025 Environment	New	15,248	-	-	-	161	161
25	2025 Technology (T)	Historical	9,000	1.962%	177	-	-	177
26	2025 Float	Historical	-	-	(672)	-	-	(672)
27	FY 2025	Subtotal:	4,972,683		136,248	-	3,044	139,293
28	2026 Construction	Historical	4,744,767	3.097%	146,954	-	(1,091)	145,863
29	2026 Construction (AS)	Historical	91,896	2.451%	2,252	-	-	2,252
30	2026 Environment	Historical	100,248	2.544%	2,551	-	-	2,551
31	2026 Replacements	New	222,840	1.784%	3,975	-	-	3,975
32	2026 Technology (T)	Historical	9,000	1.962%	177	-	-	177
33	2026 Float	Historical	-	-	(682)	-	-	(682)
34	FY 2026	Subtotal:	5,168,752		155,227	-	(1,091)	154,136
35	2027 Construction	Historical	4,564,248	3.064%	139,855	-	(773)	139,082
36	2027 Construction (AS)	Historical	91,896	2.441%	2,243	-	(58)	2,185
37	2027 Environment	Historical	100,248	2.544%	2,551	-	(70)	2,481
38	2027 Replacements	Historical	222,840	3.568%	7,951	-	-	7,951
39	2027 Replacements	New	222,840	1.784%	3,975	-	-	3,975
40	2027 Technology (T)	Historical	9,000	0.978%	88	-	(15)	73
41	2027 Float	Historical	-	-	(745)	-	-	(745)
42	FY 2027	Subtotal:	5,211,073		155,918	-	(916)	155,002
43	2028 Construction	Historical	4,399,603	3.024%	133,041	-	(1,239)	131,802
44	2028 Construction (AS)	Historical	77,896	2.516%	1,960	-	(127)	1,833
45	2028 Environment	Historical	82,248	2.666%	2,192	-	(66)	2,126
46	2028 Replacements	Historical	445,680	3.568%	15,902	-	-	15,902
47	2028 Replacements	New	222,840	1.784%	3,975	-	-	3,975
48	2028 Float	Historical	-	-	(780)	-	-	(780)
49	FY 2028	Subtotal:	5,228,267		156,291	-	(1,432)	154,858

TABLE 11-6
INTEREST CALCULATION SUMMARY
(\$000s)(FY 2025)

A	B	C	D	E	F	G	H	I
Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
50	2029 Construction	Historical	4,232,161	2.965%	125,466	-	(2,479)	122,987
51	2029 Construction (AS)	Historical	45,896	2.441%	1,121	-	(108)	1,012
52	2029 Environment	Historical	77,248	2.483%	1,918	-	(130)	1,788
53	2029 Replacements	Historical	668,520	3.568%	23,853	-	-	23,853
54	2029 Replacements	New	222,840	1.784%	3,975	-	-	3,975
55	2029 Float	Historical	-	-	(982)	-	-	(982)
56	FY 2029	Subtotal:	5,246,666		155,351	-	(2,717)	152,633
57	2030 Construction	Historical	3,974,538	2.833%	112,601	-	(2,109)	110,492
58	2030 Construction (AS)	Historical	30,896	2.579%	797	-	(267)	530
59	2030 Environment	Historical	65,248	2.538%	1,656	-	-	1,656
60	2030 Replacements	Historical	891,360	3.568%	31,804	-	-	31,804
61	2030 Replacements	New	222,840	1.784%	3,975	-	-	3,975
62	2030 Float	Historical	-	-	(987)	-	-	(987)
63	FY 2030	Subtotal:	5,184,882		149,846	-	(2,376)	147,470
64	2031 Construction	Historical	3,708,557	2.746%	101,825	-	(2,068)	99,757
65	2031 Environment	Historical	65,248	2.358%	1,539	-	-	1,539
66	2031 Replacements	Historical	1,114,200	3.568%	39,755	-	-	39,755
67	2031 Replacements	New	222,840	1.784%	3,975	-	-	3,975
68	2031 Float	Historical	-	-	(993)	-	-	(993)
69	FY 2031	Subtotal:	5,110,846		146,101	-	(2,068)	144,033
70	2032 Construction	Historical	3,418,249	2.624%	89,684	-	(2,318)	87,366
71	2032 Environment	Historical	52,248	2.720%	1,421	-	-	1,421
72	2032 Replacements	Historical	1,337,040	3.568%	47,706	-	-	47,706
73	2032 Replacements	New	222,840	1.784%	3,975	-	-	3,975
74	2032 Float	Historical	-	-	(994)	-	-	(994)
75	FY 2032	Subtotal:	5,030,378		141,792	-	(2,318)	139,474
76	2033 Construction	Historical	3,107,343	2.554%	79,368	-	(1,324)	78,044
77	2033 Environment	Historical	52,248	2.638%	1,378	-	(29)	1,349
78	2033 Replacements	Historical	1,559,880	3.568%	55,657	-	-	55,657
79	2033 Replacements	New	222,840	1.784%	3,975	-	-	3,975
80	2033 Float	Historical	-	-	(999)	-	-	(999)
81	FY 2033	Subtotal:	4,942,312		139,379	-	(1,353)	138,027
82	2034 Construction	Historical	2,797,164	2.574%	71,985	-	(1,467)	70,518
83	2034 Environment	Historical	45,248	2.951%	1,335	-	-	1,335
84	2034 Replacements	Historical	1,782,720	3.568%	63,607	-	-	63,607
85	2034 Replacements	New	222,840	1.784%	3,975	-	-	3,975
86	2034 Float	Historical	-	-	(748)	-	-	(748)
87	FY 2034	Subtotal:	4,847,973		140,156	-	(1,467)	138,688
88	2035 Construction	Historical	2,577,817	2.510%	64,716	-	(742)	63,974
89	2035 Environment	Historical	45,248	2.951%	1,335	-	(14)	1,321
90	2035 Replacements	Historical	2,005,560	3.568%	71,558	-	-	71,558
91	2035 Replacements	New	222,840	1.784%	3,975	-	-	3,975
92	2035 Float	Historical	-	-	(687)	-	-	(687)
93	FY 2035	Subtotal:	4,851,466		140,897	-	(757)	140,141

**TABLE 11-6
INTEREST CALCULATION SUMMARY
(\$000s)(FY 2025)**

A	B	C	D	E	F	G	H	I
Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
94	2036 Construction	Historical	2,388,243	2.553%	60,983	-	(1,732)	59,251
95	2036 Environment	Historical	38,248	2.577%	986	-	(30)	955
96	2036 Replacements	Historical	2,228,400	3.568%	79,509	-	-	79,509
97	2036 Replacements	New	222,840	1.784%	3,975	-	-	3,975
98	2036 Float	Historical	-	-	(699)	-	-	(699)
99	FY 2036 Subtotal:		4,877,732		144,754	-	(1,762)	142,992
100	2037 Construction	Historical	2,199,911	2.423%	53,298	-	(557)	52,741
101	2037 Environment	Historical	27,248	2.964%	808	-	-	808
102	2037 Replacements	Historical	2,451,240	3.568%	87,460	-	-	87,460
103	2037 Replacements	New	222,840	1.784%	3,975	-	-	3,975
104	2037 Float	Historical	-	-	(781)	-	-	(781)
105	FY 2037 Subtotal:		4,901,239		144,760	-	(557)	144,203
106	2038 Construction	Historical	1,969,640	2.329%	45,864	-	(379)	45,484
107	2038 Environment	Historical	27,248	2.964%	808	-	(51)	756
108	2038 Replacements	Historical	2,674,080	3.568%	95,411	-	-	95,411
109	2038 Replacements	New	222,840	1.784%	3,975	-	-	3,975
110	2038 Float	Historical	-	-	(792)	-	-	(792)
111	FY 2038 Subtotal:		4,893,808		145,266	-	(431)	144,835
112	2039 Construction	Historical	1,743,199	2.282%	39,779	-	(724)	39,055
113	2039 Environment	Historical	21,248	3.079%	654	-	(219)	435
114	2039 Replacements	Historical	2,896,920	3.568%	103,362	-	-	103,362
115	2039 Replacements	New	222,840	1.784%	3,975	-	-	3,975
116	2039 Float	Historical	-	-	(798)	-	-	(798)
117	FY 2039 Subtotal:		4,884,207		146,973	-	(943)	146,030
118	2040 Construction	Historical	1,531,417	2.250%	34,449	-	(1,408)	33,042
119	2040 Replacements	Historical	3,119,760	3.568%	111,313	-	-	111,313
120	2040 Replacements	New	222,840	1.784%	3,975	-	-	3,975
121	2040 Float	Historical	-	-	(802)	-	-	(802)
122	FY 2040 Subtotal:		4,874,017		148,936	-	(1,408)	147,529
123	2041 Construction	Historical	1,296,917	2.276%	29,517	-	(1,947)	27,570
124	2041 Replacements	Historical	3,342,600	3.568%	119,264	-	-	119,264
125	2041 Replacements	New	222,840	1.784%	3,975	-	-	3,975
126	2041 Float	Historical	-	-	(783)	-	-	(783)
127	FY 2041 Subtotal:		4,862,357		151,973	-	(1,947)	150,027
128	2042 Construction	Historical	1,070,402	2.127%	22,766	-	(1,816)	20,951
129	2042 Replacements	Historical	3,565,440	3.568%	127,215	-	-	127,215
130	2042 Replacements	New	222,840	1.784%	3,975	-	-	3,975
131	2042 Float	Historical	-	-	(832)	-	-	(832)
132	FY 2042 Subtotal:		4,858,682		153,124	-	(1,816)	151,309
133	2043 Construction	Historical	822,434	1.797%	14,783	-	(1,042)	13,741
134	2043 Replacements	Historical	3,788,280	3.568%	135,166	-	-	135,166
135	2043 Replacements	New	222,840	1.784%	3,975	-	-	3,975
136	2043 Float	Historical	-	-	(799)	-	-	(799)
137	FY 2043 Subtotal:		4,833,554		153,125	-	(1,042)	152,083
138	2044 Construction	Historical	581,754	1.713%	9,968	-	(1,026)	8,941
139	2044 Replacements	Historical	4,011,120	3.568%	143,117	-	-	143,117
140	2044 Replacements	New	222,840	1.784%	3,975	-	-	3,975
141	2044 Float	Historical	-	-	(804)	-	-	(804)
142	FY 2044 Subtotal:		4,815,714		156,256	-	(1,026)	155,230
143	2045 Construction	Historical	342,822	1.524%	5,225	-	(1,404)	3,820
144	2045 Replacements	Historical	4,233,960	3.568%	151,068	-	-	151,068
145	2045 Replacements	New	222,840	1.784%	3,975	-	-	3,975
146	2045 Float	Historical	-	-	(807)	-	-	(807)
147	FY 2045 Subtotal:		4,799,622		159,461	-	(1,404)	158,056

**TABLE 11-6
INTEREST CALCULATION SUMMARY
(\$000s)(FY 2025)**

A	B	C	D	E	F	G	H	I
Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
148	2046 Construction	Historical	109,745	1.641%	1,800	-	(737)	1,063
149	2046 Replacements	Historical	4,456,800	3.519%	156,836	-	-	156,836
150	2046 Replacements	New	222,840	1.784%	3,975	-	-	3,975
151	2046 Float	Historical	-	-	(811)	-	-	(811)
152	FY 2046	Subtotal:	4,789,385		161,802	-	(737)	161,064
153	2047 Replacements	Historical	4,557,320	3.467%	158,020	-	-	158,020
154	2047 Replacements	New	222,840	1.784%	3,975	-	-	3,975
155	2047 Float	Historical	-	-	(875)	-	-	(875)
156	FY 2047	Subtotal:	4,780,160		161,120	-	-	161,120
157	2048 Replacements	Historical	4,523,136	3.433%	155,259	-	-	155,259
158	2048 Replacements	New	222,840	1.784%	3,975	-	-	3,975
159	2048 Float	Historical	-	-	(1,094)	-	-	(1,094)
160	FY 2048	Subtotal:	4,745,976		158,140	-	-	158,140
161	2049 Replacements	Historical	4,402,535	3.427%	150,877	-	-	150,877
162	2049 Replacements	New	222,840	1.784%	3,975	-	-	3,975
163	2049 Float	Historical	-	-	(1,100)	-	-	(1,100)
164	FY 2049	Subtotal:	4,625,375		153,753	-	-	153,753
165	2050 Replacements	Historical	4,277,546	3.421%	146,337	-	-	146,337
166	2050 Replacements	New	222,840	1.784%	3,975	-	-	3,975
167	2050 Float	Historical	-	-	(1,106)	-	-	(1,106)
168	FY 2050	Subtotal:	4,500,386		149,206	-	-	149,206
169	2051 Replacements	Historical	4,148,012	3.414%	141,631	-	-	141,631
170	2051 Replacements	New	222,840	1.784%	3,975	-	-	3,975
171	2051 Float	Historical	-	-	(1,112)	-	-	(1,112)
172	FY 2051	Subtotal:	4,370,852		144,494	-	-	144,494
173	2052 Replacements	Historical	4,013,765	3.407%	136,754	-	-	136,754
174	2052 Replacements	New	222,840	1.784%	3,975	-	-	3,975
175	2052 Float	Historical	-	-	(1,118)	-	-	(1,118)
176	FY 2052	Subtotal:	4,236,605		139,611	-	-	139,611
177	2053 Replacements	Historical	3,874,635	3.399%	131,699	-	-	131,699
178	2053 Replacements	New	222,840	1.784%	3,975	-	-	3,975
179	2053 Float	Historical	-	-	(1,124)	-	-	(1,124)
180	FY 2053	Subtotal:	4,097,475		134,550	-	-	134,550
181	2054 Replacements	Historical	3,730,445	3.390%	126,461	-	-	126,461
182	2054 Replacements	New	222,840	1.784%	3,975	-	-	3,975
183	2054 Float	Historical	-	-	(1,131)	-	-	(1,131)
184	FY 2054	Subtotal:	3,953,285		129,305	-	-	129,305
185	2055 Replacements	Historical	3,581,009	3.380%	121,032	-	-	121,032
186	2055 Replacements	New	222,840	1.784%	3,975	-	-	3,975
187	2055 Float	Historical	-	-	(1,138)	-	-	(1,138)
188	FY 2055	Subtotal:	3,803,849		123,869	-	-	123,869
189	2056 Replacements	Historical	3,426,137	3.368%	115,406	-	-	115,406
190	2056 Replacements	New	222,840	1.784%	3,975	-	-	3,975
191	2056 Float	Historical	-	-	(1,145)	-	-	(1,145)
192	FY 2056	Subtotal:	3,648,977		118,236	-	-	118,236
193	2057 Replacements	Historical	3,265,632	3.355%	109,575	-	-	109,575
194	2057 Replacements	New	222,840	1.784%	3,975	-	-	3,975
195	2057 Float	Historical	-	-	(1,153)	-	-	(1,153)
196	FY 2057	Subtotal:	3,488,472		112,398	-	-	112,398
197	2058 Replacements	Historical	3,099,289	3.340%	103,532	-	-	103,532
198	2058 Replacements	New	222,840	1.784%	3,975	-	-	3,975
199	2058 Float	Historical	-	-	(1,160)	-	-	(1,160)
200	FY 2058	Subtotal:	3,322,129		106,347	-	-	106,347

**TABLE 11-6
INTEREST CALCULATION SUMMARY
(\$000s)(FY 2025)**

A	B	C	D	E	F	G	H	I
Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
201	2059 Replacements	Historical	2,926,895	3.323%	97,269	-	-	97,269
202	2059 Replacements	New	222,840	1.784%	3,975	-	-	3,975
203	2059 Float	Historical	-	-	(1,168)	-	-	(1,168)
204	FY 2059	Subtotal:	3,149,735		100,076	-	-	100,076
205	2060 Replacements	Historical	2,748,230	3.301%	90,716	-	-	90,716
206	2060 Replacements	New	222,840	1.784%	3,975	-	-	3,975
207	2060 Float	Historical	-	-	(1,186)	-	-	(1,186)
208	FY 2060	Subtotal:	2,971,070		93,506	-	-	93,506
209	Grand		\$173,876,395		\$5,344,999	(\$20,356)	(\$20,356)	\$5,324,642
	Total:							

**TABLE 11-7
SUMMARY OF AMORTIZATION (\$000S) (FY 2025)**

	A	B	C	D	E	F	G	H
1	General Project	Specific Project	2023	2024	2025	2026	2027	2028
2		Construction	209,379	193,212	166,438	180,519	164,646	167,442
3		Principal Accrual	-	-	-	-	-	-
4		Principal Accrual Reversal	-	-	-	-	-	-
5		Construction (AS)	-	7,800	6,000	-	14,000	32,000
6		Principal Accrual	-	-	-	-	-	-
7		Principal Accrual Reversal	-	-	-	-	-	-
8	BPA Borrowing	Environment	-	4,000	15,000	-	18,000	5,000
9		Principal Accrual	-	-	-	-	-	-
10		Principal Accrual Reversal	-	-	-	-	-	-
11		Technology (T)	-	-	-	-	9,000	-
12		Principal Accrual	-	-	-	-	-	-
13		Principal Accrual Reversal	-	-	-	-	-	-
14		BPA Borrowing Subtotal:	209,379	205,012	187,438	180,519	205,646	204,442
15		Replacements	-	-	-	-	-	-
16		Principal Accrual	-	-	-	-	-	-
17		Principal Accrual Reversal	-	-	-	-	-	-
18	Federal Transmission Replacement	Federal Transmission Replacement Subtotal:	-	-	-	-	-	-
19		Discounts	-	-	-	-	-	-
20	Make Whole Call	Premiums	12,958	-	-	4,072	3,571	18,815
21		Make Whole Call Subtotal:	12,958	-	-	4,072	3,571	18,815
22	Total		209,379	205,012	187,438	180,519	205,646	204,442

**TABLE 11-7
SUMMARY OF AMORTIZATION (\$000S) (FY 2025)**

	A	B	I	J	K	L	M	N
1	General Project	Specific Project	2029	2030	2031	2032	2033	2034
2		Construction	257,623	265,981	290,308	310,906	310,179	219,347
3		Principal Accrual	-	-	-	-	-	-
4		Principal Accrual Reversal	-	-	-	-	-	-
5		Construction (AS)	15,000	30,896	-	-	-	-
6		Principal Accrual	-	-	-	-	-	-
7		Principal Accrual Reversal	-	-	-	-	-	-
8	BPA Borrowing	Environment	12,000	-	13,000	-	7,000	-
9		Principal Accrual	-	-	-	-	-	-
10		Principal Accrual Reversal	-	-	-	-	-	-
11		Technology (T)	-	-	-	-	-	-
12		Principal Accrual	-	-	-	-	-	-
13		Principal Accrual Reversal	-	-	-	-	-	-
14		BPA Borrowing Subtotal:	284,623	296,877	303,308	310,906	317,179	219,347
15		Replacements	-	-	-	-	-	-
16		Principal Accrual	-	-	-	-	-	-
17		Principal Accrual Reversal	-	-	-	-	-	-
18	Federal Transmission Replacement	Federal Transmission Replacement Subtotal:	-	-	-	-	-	-
19		Discounts	-	-	-	-	-	-
20	Make Whole Call	Premiums	18,004	10,943	8,007	5,262	-	-
21		Make Whole Call Subtotal:	18,004	10,943	8,007	5,262	-	-
22	Total		284,623	296,877	303,308	310,906	317,179	219,347

**TABLE 11-7
SUMMARY OF AMORTIZATION (\$000S) (FY 2025)**

	A	B	O	P	Q	R	S	T
1	General Project	Specific Project	2035	2036	2037	2038	2039	2040
2		Construction	189,347	186,229	230,271	226,262	211,673	234,500
3		Principal Accrual	-	-	-	-	-	-
4		Principal Accrual Reversal	-	-	-	-	-	-
5		Construction (AS)	-	-	-	-	-	-
6		Principal Accrual	-	-	-	-	-	-
7		Principal Accrual Reversal	-	-	-	-	-	-
8	BPA Borrowing	Environment	7,000	11,000	-	6,000	21,248	-
9		Principal Accrual	-	-	-	-	-	-
10		Principal Accrual Reversal	-	-	-	-	-	-
11		Technology (T)	-	-	-	-	-	-
12		Principal Accrual	-	-	-	-	-	-
13		Principal Accrual Reversal	-	-	-	-	-	-
14		BPA Borrowing Subtotal:	196,347	197,229	230,271	232,262	232,922	234,500
15		Replacements	-	-	-	-	-	-
16		Principal Accrual	-	-	-	-	-	-
17		Principal Accrual Reversal	-	-	-	-	-	-
18	Federal Transmission Replacement	Federal Transmission Replacement Subtotal:	-	-	-	-	-	-
19		Discounts	-	(227)	(2,104)	-	(178)	(109)
20	Make Whole Call	Premiums	-	41	-	87	631	-
21		Make Whole Call Subtotal:	-	(186)	(2,104)	87	453	(109)
22	Total		196,347	197,456	232,375	232,262	233,100	234,609

**TABLE 11-7
SUMMARY OF AMORTIZATION (\$000S) (FY 2025)**

	A	B	U	V	W	X	Y	Z
1	General Project	Specific Project	2041	2042	2043	2044	2045	2046
2		Construction	226,510	245,756	233,125	231,289	232,068	109,745
3		Principal Accrual	-	-	-	-	-	-
4		Principal Accrual Reversal	-	-	-	-	-	-
5		Construction (AS)	-	-	-	-	-	-
6		Principal Accrual	-	-	-	-	-	-
7		Principal Accrual Reversal	-	-	-	-	-	-
8	BPA Borrowing	Environment	-	-	-	-	-	-
9		Principal Accrual	-	-	-	-	-	-
10		Principal Accrual Reversal	-	-	-	-	-	-
11		Technology (T)	-	-	-	-	-	-
12		Principal Accrual	-	-	-	-	-	-
13		Principal Accrual Reversal	-	-	-	-	-	-
14		BPA Borrowing Subtotal:	226,510	245,756	233,125	231,289	232,068	109,745
15		Replacements	-	-	-	-	-	122,320
16		Principal Accrual	-	-	-	-	-	-
17		Principal Accrual Reversal	-	-	-	-	-	-
18	Federal Transmission Replacement	Federal Transmission Replacement Subtotal:	-	-	-	-	-	122,320
19		Discounts	-	(5)	(2,212)	(7,556)	(7,642)	(1,010)
20	Make Whole Call	Premiums	-	-	-	-	-	-
21		Make Whole Call Subtotal:	-	(5)	(2,212)	(7,556)	(7,642)	(1,010)
22	Total		226,510	245,761	235,337	238,845	239,710	233,074

**TABLE 11-7
SUMMARY OF AMORTIZATION (\$000S) (FY 2025)**

	A	B	AA	AB	AC	AD	AE	AF
1	General Project	Specific Project	2047	2048	2049	2050	2051	2052
2		Construction	-	-	-	-	-	-
3		Principal Accrual	-	-	-	-	-	-
4		Principal Accrual Reversal	-	-	-	-	-	-
5		Construction (AS)	-	-	-	-	-	-
6		Principal Accrual	-	-	-	-	-	-
7		Principal Accrual Reversal	-	-	-	-	-	-
8	BPA Borrowing	Environment	-	-	-	-	-	-
9		Principal Accrual	-	-	-	-	-	-
10		Principal Accrual Reversal	-	-	-	-	-	-
11		Technology (T)	-	-	-	-	-	-
12		Principal Accrual	-	-	-	-	-	-
13		Principal Accrual Reversal	-	-	-	-	-	-
14		BPA Borrowing Subtotal:	-	-	-	-	-	-
15		Replacements	257,024	343,441	347,828	352,375	357,087	361,970
16		Principal Accrual	-	-	-	-	-	-
17		Principal Accrual Reversal	-	-	-	-	-	-
	Federal Transmission Replacement	Federal Transmission Replacement	257,024	343,441	347,828	352,375	357,087	361,970
18		Subtotal:						
19		Discounts	-	-	-	-	-	-
20		Premiums	-	-	-	-	-	-
	Make Whole Call	Make Whole Call	-	-	-	-	-	-
21		Subtotal:						
22	Total		257,024	343,441	347,828	352,375	357,087	361,970

**TABLE 11-7
SUMMARY OF AMORTIZATION (\$000S) (FY 2025)**

	A	B	AG	AH	AI	AJ	AK	AL
1	General Project	Specific Project	2053	2054	2055	2056	2057	2058
2		Construction	-	-	-	-	-	-
3		Principal Accrual	-	-	-	-	-	-
4		Principal Accrual Reversal	-	-	-	-	-	-
5		Construction (AS)	-	-	-	-	-	-
6		Principal Accrual	-	-	-	-	-	-
7		Principal Accrual Reversal	-	-	-	-	-	-
8	BPA Borrowing	Environment	-	-	-	-	-	-
9		Principal Accrual	-	-	-	-	-	-
10		Principal Accrual Reversal	-	-	-	-	-	-
11		Technology (T)	-	-	-	-	-	-
12		Principal Accrual	-	-	-	-	-	-
13		Principal Accrual Reversal	-	-	-	-	-	-
14		BPA Borrowing Subtotal:	-	-	-	-	-	-
15		Replacements	367,031	372,276	377,711	383,345	389,183	395,234
16		Principal Accrual	-	-	-	-	-	-
17		Principal Accrual Reversal	-	-	-	-	-	-
18	Federal Transmission Replacement	Federal Transmission Replacement	367,031	372,276	377,711	383,345	389,183	395,234
19		Subtotal:	-	-	-	-	-	-
20		Discounts	-	-	-	-	-	-
21	Make Whole Call	Premiums	-	-	-	-	-	-
22		Make Whole Call Subtotal:	-	-	-	-	-	-
22	Total		367,031	372,276	377,711	383,345	389,183	395,234

**TABLE 11-7
SUMMARY OF AMORTIZATION (\$000S) (FY 2025)**

	A	B	AM	AN	AO
1	General Project	Specific Project	2059	2060	Total
2		Construction	-	-	5,292,754
3		Principal Accrual	-	-	-
4		Principal Accrual	-	-	-
		Reversal	-	-	-
5		Construction (AS)	-	-	105,696
6		Principal Accrual	-	-	-
7		Principal Accrual	-	-	-
		Reversal	-	-	-
8	BPA Borrowing	Environment	-	-	119,248
9		Principal Accrual	-	-	-
10		Principal Accrual	-	-	-
		Reversal	-	-	-
11		Technology (T)	-	-	9,000
12		Principal Accrual	-	-	-
13		Principal Accrual	-	-	-
		Reversal	-	-	-
14		BPA Borrowing Subtotal:	-	-	5,526,699
15		Replacements	401,505	411,494	5,239,825
16		Principal Accrual	-	-	-
17		Principal Accrual	-	-	-
		Reversal	-	-	-
	Federal Transmission Replacement	Federal Transmission Replacement	401,505	411,494	5,239,825
18		Subtotal:			
19		Discounts	-	-	(21,042)
20		Premiums	-	-	82,393
	Make Whole Call	Make Whole Call	-	-	61,350
21		Subtotal:			
22	Total		401,505	411,494	10,787,566

**TABLE 11-8
APPLICATION OF AMORTIZATION (\$000S) (FY 2025)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
Fiscal Year	Project	Bond ID	Debt Type	In Service	Bond Due Date	Initial Principal	Current Principal	Original Rate	Effective Rate	Refinance Type	Refinanced Date	Rolled Maturity Date	Roll Rate	Principal Paid	Premium	Discount
1	2023	Construction	1116734	-	12/31/2014	12/31/2022	16,000	16,000	2.274%					16,000		
2	2023	Construction	1116735	-	12/31/2014	12/31/2022	4,000	4,000	2.274%					4,000		
3	2023	Construction	1116819	-	1/31/2019	1/31/2023	6,000	6,000	2.603%					6,000		
4	2023	Construction	1116758	-	4/30/2015	4/30/2023	3,000	3,000	2.163%					3,000		
5	2023	Construction	1116759	-	4/30/2015	4/30/2023	12,000	12,000	2.163%					12,000		
6	2023	Construction	1116763	-	6/30/2015	6/30/2023	11,000	11,000	2.443%					11,000		
7	2023	Construction	1116764	-	6/30/2015	6/30/2023	8,000	8,000	2.443%					8,000		
8	2023	Construction	1116874	-	6/30/2021	6/30/2023	15,000	15,000	0.239%					15,000		
9	2023	Construction	1116877	-	7/31/2021	7/31/2023	23,000	23,000	0.179%					23,000		
10	2023	Construction	1116637	-	9/30/2010	9/30/2023	46,000	46,000	3.161%					46,000		
11	2023	Construction	1116568	-	8/31/1998	8/31/2028	112,300	111,500	5.850%					65,379	12,958	
12	FY 2023 Subtotal:		-	-	-	-	256,300	255,500	-	-	-	-	-	209,379	12,958	
13	2024	Construction	1116730	-	10/31/2014	10/31/2023	20,000	20,000	2.521%					20,000		
14	2024	Construction	1116732	-	11/30/2014	11/30/2023	20,000	20,000	2.361%					20,000		
15	2024	Environment	1116739	-	1/31/2015	1/31/2024	4,000	4,000	1.908%					4,000		
16	2024	Construction	1116745	-	3/31/2015	3/31/2024	17,000	17,000	2.200%					17,000		
17	2024	Construction (AS)	1116817	-	9/28/2018	3/31/2024	7,800	7,800	3.078%					7,800		
18	2024	Construction	1159988	-	6/30/2023	6/30/2024	-	97,212	0.620%					97,212		
19	2024	Construction	1116875	-	7/31/2021	7/31/2024	39,000	39,000	0.363%					39,000		
20	FY 2024 Subtotal:		-	-	-	-	107,800	205,012	-	-	-	-	-	205,012		
21	2025	Environment	1116626	-	2/28/2010	2/28/2025	10,000	10,000	4.279%					10,000		
22	2025	Construction	1116785	-	5/31/2016	5/31/2025	20,000	20,000	2.101%					20,000		
23	2025	Environment	1116784	-	5/31/2016	5/31/2025	5,000	5,000	2.101%					5,000		
24	2025	Construction	1160005	-	5/31/2023	5/31/2025	-	73,438	0.980%					73,438		
25	2025	Construction	1116786	-	7/31/2016	7/31/2025	48,000	48,000	1.713%					48,000		
26	2025	Construction (AS)	1116862	-	7/31/2020	7/31/2025	6,000	6,000	0.407%					6,000		
27	2025	Construction	1116767	-	8/31/2015	8/31/2025	11,000	11,000	2.598%					11,000		
28	2025	Construction	1116768	-	8/31/2015	8/31/2025	14,000	14,000	2.598%					14,000		
29	FY 2025 Subtotal:		-	-	-	-	114,000	187,438	-	-	-	-	-	187,438		
30	2026	Construction	1116638	-	10/31/2010	10/31/2025	45,000	45,000	3.494%					45,000		
31	2026	Construction	1116742	-	2/28/2015	2/28/2026	19,000	19,000	2.416%					19,000		
32	2026	Construction	1116744	-	3/31/2015	3/31/2026	15,000	15,000	2.370%					15,000		
33	2026	Construction	1116782	-	3/31/2016	3/31/2026	6,000	6,000	2.177%					6,000		
34	2026	Construction	1116783	-	3/31/2016	3/31/2026	12,000	12,000	2.177%					12,000		
35	2026	Construction	1116765	-	7/31/2015	7/31/2026	18,000	18,000	2.707%					18,000		
36	2026	Construction	1116766	-	7/31/2015	7/31/2026	10,000	10,000	2.707%					10,000		
37	2026	Construction	1116567	-	8/31/1998	8/31/2028	106,500	106,500	5.850%					9,398	689	
38	2026	Construction	1116568	-	8/31/1998	8/31/2028	112,300	46,121	5.850%					46,121	3,383	
39	FY 2026 Subtotal:		-	-	-	-	343,800	277,621	-	-	-	-	-	180,519	4,072	
40	2027	Construction (AS)	1116871	-	5/31/2021	11/30/2026	2,000	2,000	0.933%					2,000		
41	2027	Construction	1116778	-	12/31/2015	12/31/2026	9,000	9,000	2.762%					9,000		
42	2027	Construction	1116779	-	12/31/2015	12/31/2026	29,000	29,000	2.762%					29,000		
43	2027	Construction	1116780	-	1/31/2016	1/31/2027	13,000	13,000	2.352%					13,000		
44	2027	Construction	1116781	-	2/29/2016	2/28/2027	13,000	13,000	2.236%					13,000		
45	2027	Technology (T)	1116886	-	2/28/2022	2/28/2027	9,000	9,000	1.967%					9,000		
46	2027	Construction	1116663	-	5/3/2012	5/31/2027	17,000	17,000	1.598%					17,000		
47	2027	Environment	1116664	-	5/3/2012	5/31/2027	13,000	13,000	1.598%					13,000		
48	2027	Construction (AS)	1116891	-	5/31/2022	5/31/2027	4,000	4,000	2.858%					4,000		
49	2027	Construction (AS)	1116888	-	2/28/2022	8/31/2027	8,000	8,000	2.000%					8,000		
50	2027	Environment	1116838	-	3/31/2020	9/30/2027	5,000	5,000	1.025%					5,000		
51	2027	Construction	1116567	-	8/31/1998	8/31/2028	106,500	97,102	5.850%					83,646	3,571	
52	FY 2027 Subtotal:		-	-	-	-	228,500	219,102	-	-	-	-	-	205,646	3,571	
53	2028	Environment	1116696	-	11/20/2013	11/30/2027	5,000	5,000	3.967%					5,000		
54	2028	Construction	1116728	-	9/30/2014	4/30/2028	17,000	17,000	1.491%					17,000		
55	2028	Construction (AS)	1159935	-	5/31/2023	5/31/2028	-	13,000	1.714%					13,000		
56	2028	Construction (AS)	1116899	-	8/31/2022	8/31/2028	19,000	19,000	3.254%					19,000		
57	2028	Construction	1116567	-	8/31/1998	8/31/2028	106,500	13,456	5.850%					13,456		
58	2028	Construction	1116727	-	9/30/2014	9/30/2028	3,000	3,000	3.094%					3,000		
59	2028	Construction	1116639	-	1/31/2011	1/31/2036	50,000	50,000	4.952%					50,000	6,118	
60	2028	Construction	1116640	-	2/28/2011	2/28/2038	55,000	55,000	4.935%					48,985	6,594	
61	2028	Construction	1116617	-	6/30/2009	6/30/2039	35,000	35,000	5.192%					35,000	6,102	
62	FY 2028 Subtotal:		-	-	-	-	290,500	210,456	-	-	-	-	-	204,442	18,815	

**TABLE 11-8
APPLICATION OF AMORTIZATION (\$000S) (FY 2025)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
Fiscal Year	Project	Bond ID	Debt Type	In Service	Bond Due Date	Initial Principal	Current Principal	Original Rate	Effective Rate	Refinance Type	Refinanced Date	Rolled Maturity Date	Roll Rate	Principal Paid	Premium	Discount
63	2029	Environment	1116702	-	10/31/2013	10/31/2028	6,000	6,000	3.880%					6,000		
64	2029	Environment	1116708	-	1/31/2014	1/31/2029	3,000	3,000	3.896%					3,000		
65	2029	Construction	1116889	-	5/31/2022	5/31/2029	33,000	33,000	2.948%					33,000		
66	2029	Construction (AS)	1159936	-	5/31/2024	5/31/2029	-	15,000	2.158%					15,000		
67	2029	Environment	1116723	-	7/31/2014	7/31/2029	3,000	3,000	2.922%					3,000		
68	2029	Construction	1116648	-	8/2/2011	8/31/2029	50,000	50,000	4.238%					50,000		
69	2029	Construction	1116654	-	8/2/2011	8/31/2035	45,000	45,000	4.446%					43,609	3,405	
70	2029	Construction	1116705	-	12/31/2013	12/31/2035	10,000	10,000	4.472%					10,000	816	
71	2029	Construction	1116645	-	6/22/2011	6/30/2036	50,000	50,000	4.629%					50,000	4,862	
72	2029	Construction	1116640	-	2/28/2011	2/28/2038	55,000	6,015	4.935%					6,015	760	
73	2029	Construction	1116641	-	4/30/2011	4/30/2039	40,000	40,000	4.794%					40,000	4,859	
74	2029	Construction	1116646	-	6/22/2011	6/30/2040	25,000	25,000	4.775%					25,000	3,302	
75	FY 2029 Subtotal:		-	-	-	-	320,000	286,015	-	-	-	-	-	284,623	18,004	
76	2030	Construction	1116694	-	11/20/2013	10/31/2029	55,000	55,000	4.093%					55,000		
77	2030	Construction	1116743	-	3/31/2015	3/31/2030	3,000	3,000	2.626%					3,000		
78	2030	Construction	1116890	-	5/31/2022	5/31/2030	30,000	30,000	3.019%					30,000		
79	2030	Construction (AS)	1159937	-	5/31/2025	5/31/2030	-	15,000	2.579%					15,000		
80	2030	Construction (AS)	1159999	-	5/31/2025	5/31/2030	-	15,896	2.579%					15,896		
81	2030	Construction	1116769	-	9/30/2015	9/30/2030	15,000	15,000	2.905%					15,000		
82	2030	Construction	1116650	-	8/2/2011	8/31/2033	40,000	40,000	4.386%					5,589	245	
83	2030	Construction	1116651	-	8/2/2011	8/31/2034	40,000	40,000	4.416%					40,000	2,275	
84	2030	Construction	1116652	-	8/2/2011	8/31/2035	40,000	40,000	4.446%					40,000	2,804	
85	2030	Construction	1116653	-	8/2/2011	8/31/2035	40,000	40,000	4.446%					40,000	2,804	
86	2030	Construction	1116654	-	8/2/2011	8/31/2035	45,000	1,391	4.446%					1,391	98	
87	2030	Construction	1116689	-	11/20/2013	6/30/2036	36,000	36,000	4.397%					36,000	2,717	
88	FY 2030 Subtotal:		-	-	-	-	344,000	331,288	-	-	-	-	-	296,877	10,943	
89	2031	Construction	1116690	-	11/20/2013	1/31/2031	30,000	30,000	4.162%					30,000		
90	2031	Construction	1116692	-	11/20/2013	2/28/2031	15,000	15,000	4.166%					15,000		
91	2031	Environment	1116863	-	3/31/2021	3/31/2031	13,000	13,000	1.804%					13,000		
92	2031	Construction	1116693	-	11/20/2013	3/31/2031	18,000	18,000	4.171%					18,000		
93	2031	Construction	1116649	-	8/2/2011	8/31/2032	98,900	98,900	4.355%					98,900	1,953	
94	2031	Construction	1116650	-	8/2/2011	8/31/2033	40,000	34,411	4.386%					34,411	1,094	
95	2031	Construction	1116695	-	11/20/2013	4/30/2034	28,000	28,000	4.311%					28,000	1,009	
96	2031	Construction	1116688	-	11/20/2013	8/31/2034	6,000	6,000	4.324%					6,000	251	
97	2031	Construction	1116691	-	11/20/2013	5/31/2035	20,000	20,000	4.354%					20,000	980	
98	2031	Construction	1116701	-	10/31/2013	10/31/2035	64,000	64,000	4.222%					9,997	493	
99	2031	Construction	1116704	-	11/30/2013	11/30/2035	15,000	15,000	4.365%					15,000	829	
100	2031	Construction	1116707	-	1/31/2014	1/31/2043	15,000	15,000	4.380%					15,000	1,399	
101	FY 2031 Subtotal:		-	-	-	-	362,900	357,311	-	-	-	-	-	303,308	8,007	
102	2032	Construction	1116680	-	9/30/2013	9/30/2034	9,000	9,000	4.214%					9,000	252	
103	2032	Construction	1116701	-	10/31/2013	10/31/2035	64,000	54,003	4.222%					54,003	2,099	
104	2032	Construction	1116893	-	6/30/2022	6/30/2040	32,000	32,000	3.811%					32,000	1,338	
105	2032	Construction	1116892	-	6/30/2022	6/30/2044	34,000	34,000	3.890%					34,000	1,573	
106	2032	Construction	1159992	-	5/31/2025	5/31/2054	-	80,333	3.541%					21,236		
107	2032	Construction	1159993	-	8/31/2025	8/31/2055	-	160,667	3.568%					160,667		
108	FY 2032 Subtotal:		-	-	-	-	139,000	370,003	-	-	-	-	-	310,906	5,262	
109	2033	Construction	1116848	-	5/31/2020	11/30/2032	21,000	21,000	1.231%					21,000		
110	2033	Environment	1116850	-	5/31/2020	11/30/2032	7,000	7,000	1.231%					7,000		
111	2033	Construction	1116853	-	6/30/2020	6/30/2033	21,000	21,000	1.238%					21,000		
112	2033	Construction	1116859	-	7/31/2020	7/31/2033	10,000	10,000	1.157%					10,000		
113	2033	Construction	1160001	-	5/31/2025	5/31/2053	-	74,855	3.513%					38,415		
114	2033	Construction	1159992	-	5/31/2025	5/31/2054	-	59,097	3.541%					59,097		
115	2033	Construction	1159994	-	9/30/2025	9/30/2055	-	160,667	3.540%					160,667		
116	FY 2033 Subtotal:		-	-	-	-	59,000	353,619	-	-	-	-	-	317,179		
117	2034	Construction	1116714	-	4/30/2014	2/28/2034	45,000	45,000	0.668%					45,000		
118	2034	Construction	1116713	-	4/30/2014	3/31/2034	45,000	18,300	1.133%					18,300		
119	2034	Construction	1116775	-	10/31/2015	8/31/2034	19,000	19,000	0.668%					19,000		
120	2034	Construction	1160001	-	5/31/2025	5/31/2053	-	36,440	3.513%					36,440		
121	2034	Construction	1159997	-	5/31/2025	5/31/2053	-	80,333	3.513%					80,333		
122	2034	Construction	1159990	-	8/31/2024	8/31/2054	-	165,667	3.29%					20,274		
123	FY 2034 Subtotal:		-	-	-	-	109,000	364,740	-	-	-	-	-	219,347		

**TABLE 11-8
APPLICATION OF AMORTIZATION (\$000S) (FY 2025)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
Fiscal Year	Project	Bond ID	Debt Type	In Service	Bond Due Date	Initial Principal	Current Principal	Original Rate	Effective Rate	Refinance Type	Refinanced Date	Rolled Maturity Date	Roll Rate	Principal Paid	Premium	Discount
124	2035	Construction	1116776	-	10/31/2015	10/31/2034	2,000	3.198%	3.198%					2,000		
125	2035	Construction	1116725	-	8/31/2014	8/31/2035	15,000	0.668%	0.668%					15,000		
126	2035	Environment	1116887	-	2/28/2022	8/31/2035	7,000	2.444%	2.444%					7,000		
127	2035	Construction	1159989	-	5/31/2024	5/31/2053	-	165,667	3.300%					26,953		
128	2035	Construction	1159990	-	8/31/2024	8/31/2054	-	145,393	3.329%					145,393		
129	FY 2035 Subtotal:			-	-	-	24,000	335,060	-					196,347		
130	2036	Construction	1116847	-	5/31/2020	5/31/2036	29,000	1.513%	1.513%					29,000		
131	2036	Environment	1116898	-	8/31/2022	8/31/2037	11,000	3.254%	3.254%					11,000	41	
132	2036	Construction	1116896	-	8/31/2022	8/31/2046	28,000	3.254%	3.254%					18,515		227
133	2036	Construction	1159989	-	5/31/2024	5/31/2053	-	138,714	3.300%					138,714		
134	FY 2036 Subtotal:			-	-	-	68,000	206,714	-					197,229	41	227
135	2037	Construction	1116831	-	11/30/2019	3/31/2037	36,000	2.349%	2.349%					36,000		
136	2037	Construction	1116826	-	7/31/2019	7/31/2037	46,940	2.680%	2.680%					46,940		
137	2037	Construction	1116802	-	8/31/2017	8/31/2037	30,000	2.902%	2.902%					30,000		
138	2037	Construction	1116896	-	8/31/2022	8/31/2046	28,000	9.258	3.254%					9,206		52
139	2037	Construction	1116806	-	9/30/2017	9/30/2047	10,000	10,000	3.247%					9,880		120
140	2037	Construction	1116895	-	8/31/2022	8/31/2049	30,000	30,000	3.254%					29,428		572
141	2037	Construction	1116894	-	8/31/2022	2/28/2050	36,000	36,000	3.254%					35,197		803
142	2037	Construction	1116897	-	8/31/2022	2/28/2050	25,000	25,000	3.254%					24,443		557
143	2037	Construction	1159991	-	9/30/2024	9/30/2051	-	165,667	3.241%					9,177		
144	FY 2037 Subtotal:			-	-	-	241,940	388,865	-					230,271		2,104
145	2038	Environment	1159921	-	5/31/2023	5/31/2038	-	6,000	2.558%					6,000		
146	2038	Construction	1116832	-	11/30/2019	6/30/2038	37,000	37,000	2.429%					37,000		
147	2038	Construction	1116797	-	8/31/2017	8/31/2038	7,000	7,000	2.929%					7,000		
148	2038	Construction	1116796	-	7/31/2017	7/31/2045	27,000	27,000	3.230%					25,773	87	
149	2038	Construction	1159991	-	9/30/2024	9/30/2051	-	156,490	3.241%					156,490		
150	FY 2038 Subtotal:			-	-	-	71,000	233,490	-					232,262	87	
151	2039	Construction	1116839	-	4/30/2020	4/30/2039	45,000	45,000	1.594%					45,000		
152	2039	Environment	1159922	-	5/31/2024	5/31/2039	-	6,000	2.887%					6,000		
153	2039	Construction	1116833	-	11/30/2019	9/30/2039	39,000	39,000	2.495%					39,000		
154	2039	Environment	1159923	-	5/31/2025	5/31/2040	-	6,000	3.154%					6,000		
155	2039	Environment	1160000	-	5/31/2025	5/31/2040	-	9,248	3.154%					9,248		
156	2039	Construction	1116792	-	7/31/2017	7/31/2041	19,000	19,000	3.164%					19,000	54	
157	2039	Construction	1116803	-	9/30/2017	9/30/2041	17,000	17,000	3.156%					17,000	45	
158	2039	Construction	1116793	-	7/31/2017	7/31/2042	14,000	14,000	3.181%					14,000	63	
159	2039	Construction	1116794	-	7/31/2017	7/31/2043	23,000	23,000	3.198%					23,000	149	
160	2039	Construction	1116804	-	9/30/2017	9/30/2043	14,000	14,000	3.193%					14,000	88	
161	2039	Construction	1116795	-	7/31/2017	7/31/2044	17,000	17,000	3.215%					17,000	148	
162	2039	Construction	1116805	-	9/30/2017	9/30/2044	9,000	9,000	3.209%					9,000	76	
163	2039	Construction	1116796	-	7/31/2017	7/31/2045	27,000	1,227	3.230%					1,227	9	
164	2039	Construction	1116800	-	8/31/2017	8/31/2047	18,000	18,000	3.076%					13,446		178
165	FY 2039 Subtotal:			-	-	-	242,000	237,476	-					232,922	631	178
166	2040	Construction	1116860	-	7/31/2020	1/31/2040	30,000	30,000	1.421%					30,000		
167	2040	Construction	1116881	-	2/28/2022	8/31/2040	40,000	40,000	2.682%					40,000		
168	2040	Construction	1116798	-	8/31/2017	8/31/2043	10,000	10,000	3.024%					9,991		9
169	2040	Construction	1116801	-	8/31/2017	8/31/2046	22,000	22,000	3.066%					21,932		68
170	2040	Construction	1116800	-	8/31/2017	8/31/2047	18,000	4,376	3.076%					4,344		32
171	2040	Construction	1160002	-	6/30/2023	6/30/2050	-	55,788	3.016%					55,788		
172	2040	Construction	1159987	-	5/31/2023	5/31/2053	-	79,562	3.016%					72,445		
173	FY 2040 Subtotal:			-	-	-	120,000	241,726	-					234,500		109
174	2041	Construction	1116864	-	3/31/2021	3/31/2041	6,000	6,000	2.347%					6,000		
175	2041	Construction	1116872	-	6/30/2021	6/30/2041	40,000	40,000	2.083%					40,000		
176	2041	Construction	1116799	-	8/31/2017	8/31/2041	13,000	13,000	2.991%					13,000		
177	2041	Construction	1116882	-	2/17/2022	8/31/2041	35,000	35,000	2.715%					35,000		
178	2041	Construction	1159986	-	4/30/2023	4/30/2052	-	262,000	2.985%					125,394		
179	2041	Construction	1159987	-	5/31/2023	5/31/2053	-	7,117	3.016%					7,117		
180	FY 2041 Subtotal:			-	-	-	94,000	363,117	-					226,510		

**TABLE 11-8
APPLICATION OF AMORTIZATION (\$000S) (FY 2025)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
Fiscal Year	Project	Bond ID	Debt Type	In Service	Bond Due Date	Initial Principal	Current Principal	Original Rate	Effective Rate	Refinance Type	Refinanced Date	Rolled Maturity Date	Roll Rate	Principal Paid	Premium	Discount
181	2042	Construction	1116865	-	3/31/2021	3/31/2042	46,000	46,000	2.400%	2.400%				46,000		
182	2042	Construction	1116879	-	8/31/2021	8/31/2042	33,000	33,000	1.925%	1.925%				33,000		
183	2042	Construction	1116885	-	2/17/2022	8/31/2042	30,000	30,000	2.743%	2.743%				30,000		
184	2042	Construction	1116884	-	2/17/2022	2/28/2050	31,000	31,000	2.822%	2.822%				150		5
185	2042	Construction	1159986	-	4/30/2023	4/30/2052	-	136,606	2.985%	2.985%				136,606		
186	FY 2042 Subtotal:		-	-	-	-	140,000	276,606	-	-				245,756		5
187	2043	Construction	1116883	-	2/28/2022	2/28/2043	32,000	32,000	2.750%	2.750%				32,000		
188	2043	Construction	1116869	-	5/31/2021	5/31/2043	45,000	45,000	2.344%	2.344%				45,000		
189	2043	Construction	1116866	-	3/31/2021	9/30/2044	34,000	34,000	2.515%	2.515%				33,766		234
190	2043	Construction	1116870	-	5/31/2021	11/30/2044	42,000	42,000	2.408%	2.408%				41,614		386
191	2043	Construction	1116873	-	6/30/2021	6/30/2045	34,000	34,000	2.240%	2.240%				33,358		642
192	2043	Construction	1116867	-	3/31/2021	9/30/2045	14,000	14,000	2.550%	2.550%				13,836		164
193	2043	Construction	1116876	-	7/31/2021	1/31/2046	27,000	27,000	2.025%	2.025%				3,392		98
194	2043	Construction	1116884	-	2/17/2022	2/28/2050	31,000	30,846	2.822%	2.822%				30,158		688
195	FY 2043 Subtotal:		-	-	-	-	259,000	258,846	-	-				233,125		2,212
196	2044	Construction	1116878	-	8/31/2021	8/31/2044	39,000	39,000	2.006%	2.006%				39,000		
197	2044	Construction	1116876	-	7/31/2021	1/31/2046	27,000	23,509	2.025%	2.025%				23,056		453
198	2044	Construction	1116846	-	5/31/2020	5/31/2046	26,000	26,000	1.931%	1.931%				25,454		546
199	2044	Construction	1116851	-	5/31/2020	11/30/2047	24,000	24,000	1.949%	1.949%				23,165		835
200	2044	Construction	1116849	-	5/31/2020	5/31/2048	21,000	21,000	1.953%	1.953%				20,177		823
201	2044	Construction	1116852	-	5/31/2020	5/31/2048	42,000	42,000	1.953%	1.953%				40,355		1,645
202	2044	Construction	1116857	-	8/31/2020	2/28/2049	11,000	11,000	1.990%	1.990%				10,489		511
203	2044	Construction	1116856	-	6/30/2020	6/30/2049	63,800	63,800	1.812%	1.812%				12,559		777
204	2044	Construction	1116858	-	8/31/2020	8/31/2049	39,000	39,000	1.992%	1.992%				37,035		1,965
205	FY 2044 Subtotal:		-	-	-	-	292,800	289,309	-	-				231,289		7,556
206	2045	Construction	1116861	-	7/31/2020	7/31/2045	19,000	19,000	1.626%	1.626%				19,000		
207	2045	Construction	1116843	-	4/30/2020	4/30/2047	72,000	72,000	1.792%	1.792%				33,439		807
208	2045	Construction	1116854	-	6/30/2020	6/30/2047	20,000	20,000	1.805%	1.805%				19,424		576
209	2045	Construction	1116855	-	6/30/2020	6/30/2047	30,000	30,000	1.805%	1.805%				29,136		864
210	2045	Construction	1116844	-	4/30/2020	4/30/2048	19,000	19,000	1.806%	1.806%				18,353		647
211	2045	Construction	1116845	-	4/30/2020	4/30/2048	67,000	67,000	1.806%	1.806%				64,719		2,281
212	2045	Construction	1116856	-	6/30/2020	6/30/2049	63,800	50,464	1.812%	1.812%				47,997		2,468
213	FY 2045 Subtotal:		-	-	-	-	290,800	277,464	-	-				232,068		7,642
214	2046	Construction	1116840	-	4/30/2020	4/30/2046	9,000	9,000	1.776%	1.776%				9,000		
215	2046	Construction	1116841	-	4/30/2020	4/30/2046	48,000	48,000	1.776%	1.776%				48,000		
216	2046	Construction	1116842	-	4/30/2020	4/30/2047	4,000	4,000	1.792%	1.792%				3,954		46
217	2046	Construction	1116843	-	4/30/2020	4/30/2047	72,000	37,754	1.792%	1.792%				37,317		437
218	2046	Construction	1116810	-	8/31/2018	2/28/2048	12,000	12,000	0.668%	0.668%				11,474		526
219	2046	Replacements	1107920	-	3/31/2026	3/31/2061	222,840	222,840	3.568%	3.568%				122,320		
220	FY 2046 Subtotal:		-	-	-	-	367,840	333,594	-	-				232,065		1,010
221	2047	Replacements	1107920	-	3/31/2026	3/31/2061	222,840	100,520	3.568%	3.568%				100,520		
222	2047	Replacements	1107921	-	3/31/2027	3/31/2062	222,840	222,840	3.568%	3.568%				156,504		
223	FY 2047 Subtotal:		-	-	-	-	445,680	323,360	-	-				257,024		
224	2048	Replacements	1107921	-	3/31/2027	3/31/2062	222,840	66,336	3.568%	3.568%				66,336		
225	2048	Replacements	1107922	-	3/31/2028	3/31/2063	222,840	222,840	3.568%	3.568%				222,840		
226	2048	Replacements	1107923	-	3/31/2029	3/31/2064	222,840	222,840	3.568%	3.568%				54,265		
227	FY 2048 Subtotal:		-	-	-	-	668,520	512,016	-	-				343,441		
228	2049	Replacements	1107923	-	3/31/2029	3/31/2064	222,840	168,575	3.568%	3.568%				168,575		
229	2049	Replacements	1107924	-	3/31/2030	3/31/2065	222,840	222,840	3.568%	3.568%				179,254		
230	FY 2049 Subtotal:		-	-	-	-	445,680	391,415	-	-				347,828		
231	2050	Replacements	1107924	-	3/31/2030	3/31/2065	222,840	43,586	3.568%	3.568%				43,586		
232	2050	Replacements	1107925	-	3/31/2031	3/31/2066	222,840	222,840	3.568%	3.568%				222,840		
233	2050	Replacements	1107926	-	3/31/2032	3/31/2067	222,840	222,840	3.568%	3.568%				85,948		
234	FY 2050 Subtotal:		-	-	-	-	668,520	489,266	-	-				352,375		
235	2051	Replacements	1107926	-	3/31/2032	3/31/2067	222,840	136,892	3.568%	3.568%				136,892		
236	2051	Replacements	1107927	-	3/31/2033	3/31/2068	222,840	222,840	3.568%	3.568%				220,195		
237	FY 2051 Subtotal:		-	-	-	-	445,680	359,732	-	-				357,087		
238	2052	Replacements	1107927	-	3/31/2033	3/31/2068	222,840	2,645	3.568%	3.568%				2,645		
239	2052	Replacements	1107928	-	3/31/2034	3/31/2069	222,840	222,840	3.568%	3.568%				222,840		
240	2052	Replacements	1107929	-	3/31/2035	3/31/2070	222,840	222,840	3.568%	3.568%				136,485		
241	FY 2052 Subtotal:		-	-	-	-	668,520	448,325	-	-				361,970		

**TABLE 11-8
APPLICATION OF AMORTIZATION (\$000S) (FY 2025)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
Fiscal Year	Project	Bond ID	Debt Type	In Service	Bond Due Date	Initial Principal	Current Principal	Original Rate	Effective Rate	Refinance Type	Refinanced Date	Rolled Maturity Date	Roll Rate	Principal Paid	Premium	Discount
242	2053	Replacements	1107929	-	3/31/2035	3/31/2070	222,840	86,355	3.568%	3.568%				86,355		
243	2053	Replacements	1107930	-	3/31/2036	3/31/2071	222,840	222,840	3.568%	3.568%				222,840		
244	2053	Replacements	1107931	-	3/31/2037	3/31/2072	222,840	222,840	3.568%	3.568%				57,835		
245	FY 2053 Subtotal:		-	-	-	-	668,520	532,035	-	-				367,031		
246	2054	Replacements	1107931	-	3/31/2037	3/31/2072	222,840	165,005	3.568%	3.568%				165,005		
247	2054	Replacements	1107932	-	3/31/2038	3/31/2073	222,840	222,840	3.568%	3.568%				207,271		
248	FY 2054 Subtotal:		-	-	-	-	445,680	387,845	-	-				372,276		
249	2055	Replacements	1107932	-	3/31/2038	3/31/2073	222,840	15,569	3.568%	3.568%				15,569		
250	2055	Replacements	1107933	-	3/31/2039	3/31/2074	222,840	222,840	3.568%	3.568%				222,840		
251	2055	Replacements	1107934	-	3/31/2040	3/31/2075	222,840	222,840	3.568%	3.568%				139,303		
252	FY 2055 Subtotal:		-	-	-	-	668,520	461,249	-	-				377,711		
253	2056	Replacements	1107934	-	3/31/2040	3/31/2075	222,840	83,537	3.568%	3.568%				83,537		
254	2056	Replacements	1107935	-	3/31/2041	3/31/2076	222,840	222,840	3.568%	3.568%				222,840		
255	2056	Replacements	1107936	-	3/31/2042	3/31/2077	222,840	222,840	3.568%	3.568%				76,968		
256	FY 2056 Subtotal:		-	-	-	-	668,520	529,217	-	-				383,345		
257	2057	Replacements	1107936	-	3/31/2042	3/31/2077	222,840	145,872	3.568%	3.568%				145,872		
258	2057	Replacements	1107937	-	3/31/2043	3/31/2078	222,840	222,840	3.568%	3.568%				222,840		
259	2057	Replacements	1107938	-	3/31/2044	3/31/2079	222,840	222,840	3.568%	3.568%				20,471		
260	FY 2057 Subtotal:		-	-	-	-	668,520	591,552	-	-				389,183		
261	2058	Replacements	1107938	-	3/31/2044	3/31/2079	222,840	202,369	3.568%	3.568%				202,369		
262	2058	Replacements	1107939	-	3/31/2045	3/31/2080	222,840	222,840	3.568%	3.568%				192,865		
263	FY 2058 Subtotal:		-	-	-	-	445,680	425,209	-	-				395,234		
264	2059	Replacements	1107939	-	3/31/2045	3/31/2080	222,840	29,975	3.568%	3.568%				29,975		
265	2059	Replacements	1107940	-	3/31/2046	3/31/2081	222,840	222,840	3.568%	3.568%				222,840		
266	2059	Replacements	1107941	-	3/31/2047	3/31/2082	222,840	222,840	3.568%	3.568%				148,690		
267	FY 2059 Subtotal:		-	-	-	-	668,520	475,655	-	-				401,505		
268	2060	Replacements	1107941	-	3/31/2047	3/31/2082	222,840	74,150	3.568%	3.568%				74,150		
269	2060	Replacements	1107942	-	3/31/2048	3/31/2083	222,840	222,840	3.568%	3.568%				222,840		
270	2060	Replacements	1107943	-	3/31/2049	3/31/2084	222,840	222,840	3.568%	3.568%				114,505		
271	FY 2060 Subtotal:		-	-	-	-	668,520	519,830	-	-				411,494		
272	Grand Total						\$13,131,260	\$13,307,078						#####	\$82,393	\$21,042

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12. REPAYMENT THEORY OF OPERATION

12.1 Introduction

BPA is required to collect revenues sufficient to meet BPA's annual transmission expenses and cover the long-term obligations of the Federal Columbia River Transmission System.

The repayment program is used to determine whether a given set of annual revenues is sufficient to meet a given set of annual expenses and cover a given set of long-term obligations when applied in accordance with the requirements of Department of Energy Order RA 6120.2. The program is also used to determine the minimum factor by which future revenues can be multiplied to obtain a new set of revenues that will be sufficient to recover amortization costs.

The revenues and the expenses of the cost evaluation year will be assigned to all future years, in effect assigning the net operating revenue of the cost evaluation year to all future years and levelizing the long-term obligations over all future years.

12.2 Repayment Program Logic

The diagrams on the following pages show the flow of logic in BPA's repayment program. The first diagram shows the logic of the binary search used to locate minimum sufficient revenues. A necessary part of this search is the test for sufficiency. The logic of the test for sufficiency is shown on the remaining two diagrams.

The equations referred to are:

Revenue Equation: Net revenues of each year are expended on interest and payments on the principals.

Investment equation: The payments on each investment are less than or equal to the principal of that investment (and equal to the principal of that investment after the investment is due).

Predictor equation: For each future year, the accumulated revenues less the accumulated interest less the accumulated investments due is equal to the accumulated payments on high interest rate investments which are not due.

FIGURES

Figure 12-1 Repayment Program (Test for Sufficiency)

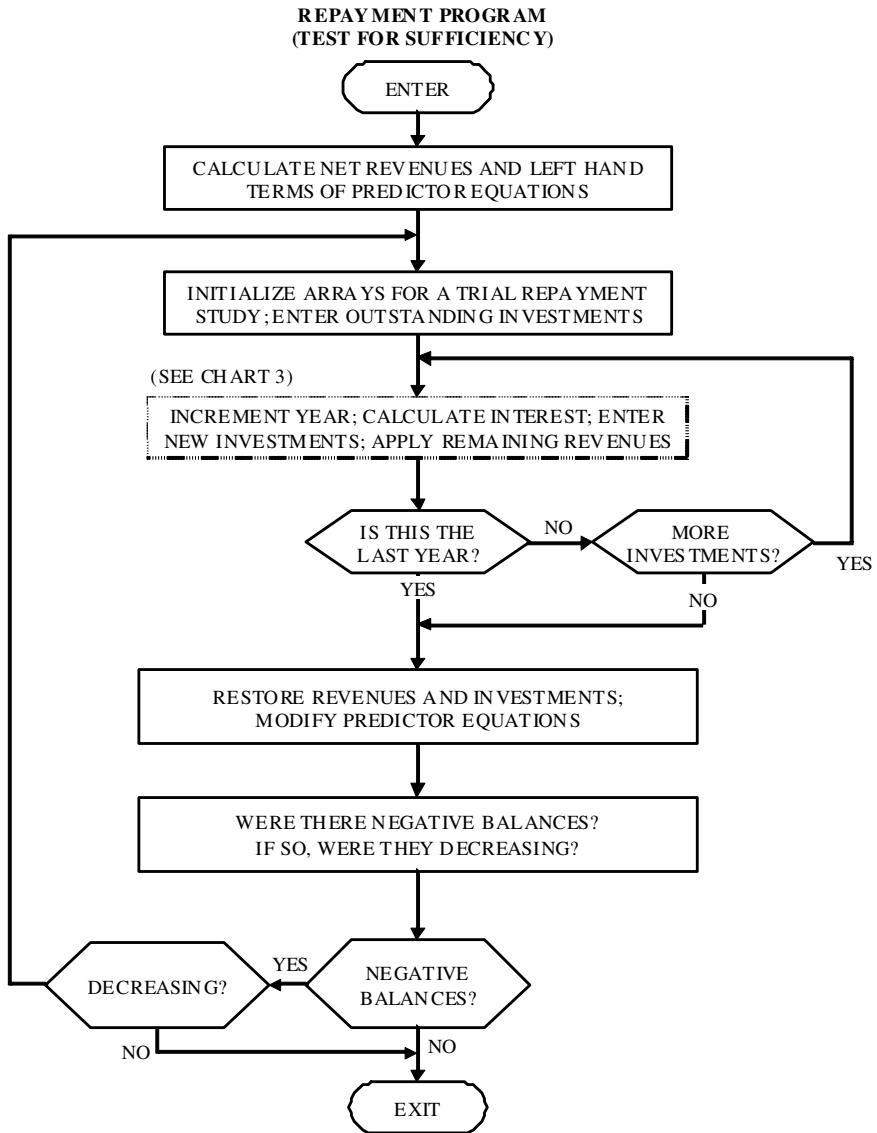
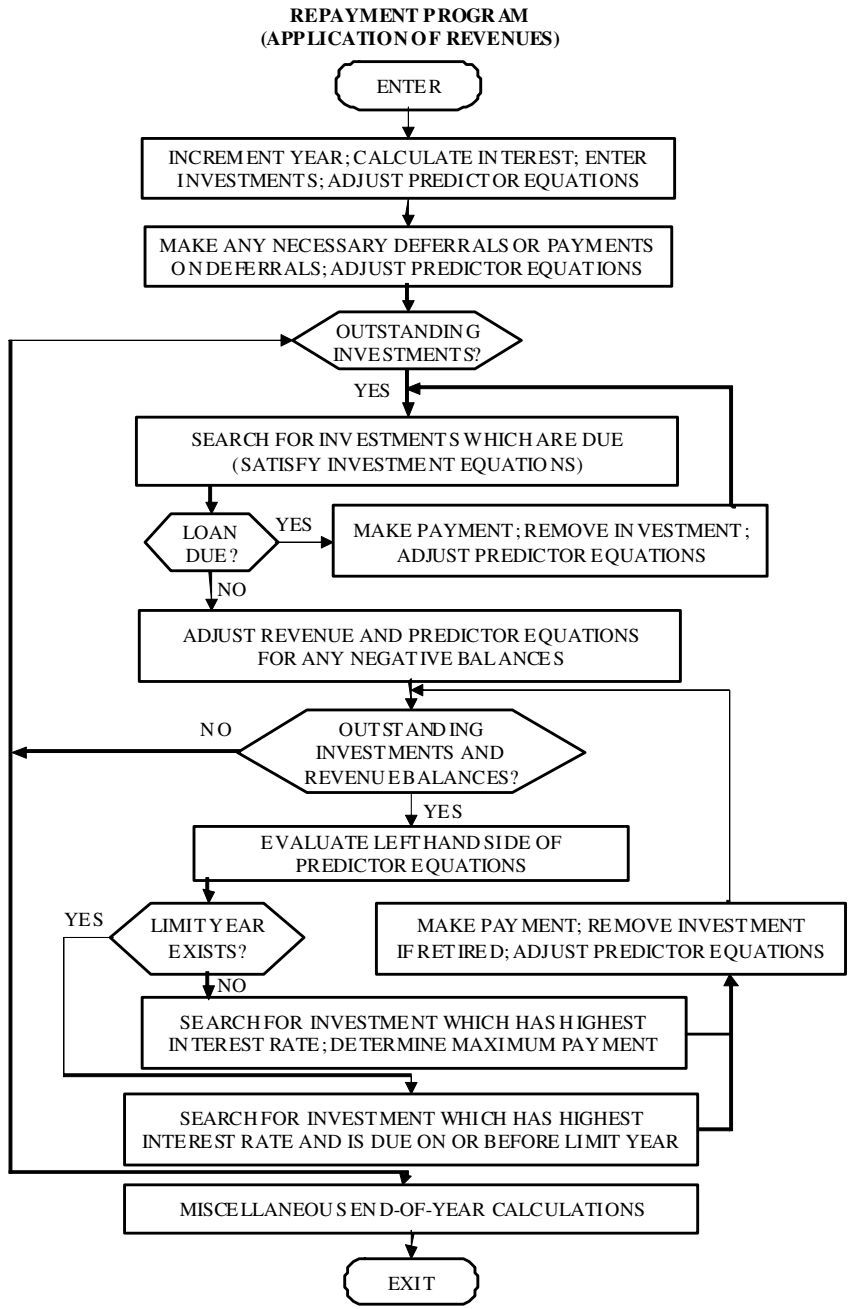


Figure 12-2 Repayment Program (Application of Revenues)



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13. TRANSMISSION SALES AND REVENUES

Table 13-1
Transmission Sales Forecast, FY 2023 - FY 2025 (Megawatts)

Rate Schedule	(A)	(B)	(C)	(D)
		FY 2023	FY 2024	FY 2025
1 Network				
2 Formula Power Transmission (FPT)		2	2	2
3 Network Integration (NT)		7,346	8,149	8,333
4 Long-term Point to Point (PTP LT)		28,906	29,692	30,490
5 PTP Short Term (PTP ST)		1,317	1,317	1,317
6 Subtotal Network		37,571	39,160	40,143
7 Southern Intertie				
8 Long-term Intertie South (IS LT)		6,025	6,025	6,025
9 IS Short Term (IS ST)		62	62	62
10 Subtotal Intertie		6,087	6,087	6,087
11 Utility Delivery Charge		153	154	154
12 Montana Intertie		83	88	88

Table 13-2
Transmission Revenues, Current Rates FY 2023 - FY 2025
(\$000s)

(A)	(B) FY 2023	(C) FY 2024	(D) FY 2025
1 Long-Term			
2 Network			
3 Formula Power Transmission	21	21	21
5 Point-to-Point Long Term	571,647	587,194	602,980
6 Network Integration	179,040	198,604	203,101
7 Interties			
9 Southern Intertie Long Term	80,831	80,831	80,831
10 Montana Intertie Long Term	520	553	553
11 Short-Term			
13 Point-to-Point Short Term	34,024	34,088	34,024
14 Southern Intertie Short Term	4,782	4,795	4,782
15 Delivery			
16 Utility Delivery Charges- Delivery	3,039	3,050	3,064
18 DSI Delivery	408	408	408
19 Ancillary			
20 Scheduling, System Control & Dispatch	175,163	181,658	185,533
22 Reactive Supply & Voltage from Gen	0	0	0
23 Operating Reserves - Spin & Supp	38,699	38,699	38,699
24 Regulation & Frequency Response	24,225	24,225	24,225
26 Variable Energy Balacning	29,727	29,727	29,727
27 Dispatchable Energy Balancing	912	912	912
28 Energy & Generation Imbalance	0	0	0
29 Other Revenues			
36 AC-PNW PSW Intertie	2,210	2,210	2,210
53 Gen-Integration-Other Revenue Source	14,723	14,723	14,809
42 Land Leases and Sales	295	295	295
49 NFP-Depr PNW PSW Intertie	3,468	3,488	3,488
33 Operations & Maintenance	1,328	1,328	1,328
44 Other Leases/Other Revenue Sources	965	965	965
45 Regional Compliance Enf/ Regional Coordinator	4,412	4,194	4,220
46 Remedial Action Scheme	38	38	38
35 Reservation Fee- Other Revenue Sources	358	358	358
50 Srvcs/FPS Loss/Int Exch/Arcrft	43	43	43
32 Townsend-Garrison Transmission	12,228	12,228	12,228
48 Transmissions Share of Irrigation PP	246	246	246
52 UNAUTH INCREASE- Other Revenue Sources	0	0	0
31 Use of Facilities (UFT)	3,654	3,634	3,634
40 Fiber- Other Revenue	7,159	5,606	5,606
41 Fiber-Other Reimbursable Revenue	1,245	1,202	1,202
37 Wireless/PCS- Other Revenue	7,159	7,008	7,008
39 Wireless/PCS- Reimbursable Revenue	4,032	4,032	4,032
54 Subtotal Network	784,731	819,907	840,127
55 Subtotal Interties	86,133	86,180	86,167
57 Subtotal Delivery	3,447	3,458	3,473
58 Subtotal Ancillary	268,726	275,221	279,096
59 Subtotal Other Revenues	63,563	61,597	61,709
60 Total TS	1,206,600	1,246,363	1,270,571

Table 13-3
Transmission Revenues, Proposed Rates FY 2024 - FY 2025
(\$000s)

(A)	(C) FY 2024	(D) FY 2025
1 Long-Term		
2 Network		
3 Formula Power Transmission	21	21
5 Point-to-Point Long Term	587,194	602,980
6 Network Integration	198,604	203,101
7 Interties		
9 Southern Intertie Long Term	80,831	80,831
10 Montana Intertie Long Term	553	553
11 Short-Term		
13 Point-to-Point Short Term	34,088	34,024
14 Southern Intertie Short Term	4,782	4,782
15 Delivery		
16 Utility Delivery Charges- Delivery	3,050	3,064
18 DSI Delivery	408	408
19 Ancillary		
20 Scheduling, System Control & Dispatch	181,658	185,533
22 Reactive Supply & Voltage from Gen	0	0
23 Operating Reserves - Spin & Supp	38,805	38,699
24 Regulation & Frequency Response	24,291	24,255
26 Variable Energy Balancing	29,727	29,727
27 Dispatchable Energy Balancing	912	912
28 Energy & Generation Imbalance	0	0
29 Other Revenues		
36 AC-PNW PSW Intertie	2,210	2,210
53 Gen-Integration-Other Revenue Source	19,445	19,800
42 Land Leases and Sales	295	295
49 NFP-Depr PNW PSW Intertie	3,468	3,468
33 Operations & Maintenance	1,320	1,320
44 Other Leases/Other Revenue Sources	963	950
45 Regional Compliance Enf/ Regional Coordinator	4,194	4,220
46 Remedial Action Scheme	77	77
35 Reservation Fee- Other Revenue Sources	247	206
50 Srvcs/FPS Loss/Int Exch/Arcrft	43	43
32 Townsend-Garrison Transmission	12,228	12,228
48 Transmissions Share of Irrigation PP	246	246
52 UNAUTH INCREASE- Other Revenue Sources	0	0
31 Use of Facilities (UFT)	3,755	3,580
40 Fiber- Other Revenue	7,435	5,501
41 Fiber-Other Reimbursable Revenue	1,245	949
37 Wireless/PCS- Other Revenue	7,159	7,157
39 Wireless/PCS- Reimbursable Revenue	4,032	4,032
54 Subtotal Network	819,907	840,126
55 Subtotal Interties	86,167	86,167
57 Subtotal Delivery	3,458	3,473
58 Subtotal Ancillary	275,393	279,126
59 Subtotal Other Revenues	68,362	66,281
60 Total TS	1,253,287	1,275,172

Table 13-4
LGIA Transmission Credits and Interest at Current Rates
(\$000)

(A)	(B)		(C)		(D)		(E)		(F)		(G)	
	FY 2023		FY 2024		FY 2025		FY 2026		FY 2027		FY 2028	
Generation Project	Interest Expense	Transmission Credits Repaid	Interest Expense	Transmission Credits Repaid	Interest Expense	Transmission Credits Repaid	Interest Expense	Transmission Credits Repaid	Interest Expense	Transmission Credits Repaid	Interest Expense	Transmission Credits Repaid
1	Generation Project A	-	-	-	-	-	-	-	-	-	-	-
2	Generation Project B	1,599	9,401	1,348	10,447	994	10,447	-	-	-	-	-
3	Generation Project C	-	-	-	-	-	-	-	-	-	-	-
4	Generation Project D	333	709	319	709	304	709	-	-	-	-	-
5	Generation Project E	-	-	-	-	-	-	-	-	-	-	-
6	Generation Project F	-	-	-	-	-	-	-	-	-	-	-
7	Generation Project G	-	-	-	-	-	-	-	-	-	-	-
8	Generation Project H	-	-	-	-	-	-	-	-	-	-	-
9	Generation Project I	639	1,157	596	2,975	552	2,975	-	-	-	-	-
10	Generation Project J	7	298	1	132	-	-	-	-	-	-	-
11	Generation Project K	-	-	-	-	-	-	-	-	-	-	-
12	Generation Project L	1	205	-	-	-	-	-	-	-	-	-
13	Generation Project M	272	3,871	179	1,613	84	1,613	-	-	-	-	-
14	Generation Project N	230	-	234	166	228	442	-	-	-	-	-
15	Generation Project O	72	-	73	-	75	-	-	-	-	-	-
16	Generation Project P	-	-	-	-	-	-	-	-	-	-	-
17	Generation Project Q	-	-	-	-	-	-	-	-	-	-	-
18	Generation Project R	0	20	-	-	-	-	-	-	-	-	-
19	Generation Project S	51	129	49	129	46	129	-	-	-	-	-
20	Generation Project T	10	178	3	241	-	-	-	-	-	-	-
21	Generation Project U	2	-	0	60	-	-	-	-	-	-	-
22	Generation Project V	29	129	26	129	23	129	-	-	-	-	-
23	Generation Project W	8	184	3	184	-	8	-	-	-	-	-
24	Generation Project X	11	149	7	149	2	148	-	-	-	-	-
25	Generation Project Y	17	117	13	164	-	341	-	-	-	-	-
26	Generation Project Z	3	642	-	-	-	-	-	-	-	-	-
27	Generation Project AA	204	912	172	1,350	128	1,532	-	-	-	-	-
28	Generation Project AB	167	-	154	1,012	113	1,778	-	-	-	-	-
29	Generation Project AC	11	128	8	134	6	134	-	-	-	-	-
30	Generation Project AD	136	1,486	105	1,486	63	2,601	-	-	-	-	-
31	Generation Project AE	9	184	3	184	-	23	-	-	-	-	-
32	Generation Project AF	56	184	52	184	47	184	-	-	-	-	-
33	Generation Project AG	26	184	21	779	-	-	-	-	-	-	-
34	Generation Project AH	18	1,037	2	1,630	-	2,074	-	-	-	-	-
35	Generation Project AI	\$ 82	\$ 184	\$ 70	\$ 258	\$ 66	\$ 258	-	-	-	-	-
36	Generation Project AJ	\$ 115	\$ -	\$ 98	\$ -	\$ 83	\$ 419	-	-	-	-	-
37	Generation Project AK	\$ 144	\$ -	\$ 122	\$ -	\$ 104	\$ 558	-	-	-	-	-
38	ANNUAL TOTALS	\$ 4,251	\$ 21,487	\$ 3,656	\$ 24,112	\$ 2,918	\$ 26,502	-	-	-	-	-

Table 13-5
LGIA Transmission Credits and Interest at Proposed Rates
(\$000)

(A)	(B)	(C)	(D)	(E)	
	FY 2024		FY 2025		
	Interest Expense	Transmission Credits Repaid	Interest Expense	Transmission Credits Repaid	
1	Generation Project A	-	-	-	-
2	Generation Project B	1,348	10,447	994	10,447
3	Generation Project C	-	-	-	-
4	Generation Project D	319	709	304	709
5	Generation Project E	-	-	-	-
6	Generation Project F	-	-	-	-
7	Generation Project G	-	-	-	-
8	Generation Project H	-	-	-	-
9	Generation Project I	596	2,975	552	2,975
10	Generation Project J	1	132	-	-
11	Generation Project K	-	-	-	-
12	Generation Project L	-	-	-	-
13	Generation Project M	179	1,613	84	1,613
14	Generation Project N	234	166	228	442
15	Generation Project O	73	-	75	-
16	Generation Project P	-	-	-	-
17	Generation Project Q	-	-	-	-
18	Generation Project R	-	-	-	-
19	Generation Project S	49	129	46	129
20	Generation Project T	3	241	-	-
21	Generation Project U	0	60	-	-
22	Generation Project V	26	129	23	129
23	Generation Project W	3	184	-	8
24	Generation Project X	7	149	2	148
25	Generation Project Y	13	164	-	341
26	Generation Project Z	-	-	-	-
27	Generation Project AA	172	1,350	128	1,532
28	Generation Project AB	154	1,012	113	1,778
29	Generation Project AC	8	134	6	134
30	Generation Project AD	105	1,486	63	2,601
31	Generation Project AE	3	184	-	23
32	Generation Project AF	52	184	47	184
33	Generation Project AG	21	779	-	-
34	Generation Project AH	2	1,630	-	2,074
35	Generation Project AI	70	258	66	258
36	Generation Project AJ	98	-	83	419
37	Generation Project AK	122	-	104	558
38	ANNUAL TOTALS	3,656	24,112	2,918	26,502

