

SOUTHWESTERN POWER ADMINISTRATION

**DRAFT 2023 POWER REPAYMENT STUDIES**

ROBERT DOUGLAS WILLIS  
HYDROPOWER PROJECT

May 2024

U.S. DEPARTMENT OF ENERGY  
SOUTHWESTERN POWER ADMINISTRATION  
ROBERT DOUGLAS WILLIS HYDROPOWER PROJECT  
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SOUTHWESTERN POWER ADMINISTRATION  
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Introduction

The Robert Douglas Willis Hydropower Project (R.D. Willis) is an addition to the Town Bluff Dam located on the Neches River in eastern Texas downstream from the Sam Rayburn Dam (Rayburn). Town Bluff Dam was originally constructed in 1951 by the U.S. Army Corps of Engineers (Corps) and primarily provides stream-flow regulation of releases from the Sam Rayburn Dam. The Lower Neches Valley Authority (LNVA) contributed funds toward construction of both the Town Bluff and Rayburn projects and makes established annual payments for the right to withdraw up to 2,000 cubic feet of water per second for its use. Power was legislatively authorized at the Town Bluff Dam project from its inception, but installation of hydroelectric facilities was deferred until justified by economic conditions. A determination of economic feasibility was made in a 1982 Corps study. In 1983, the Sam Rayburn Municipal Power Agency (SRMPA) proposed to fund the development of hydropower at R.D. Willis in return for the output of the project to be delivered to its member municipalities. SRMPA provided non-Federal funds for the entire design and construction of the project that was performed by the Corps at a cost of \$18.7 million. Upon completion, ownership and operation was vested in the U.S. Government through the Corps. The commercial on-line date was December 1, 1989. The rate determined by Southwestern Power Administration (Southwestern) includes annual operating, maintenance, interest, and marketing costs, as well as expected capital replacement costs. The rate does not include any of the original investment costs provided by SRMPA. The Government has no transmission liability connected with this project, and the project is not currently marketed to a customer.

Southwestern currently has marketing responsibility for 24 multiple-purpose water resource projects, with power facilities constructed and operated by the Corps, in a six-state marketing area with a total installed generating capacity of over 2.2 million kilowatts (kW).

The headquarters office for Southwestern is in Tulsa, Oklahoma. The Southwestern transmission system control center in Nixa, Missouri, dispatches power in the system operating as a contract participant of the Southwest Power Pool Regional Transmission Organization (SPP RTO) and interconnects with major utilities through numerous interconnections. The hydraulic control covers three major river basins with constraints including flood control, navigation, water supply and recreation, all of which must be coordinated with three divisions and six districts of the Corps. Field offices for the physical operation and maintenance of Southwestern's transmission system are located at Springfield, Missouri; Jonesboro, Arkansas; and Gore, Oklahoma. Southwestern's Liaison Office is in Washington, D.C.

The purpose of these Power Repayment Studies (PRSS) is to determine the amount of revenue required to assure recovery of all costs assigned to power for the R.D. Willis project. Southwestern must secure revenues sufficient to meet the annual costs of marketing, operations, and maintenance (O&M), and to repay, with interest, all the replacements and additional investment in generating facilities over a reasonable period of time. Department of Energy (DOE) Order No. RA 6120.2 specifies that each Power Marketing Administration (PMA) will prepare and

publish annually a Current PRS for each Power System to test the adequacy of existing rates for satisfying repayment criteria. If the Current PRS indicates that existing rates do not satisfy repayment criteria, a Revised PRS is prepared using proposed rates that are adequate to satisfy repayment requirements. Conversely, if the allowable balance exceeds the estimated future unamortized power investment during and at the end of the repayment period then a decrease in revenues is necessary.

The 2023 Current PRS analyzes the revenues and costs for R.D. Willis to determine the amount of revenue required to pay each year's expense for: (1) marketing; (2) O&M; (3) interest; and (4) amortization of the power investment. After the annual expenses are recovered, the adequacy of the revenues to cover the repayment obligation is tested by comparing the unamortized investment during each year of the study with the allowable balance of unamortized investment.

The allowable balance is the maximum amount that can remain unamortized each year with the established 50-year increments of investment and service life for replacements. The allowable balance is recalculated each year. The actual amount paid each year is subtracted from the allowable balance and the newly estimated annual investment is added to the allowable balance. The Current PRS (see Table 1) checks to see if the repayment criteria are met by comparing the balance to be repaid (remaining unamortized investment balance) to the allowable balance (maximum amount that can remain unamortized). If the balance to be repaid exceeds the allowable balance, then an increase in revenue for cost recovery is needed. Conversely, if the allowable balance is higher than the balance to be repaid, then a decrease in revenue is required. See the summary of Table 1 for further explanation.

The 2023 Current PRS shows the actual status of repayment through FY 2022 and demonstrates the repayment potential of the present annual rate of \$1,282,836 through the end of the repayment period. The Current PRS, Table 1, indicates the present rate will underpay R.D. Willis's costs by \$37,328,850 at the end of FY 2072 (end of the repayment period). Table II details the projected operating and marketing expenses that are reflected in the PRS. This study reflects an estimated increase in the Corps' O&M expenses for the repayment period.

The Revised PRS has been prepared following DOE policies, procedures and methodology as expressed in DOE Order No. RA 6120.2, which establishes PMA Financial Reporting Policies. The Revised PRS is defined as one which demonstrates "that potential revenue levels will satisfy the cost recovery criteria over the remainder of the power system's repayment period". The Revised PRS confirms the revenue level necessary to meet repayment criteria. The Revised PRS, Table I Revised, indicates that increasing annual revenues by 28.6 percent from \$1,282,836 to \$1,650,648 will accomplish repayment as required by statute through FY 2072.

A narrative is enclosed for each table noted above that explains in further detail how the projections have been derived. Supplemental information for the Current and Revised PRSs is included in the Supporting Data section.

#### Statement of Pertinent Assumptions

The R.D. Willis PRSs have been prepared following DOE policies, procedures, and methodology provided in DOE Order RA 6120.2. The Current PRS utilizes the established rate for estimating future revenues and demonstrating repayment potential of the project, proving whether the existing rate as applied to costs expected over the cost evaluation period will meet repayment criteria over the remainder of the repayment period. The Revised PRS

demonstrates the revenue level necessary to meet repayment criteria. The pertinent assumptions made in the 2023 R.D. Willis PRS include:

- a) A cost evaluation period of 5 years (FY 2023 - FY 2027).
- b) Project costs are based on estimates of conditions expected over the cost evaluation period.
- c) Repayment of all project power investment (including additions) within a 50-year period from the date the investment was placed in service.
- d) Repayment of replacements within the service life of each replacement. Replacement costs are based on 2022 cost levels.
- e) Project revenues are based on the assumed sale of the entire hydroelectric output of R.D. Willis for a fixed annual rate.
- f) Interest rates used are those specified in the project authorizing legislation and used in calculating interest expense for historical years. For all future year investments, the interest rate used is specified in the "Interest Rate Formula" in RA 6120.2, including any deficits. The future interest rate is 2.75 percent and is used for FY 2023 and all fiscal years thereafter.
- g) Distribution of revenue to the amortization of added capital investment is made assuming each increment of investment must be repaid within 50 years, or its service life, whichever is less, and where possible, to mitigate interest expense, the repayment of highest interest-bearing investment is accomplished first.
- h) The last year of actual data for purposes of this study is FY 2022, making the first estimated year FY 2023 and the end of the cost evaluation period FY 2027. The next annual power repayment study will include actual FY 2023 data and will a cost evaluation period of FY 2024 through FY 2028.
- i) The actual investment, interest (until FY 1995), and operations and maintenance cost data are provided by the Corps' financial records, based on Corps Engineering Regulation 37-2-10, and the Southwestern-Corps Memorandum of Understanding dated November 14, 1989, for historical years, as compiled by Southwestern for the Southwestern Federal Power System (SWFPS). Beginning in FY 1995 interest expense is computed by Southwestern from actual financial information furnished by the Corps.
- j) The initial capital investment of the R.D. Willis hydropower facilities were financed by a non-Federal entity. Therefore, the rate does not include a component for repayment of the initial capitalized investment since these costs were prepaid.
- k) The Corps owns and operates the R.D. Willis Hydropower Project in its entirety.

DRAFT

CURRENT POWER REPAYMENT STUDY

R.D. WILLIS

TABLE I  
CURRENT POWER REPAYMENT STUDY - R.D. WILLIS

This Current PRS shows the Status of Repayment through Fiscal Year 2072 and demonstrates the repayment potential of the existing rate over the cost evaluation period.

Under the current rate, with projections of varying costs over the cost evaluation period, the project will not be repaid at or within the 50-year time frame.

Each column of Table I is described as follows:

Column 1 - Year of Study - First year of commercial operation through the end of the R.D. Willis repayment period in FY 2072. The 50-year repayment period begins with FY 2023, the first future year investment may be added.

Commercial operation of the two generating units began December 1, 1989.

Column 2 - Fiscal Year - October 1 through September 30, annually.

Column 3 - Gross Revenue - Gross revenue as estimated or recorded on Southwestern's financial records for the sale of electric power and energy. Through FY 2022, accumulated gross revenue recorded was \$22,931,417. For FY 2023, and thereafter, revenues are projected at the FERC-approved rate of \$1,282,836 annually (FERC Docket No. EF16-1-000).

Column 4 - Operating Expense - Summation of Corps' Operation & Maintenance (O&M) expenses, and Southwestern's Marketing expenses assigned to R.D. Willis. From Column 7 of Table II.

Column 5 - Interest Expense - Net interest is determined by subtracting the interest credit on funds returned to the Treasury during the fiscal year from the interest charges for use of Government funds during the year. A positive value indicates a net charge to Southwestern and a negative value indicates a net credit. Beginning in FY 1995 interest expense is computed by Southwestern from actual financial information furnished by the Corps. Through FY 2022 the accumulated interest was -\$603,832.

PRS projections for interest expense (or credit) are calculated using the applicable interest rate included in DOE Order No. RA 6120.2 as follows:

1. Original Unamortized Investment - None of the original investment accrues interest as it was paid for by a non-Federal sponsor.
2. Prior Year Investment - Unamortized investment accrues interest at the applicable interest rate for the year the investment was added.

3. Future Investment - Project additions and/or replacements accrue interest for one-half year at the current applicable interest rate (2.75 percent for FY 2023 and thereafter) for the year the investment is added. If not repaid in the year the investment is added, the a full year of interest at the FY 2023 interest rate is applied to the unpaid portion in the following year(s).
4. Prior Year Balance - Calculated at the applicable interest rate for the year the net revenue / expense was incurred.
5. Balance (Net Revenue / Expense) - Interest for the current year is computed on balance at the current applicable interest rate (2.75 percent for FY 2023 and thereafter) for one-half year (result is normally an interest credit, shown as a negative interest expense), calculated as follows:

$$\frac{\text{Gross Revenue} - \text{Operating Expenses}}{\text{Net Revenue} \times 0.5 \times 0.0275}$$

Future year interest for net revenue / expense is accrued for the full year at the FY 2023 interest rate.

Column 6 - Actual Amortization - As of September 30, 2022, the investment paid was \$675,358. The projected figures are amounts of amortization to be applied to repay future investments (additions and/or replacements).

Reserve Amortization - Amount of annual revenue available for repayment of future added investment after application first to the prior year's annual operating expenses, if any, and interest (includes interest credit on both reserves added annually and accumulated balance of reserve). As of September 30, 2022, \$3,940,607 had been collected for future investments. Column 3 minus Column 4 and Column 5 minus actual amortization.

Column 7- Added Investment - Includes historical and projected capital replacements and/or additions at the R.D. Willis project to be included in the development of the balance to be repaid.

Historical - Total Electric Plant in Service as of September 30, 2022, at the R.D. Willis Project was \$17,092,129. This amount is reduced by the remaining \$16,416,771 non-Federal contribution, leaving \$675,358 capitalized investment to be repaid. Due to a bookkeeping / classification error, the Corps incorrectly recorded an expenditure as a government investment of \$10,246 in FY 1994.

Projected - Projected investments shown in the study are major Project Replacements only. The Corps identified major items at R.D. Willis which have estimated service lives of 50 years or less and determined the investment required for the replacement of these items at 2016 cost levels. The costs of these items have been updated to July 2022 cost levels using the Handy-

Whitman Index of Public Utility Construction Costs. The service lives for the items identified include 8, 12, 15, 20, 25, 35, 40, 45 and 50 years.

Proration - Added investments in replacements with service lives beyond the repayment period that are estimated to be placed in service within the last 36 years of the repayment period are prorated beginning in FY 2023 using compound interest amortization to calculate the amount of the investment which would be repaid under a declining balance, mortgage-type repayment schedule.

The 36-year period is used because that is the length of time in which interest expense at the rate of 2.75 percent will not exceed the principal amount of the replacement [ $1 / .0275 = 36$ ]. Any replacement occurring prior to the last 36 years of the repayment period is assumed to be paid in full in the year placed in service unless the revenue that would be applied to the replacement is needed to repay the original project investment in a 36-year period. This adjustment is made to accurately reflect the amounts required to be repaid by the end of 50-year repayment period

Column 8 - Balance to be Repaid - The remaining investment to be repaid at the end of the fiscal year. Column 8 for the previous year plus Column 7 for the current year minus Column 6 for the current year.

Column 9 - Allowable Balance - Cumulative investment allowed to remain unpaid during a period 50 years from the year that each investment was placed in service.

Column 10 - Status of Repayment - Cumulative amortization through FY 2022 was \$3,940,607. This amount agrees with the Southwestern Federal Power System financial statements for FY 2022. Column 9 minus Column 8. This represents the portion of the allowable balance that has been repaid to date. This does not represent cumulative amortization, as original investments and subsequent actual replacements that have been fully repaid have been removed.

SOUTHWESTERN POWER ADMINISTRATION  
CURRENT POWER REPAYMENT STUDY  
R. D WILLIS

(1) YEAR OF STUDY	(2) FISCAL YEAR	(3) GROSS REVENUE \$	(4) OPERATING EXPENSE \$	(5) INTEREST EXPENSE \$	(6) AMORTIZATION ACTUAL RESERVE \$	(7) ADDED INVESTMENT \$	(8) BALANCE TO BE REPAID \$	(9) ALLOWABLE BALANCE \$	(10) STATUS OF REPAYMENT \$	
	1990	310,890	345,825	1,990	0	(36,925)	10,246	47,171	10,246	(36,925)
1	1991	373,068	399,295	3,500	0	(29,727)	0	76,898	10,246	(66,652)
2	1992	408,648	243,753	(4,374)	10,246	169,269	0	(92,371)	10,246	102,617
3	1993	346,614	263,191	(4,820)	0	88,243	0	(180,614)	10,246	190,860
4	1994	284,580	274,403	(3,852)	(10,246)	14,029	(10,246)	(204,889)	0	204,889
5	1995	294,312	263,307	(1,124)	0	32,129	0	(237,018)	0	237,018
6	1996	294,312	261,838	(17,020)	0	49,494	0	(286,512)	0	286,512
7	1997	266,928	306,187	(52,418)	0	13,159	0	(299,671)	0	299,671
8	1998	293,928	309,203	(20,419)	0	5,144	0	(304,815)	0	304,815
9	1999	302,928	452,031	(14,325)	16,954	(134,778)	16,954	(153,083)	16,954	170,037
10	2000	337,932	223,025	(13,614)	11,865	128,521	11,865	(269,739)	28,819	298,558
11	2001	337,932	336,506	(19,421)	(15,210)	20,847	(15,210)	(305,796)	13,609	319,405
12	2002	353,700	405,111	(16,568)	5,341	(34,843)	5,341	(265,612)	18,950	284,562
13	2003	353,700	337,715	(15,376)	0	31,361	0	(296,973)	18,950	315,923
14	2004	444,681	424,046	(16,488)	0	37,123	0	(334,096)	18,950	353,046
15	2005	452,952	429,947	(18,547)	(11,023)	41,552	(11,023)	(386,671)	7,927	394,598
16	2006	599,310	872,723	(11,557)	21,885	(261,856)	21,885	(102,930)	29,812	132,742
17	2007	773,709	905,075	418	100,324	(131,784)	100,324	129,178	130,136	958
18	2008	815,580	1,226,949	15,939	0	(427,308)	0	556,486	130,136	(426,350)
19	2009	929,388	393,974	12,559	0	522,855	0	33,631	130,136	96,505
20	2010	929,388	489,151	(7,412)	22,979	447,649	22,979	(391,039)	153,115	544,154
21	2011	929,388	485,197	(26,017)	0	470,208	0	(861,247)	153,115	1,014,362
22	2012	929,388	670,786	(38,961)	50,501	297,563	50,501	(1,108,309)	203,616	1,311,925
23	2013	1,000,860	448,519	(38,299)	0	590,640	0	(1,698,949)	203,616	1,902,565
24	2014	1,072,332	548,529	(58,617)	33,229	582,420	33,229	(2,248,140)	236,845	2,484,985
25	2015	1,018,728	561,410	(83,931)	0	541,249	0	(2,789,389)	236,845	3,026,234
26	2016	1,219,503	971,695	(76,743)	0	324,551	0	(3,113,940)	236,845	3,350,785
27	2017	842,558	972,479	(67,970)	395,492	(61,951)	395,492	(2,656,497)	632,337	3,288,834
28	2018	1,282,836	971,121	(4,036)	43,021	315,751	43,021	(2,929,227)	675,358	3,604,585
29	2019	1,282,836	828,969	(6,849)	0	460,716	0	(3,389,943)	675,358	4,065,301
30	2020	1,282,836	1,397,347	1,140	0	(115,651)	0	(3,274,292)	675,358	3,949,650
31	2021	1,282,836	1,371,009	716	0	(117,511)	0	(3,156,781)	675,358	3,832,139
32	2022	1,282,836	1,140,336	(1,336)	0	108,468	0	(3,265,249)	675,358	3,940,607
SUBTOTALS		22,931,417	19,530,652	(603,832)	675,358	3,940,607	675,358			
33	2023	1,282,836	986,200	(93,065)	58,781	389,701	58,781	(3,596,169)	734,139	4,330,308
34	2024	1,282,836	1,003,500	(101,927)	58,781	381,263	58,781	(3,918,651)	792,920	4,711,571
35	2025	1,282,836	1,023,200	(109,828)	109,381	369,464	109,381	(4,178,734)	902,301	5,081,035
36	2026	1,282,836	1,042,100	(46,991)	4,466,461	287,727	5,180,781	714,320	6,083,082	5,368,762
37	2027	1,282,836	1,059,900	17,386	205,550	205,550	58,781	567,551	6,141,863	5,574,312
38	2028	1,282,836	1,059,900	54,130	168,806	168,806	3,024,500	3,423,245	9,166,363	5,743,118
39	2029	1,282,836	1,059,900	112,920	110,016	110,016	1,588,700	4,901,929	10,755,063	5,853,134
40	2030	1,282,836	1,059,900	135,931	87,005	87,005	304,900	5,119,824	11,059,963	5,940,139
41	2031	1,282,836	1,059,900	137,732	85,204	85,204	0	5,034,620	11,059,963	6,025,343
42	2032	1,282,836	1,059,900	140,806	82,130	82,130	394,000	5,346,490	11,453,963	6,107,473
43	2033	1,282,836	1,059,900	144,273	78,663	78,663	22,400	5,290,227	11,453,963	6,163,736
44	2034	1,282,836	1,059,900	142,418	80,518	80,518	0	5,209,709	11,446,036	6,236,327
45	2035	1,282,836	1,059,900	170,243	52,693	52,693	2,184,700	7,341,716	13,630,736	6,289,020
46	2036	1,282,836	1,059,900	198,833	24,103	24,103	0	7,317,613	13,630,736	6,313,123
47	2037	1,282,836	1,059,900	201,566	21,370	21,370	247,000	7,543,243	13,877,736	6,334,493
48	2038	1,282,836	1,059,900	204,405	18,531	18,531	2,200	7,526,912	13,877,736	6,350,824
49	2039	1,282,836	1,059,900	253,941	0	(31,005)	2,580,300	10,138,217	16,458,036	6,319,819
50	2040	1,282,836	1,059,900	305,266	0	(82,330)	33,400	10,253,947	16,482,036	6,228,089
51	2041	1,282,836	1,059,900	322,067	0	(99,131)	1,023,800	11,376,878	16,460,151	5,083,273
52	2042	1,282,836	1,059,900	356,095	0	(133,159)	1,006,500	12,516,537	17,366,327	4,849,790
53	2043	1,282,836	1,059,900	389,046	0	(166,110)	804,700	13,487,347	17,590,927	4,103,580
54	2044	1,282,836	1,059,900	405,680	0	(182,744)	0	13,670,091	17,590,927	3,920,836
55	2045	1,282,836	1,059,900	411,093	0	(188,157)	28,200	13,886,448	17,567,948	3,681,500
56	2046	1,282,836	1,059,900	416,684	0	(193,748)	2,200	14,082,396	17,567,948	3,485,552
57	2047	1,282,836	1,059,900	428,277	0	(205,341)	453,300	14,741,037	17,576,747	2,835,710
58	2048	1,282,836	1,059,900	446,395	0	(223,459)	448,300	15,412,796	17,584,347	2,171,551
59	2049	1,282,836	1,059,900	464,223	0	(241,287)	176,000	15,830,083	17,704,718	1,874,635
60	2050	1,282,836	1,059,900	478,503	0	(255,567)	87,900	16,173,550	17,764,418	1,590,868
61	2051	1,282,836	1,059,900	490,270	0	(267,334)	72,400	16,513,284	17,836,818	1,323,534
62	2052	1,282,836	1,059,900	542,186	0	(319,250)	1,492,800	18,325,334	18,687,126	361,792
63	2053	1,282,836	1,059,900	600,968	0	(378,032)	339,700	19,043,066	18,627,826	(415,240)
64	2054	1,282,836	1,059,900	619,650	0	(396,714)	6,600	19,446,380	18,632,226	(814,154)
65	2055	1,282,836	1,059,900	650,555	0	(427,619)	524,200	20,398,199	19,104,226	(1,293,973)
66	2056	1,282,836	1,059,900	697,101	0	(474,165)	1,023,400	21,895,764	19,083,205	(2,812,559)
67	2057	1,282,836	1,059,900	733,823	0	(510,887)	213,200	22,619,851	19,274,005	(3,345,846)
68	2058	1,282,836	1,059,900	764,432	0	(541,496)	533,800	23,695,147	19,227,705	(4,467,442)
69	2059	1,282,836	1,059,900	787,298	0	(564,362)	0	24,259,509	19,227,705	(5,031,804)
70	2060	1,282,836	1,059,900	810,911	0	(587,975)	87,400	24,934,884	19,295,605	(5,639,279)
71	2061	1,282,836	1,059,900	835,174	0	(612,238)	0	25,547,122	19,236,824	(6,310,298)
72	2062	1,282,836	1,059,900	867,619	0	(644,683)	381,500	26,573,305	19,100,743	(7,472,562)
73	2063	1,282,836	1,059,900	923,020	0	(700,084)	280,100	27,553,489	17,717,362	(9,836,127)
74	2064	1,282,836	1,059,900	970,915	0	(747,979)	65,600	28,367,068	17,517,081	(10,849,987)
75	2065	1,282,836	1,059,900	998,960	0	(776,024)	30,100	29,173,192	17,423,200	(11,749,992)
76	2066	1,282,836	1,059,900	1,084,677	0	(861,741)	376,100	30,411,033	14,906,800	(15,504,233)
77	2067	1,282,836	1,059,900	1,175,968	0	(953,032)	74,700	31,438,765	14,734,500	(16,704,265)
78	2068	1,282,836	1,059,900	1,213,627	0	(990,691)	74,000	32,503,456	14,367,800	(18,135,656)
79	2069	1,282,836	1,059,900	1,290,238	0	(1,067,302)	110,700	33,681,458	12,983,700	(20,697,758)
80	2070	1,282,836	1,059,900	1,365,802	0	(1,142,866)	11,500	34,835,824	12,690,300	(22,145,524)
81	2071	1,282,836	1,059,900	1,415,193	0	(1,192,257)	54,900	36,082,981	11,743,800	(24,339,181)
82	2072	1,282,836	1,059,900	1,468,805	0	(1,245,869)	0	37,328,850	0	(37,328,850)
TOTALS		87,073,217	72,341,052	25,689,462	6,383,351	(11,021,287)	26,307,563			
SUBTOTALS		64,141,800	52,810,400	26,293,294	5,707,993	(14,961,894)	25,632,205			

TABLE II  
OPERATING EXPENSES  
CURRENT POWER REPAYMENT STUDY - R.D. WILLIS

- Column 1 - Year of Study - First year of commercial operation through the end of the R.D. Willis repayment period in FY 2072. The 50-year repayment period begins with FY 2023, the first year after the latest replacements have been placed in service.
- Column 2 - Fiscal Year - October 1 through September 30, annually.
- Column 3 - Corps Operation and Maintenance - Estimates for future years' operations and maintenance (O&M) expenses were developed using 10-year rolling average of Corps O&M actuals in 2022 dollars, adjusted by the Gross Domestic Product (GDP) price index. Southwestern has also included an allowance for projected cost variations beginning in FY 2023 to forecast an average level of large maintenance through the end of the repayment study, based on data provided by the Corps for the earlier years of the cost evaluation period

Example: Base Costs in 2023	Large Maintenance Items	1+ GDP Price Index Compounded (Factor)	Projected Corp O&M Expense <u>1/</u>	Year
\$919,453	\$0	1.021000	\$956,400	FY 2023
\$919,453	\$0	1.041420	\$975,100	FY 2024
\$919,453	\$0	1.062248	\$994,300	FY 2025
\$919,453	\$0	1.083493	\$1,013,800	FY 2026
\$876,953	\$40,000	<u>2/</u> 1.105163	\$1,031,000	FY 2027 & Thereafter

1/ Includes the Civil Service Retirement System Unfunded costs of \$16,300 per year.

2/ Cost Variation Factor  $876,953 \times 0.045629 = \$40,000$  (rounded)

- Column 4 - Corps Retirement Losses - Depreciation less Cumulative Depreciation Expense found in the Corps' annual financial statements.
- Column 5 - Corps Expense Total - Represents the total Corps O&M expense related to the R.D. Willis project. Column 3 plus Column 4.
- Column 6 - SWPA Marketing Expense - These expenses are Southwestern's actual Marketing expenses assigned to R.D. Willis in the annual distribution of revenue to the Corps through FY 2023. Forecasts for FY 2023-2027 are based on the FY 2023 Budget of the United States Government. The historical average of actual

Transmission-related O&M and Southwestern's Marketing-related expenses reveal that 20.2 percent of these expenses are Southwestern's Other Power Marketing Expenses (chargeable to all generating projects, including R.D. Willis). The remaining are Transmission-related O&M and General Administrative and Overhead (GA&O) expenses related or assigned to Purchased Power and Wheeling, which are not applicable to R.D. Willis and thus not charged to R.D. Willis.

The following formulas are used to assign a proportionate share of Southwestern's Marketing expenses to each project marketed by Southwestern, and is used here to assign such costs to the R.D. Willis Project:

$$\frac{A}{B} = C; D \times E = F; (C \times F) + 1,000 = G$$

- A = R.D. Willis Generating Capacity, in kilowatts.
- B = Southwestern's Total Generating Capacity, in kilowatts.
- C = Ratio of R.D. Willis Capacity to Total Capacity (A / B).
- D = Projected Southwestern Total Transmission and Marketing Expenses (Excludes Purchased Power, Wheeling, and Banking). Projection represents a historical percentage of actual expenditures as it relates to budget projections.
- E = Ratio representing a five-year average of Southwestern's historical Marketing Expenses as compared to Southwestern's Total Transmission and Marketing Expenses.
- F = Projected Marketing Expenses without Transmission, Purchased Power, Wheeling and Banking-related costs (D x E).
- G = Southwestern's marketing expenses chargeable to R.D. Willis each Fiscal Year (C x F), plus \$1,000 Unfunded Civil Service Retirement costs.

FY 2023	$7,350\text{kW} \div 2,213,500\text{kW} = 0.003321$	$((\$42,880,000 \times 20.2\%) \times (0.003321)) + \$1,000 = \$29,800$
FY 2024	$7,350\text{kW} \div 2,213,500\text{kW} = 0.003322$	$((\$40,886,000 \times 20.2\%) \times (0.003321)) + \$1,000 = \$28,400$
FY 2025	$7,350\text{kW} \div 2,213,500\text{kW} = 0.003323$	$((\$41,564,000 \times 20.2\%) \times (0.003321)) + \$1,000 = \$28,900$
FY 2026	$7,350\text{kW} \div 2,213,500\text{kW} = 0.003324$	$((\$40,691,000 \times 20.2\%) \times (0.003321)) + \$1,000 = \$28,300$
FY 2027	$7,350\text{kW} \div 2,213,500\text{kW} = 0.003325$	$((\$41,527,000 \times 20.2\%) \times (0.003321)) + \$1,000 = \$28,900$

Column 7 - Total Operating Expense - Sum of the Corps' O&M Expense and Southwestern's Marketing expense assignable to R.D. Willis (Column 5 plus Column 6) agrees with Table I, Column 4.

SOUTHWESTERN POWER ADMINISTRATION  
CURRENT POWER REPAYMENT STUDY  
OPERATING EXPENSES  
R. D. WILLIS

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
YEAR OF STUDY	FISCAL YEAR	CORPS OPERATION AND MAINTENANCE \$	CORPS RETIREMENT LOSSES \$	CORPS EXPENSE TOTAL \$	SWPA MARKETING EXPENSE \$	TOTAL OPERATING EXPENSE \$	FISCAL YEAR
	1990	328,568	0	328,568	17,257	345,825	1990
	1991	386,343	0	386,343	12,952	399,295	1991
	1992	233,849	0	233,849	9,904	243,753	1992
	1993	245,085	0	245,085	18,106	263,191	1993
	1994	269,686	0	269,686	4,717	274,403	1994
	1995	247,319	0	247,319	15,988	263,307	1995
	1996	246,681	0	246,681	15,157	261,838	1996
	1997	289,845	0	289,845	16,342	306,187	1997
	1998	299,267	0	299,267	9,936	309,203	1998
	1999	435,062	0	435,062	16,969	452,031	1999
	2000	204,468	0	204,468	18,557	223,025	2000
	2001	303,021	10,538	313,559	22,947	336,506	2001
	2002	365,010	5,872	370,882	34,229	405,111	2002
	2003	325,827	0	325,827	11,888	337,715	2003
	2004	362,189	(1)	362,188	61,858	424,046	2004
	2005	408,349	0	408,349	21,598	429,947	2005
	2006	851,020	1	851,021	21,702	872,723	2006
	2007	896,418	0	896,418	8,657	905,075	2007
	2008	1,211,167	0	1,211,167	15,782	1,226,949	2008
	2009	374,587	(1)	374,586	19,388	393,974	2009
	2010	464,399	4,138	468,537	20,614	489,151	2010
	2011	450,028	1	450,029	35,168	485,197	2011
	2012	653,342	0	653,342	17,444	670,786	2012
	2013	432,105	0	432,105	16,414	448,519	2013
	2014	529,219	0	529,219	19,310	548,529	2014
	2015	541,314	1	541,315	20,095	561,410	2015
	2016	2,790,976	(1,839,794)	951,182	20,513	971,695	2016
	2017	955,104	(3,923)	951,181	21,298	972,479	2017
	2018	941,986	4,261	946,247	24,874	971,121	2018
	2019	806,401	0	806,401	22,568	828,969	2019
	2020	1,365,733	0	1,365,733	31,614	1,397,347	2020
	2021	1,371,009	0	1,371,009	28,622	1,399,631	2021
	2022	1,140,335	(1)	1,140,334	35,370	1,175,704	2022
	SUBTOTALS	20,725,712	(1,818,908)	18,906,804	687,838	19,594,642	
	2023	956,400	0	956,400	29,800	986,200	2023
	2024	975,100	0	975,100	28,400	1,003,500	2024
	2025	994,300	0	994,300	28,900	1,023,200	2025
	2026	1,013,800	0	1,013,800	28,300	1,042,100	2026
	2027	1,031,000	0	1,031,000	28,900	1,059,900	2027
	2028	1,031,000	0	1,031,000	28,900	1,059,900	2028
	2029	1,031,000	0	1,031,000	28,900	1,059,900	2029
	2030	1,031,000	0	1,031,000	28,900	1,059,900	2030
	2031	1,031,000	0	1,031,000	28,900	1,059,900	2031
	2032	1,031,000	0	1,031,000	28,900	1,059,900	2032
	2033	1,031,000	0	1,031,000	28,900	1,059,900	2033
	2034	1,031,000	0	1,031,000	28,900	1,059,900	2034
	2035	1,031,000	0	1,031,000	28,900	1,059,900	2035
	2036	1,031,000	0	1,031,000	28,900	1,059,900	2036
	2037	1,031,000	0	1,031,000	28,900	1,059,900	2037
	2038	1,031,000	0	1,031,000	28,900	1,059,900	2038
	2039	1,031,000	0	1,031,000	28,900	1,059,900	2039
	2040	1,031,000	0	1,031,000	28,900	1,059,900	2040
	2041	1,031,000	0	1,031,000	28,900	1,059,900	2041
	2042	1,031,000	0	1,031,000	28,900	1,059,900	2042
	2043	1,031,000	0	1,031,000	28,900	1,059,900	2043
	2044	1,031,000	0	1,031,000	28,900	1,059,900	2044
	2045	1,031,000	0	1,031,000	28,900	1,059,900	2045
	2046	1,031,000	0	1,031,000	28,900	1,059,900	2046
	2047	1,031,000	0	1,031,000	28,900	1,059,900	2047
	2048	1,031,000	0	1,031,000	28,900	1,059,900	2048
	2049	1,031,000	0	1,031,000	28,900	1,059,900	2049
	2050	1,031,000	0	1,031,000	28,900	1,059,900	2050
	2051	1,031,000	0	1,031,000	28,900	1,059,900	2051
	2052	1,031,000	0	1,031,000	28,900	1,059,900	2052
	2053	1,031,000	0	1,031,000	28,900	1,059,900	2053
	2054	1,031,000	0	1,031,000	28,900	1,059,900	2054
	2055	1,031,000	0	1,031,000	28,900	1,059,900	2055
	2056	1,031,000	0	1,031,000	28,900	1,059,900	2056
	2057	1,031,000	0	1,031,000	28,900	1,059,900	2057
	2058	1,031,000	0	1,031,000	28,900	1,059,900	2058
	2059	1,031,000	0	1,031,000	28,900	1,059,900	2059
	2060	1,031,000	0	1,031,000	28,900	1,059,900	2060
	2061	1,031,000	0	1,031,000	28,900	1,059,900	2061
	2062	1,031,000	0	1,031,000	28,900	1,059,900	2062
	2063	1,031,000	0	1,031,000	28,900	1,059,900	2063
	2064	1,031,000	0	1,031,000	28,900	1,059,900	2064
	2065	1,031,000	0	1,031,000	28,900	1,059,900	2065
	2066	1,031,000	0	1,031,000	28,900	1,059,900	2066
	2067	1,031,000	0	1,031,000	28,900	1,059,900	2067
	2068	1,031,000	0	1,031,000	28,900	1,059,900	2068
	2069	1,031,000	0	1,031,000	28,900	1,059,900	2069
	2070	1,031,000	0	1,031,000	28,900	1,059,900	2070
	2071	1,031,000	0	1,031,000	28,900	1,059,900	2071
	2072	1,031,000	0	1,031,000	28,900	1,059,900	2072
	SUBTOTALS	51,365,600	0	51,365,600	1,444,800	52,810,400	
	TOTAL	72,091,312	(1,818,908)	70,272,404	2,132,638	72,405,042	

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REVISED POWER REPAYMENT STUDY

R.D. WILLIS

## TABLE I

REVISED POWER REPAYMENT STUDY - R.D. WILLIS

This Revised PRS was prepared to determine the change in annual revenue required to complete repayment of all required costs at R.D. Willis within the 50-year study period.

The Current PRS, Table I, indicates that under the existing rate the R.D. Willis project is underpaid by \$37,328,850 at the end of the repayment period. An annual increase of \$367,812 in revenue will adequately recover all projected costs. The revenue increase is necessary to recover the increased operations and maintenance and investment future estimated costs.

No change was made to the Current PRS, Table I, except for increasing the amount of needed annual revenue. By increasing the annual gross revenue by \$367,812 (from \$1,282,836 to \$1,650,648) beginning September 1, 2025, and thereafter, repayment of each investment at the R.D. Willis project is demonstrated at a maximum 50-year rate. This increase in annual gross revenue amounts to a 28.6 percent increase to the existing rate. (See Current PRS, Table I, for column definitions.)

SOUTHWESTERN POWER ADMINISTRATION  
 REVISED POWER REPAYMENT STUDY  
 R. D WILLIS

TABLE I  
 May 2024

(1) YEAR OF STUDY	(2) FISCAL YEAR	(3) GROSS REVENUE \$	(4) OPERATING EXPENSE \$	(5) INTEREST EXPENSE \$	(6) AMORTIZATION ACTUAL \$	(7) RESERVE RESERVE \$	(8) ADDED INVESTMENT \$	(9) BALANCE TO BE REPAID \$	(10) ALLOWABLE BALANCE \$	(11) STATUS OF REPAYMENT \$
	1990	310,890	345,825	1,990	0	(36,925)	10,246	47,171	10,246	(36,925)
1	1991	373,068	399,295	3,500	0	(29,727)	0	76,898	10,246	(66,652)
2	1992	408,648	243,753	(4,374)	10,246	169,269	0	(92,371)	10,246	102,617
3	1993	346,614	263,191	(4,820)	0	88,243	0	(180,614)	10,246	190,860
4	1994	284,580	274,403	(3,852)	(10,246)	14,029	(10,246)	(204,889)	0	204,889
5	1995	294,312	263,307	(1,124)	0	32,129	0	(237,018)	0	237,018
6	1996	294,312	261,838	(17,020)	0	49,494	0	(286,512)	0	286,512
7	1997	266,928	306,187	(52,418)	0	13,159	0	(299,671)	0	299,671
8	1998	293,928	309,203	(20,419)	0	5,144	0	(304,815)	0	304,815
9	1999	302,928	452,031	(14,325)	16,954	(134,778)	16,954	(153,083)	16,954	170,037
10	2000	337,932	223,025	(13,614)	11,865	128,521	11,865	(269,739)	28,819	298,558
11	2001	337,932	336,506	(19,421)	(15,210)	20,847	(15,210)	(305,796)	13,609	319,405
12	2002	353,700	405,111	(16,568)	5,341	(34,843)	5,341	(265,612)	18,950	284,562
13	2003	353,700	337,715	(15,376)	0	31,361	0	(296,973)	18,950	315,923
14	2004	444,681	424,046	(16,488)	0	37,123	0	(334,096)	18,950	353,046
15	2005	452,952	429,947	(18,547)	(11,023)	41,552	(11,023)	(386,671)	7,927	394,598
16	2006	599,310	872,723	(11,557)	21,885	(261,856)	21,885	(102,930)	29,812	132,742
17	2007	773,709	905,075	418	100,324	(131,784)	100,324	129,178	130,136	958
18	2008	815,580	1,226,949	15,939	0	(427,308)	0	556,486	130,136	(426,350)
19	2009	929,388	393,974	12,559	0	522,855	0	33,631	130,136	96,505
20	2010	929,388	489,151	(7,412)	22,979	447,649	22,979	(391,039)	153,115	544,154
21	2011	929,388	485,197	(26,017)	0	470,208	0	(861,247)	153,115	1,014,362
22	2012	929,388	670,786	(38,961)	50,501	297,563	50,501	(1,108,309)	203,616	1,311,925
23	2013	1,000,860	448,519	(38,299)	0	590,640	0	(1,698,949)	203,616	1,902,565
24	2014	1,072,332	548,529	(58,617)	33,229	582,420	33,229	(2,248,140)	236,845	2,484,985
25	2015	1,018,728	561,410	(83,931)	0	541,249	0	(2,789,389)	236,845	3,026,234
26	2016	1,219,503	971,695	(76,743)	0	324,551	0	(3,113,940)	236,845	3,350,785
27	2017	842,558	972,479	(67,970)	395,492	(61,951)	395,492	(2,656,497)	632,337	3,288,834
28	2018	1,282,836	971,121	(4,036)	43,021	315,751	43,021	(2,929,227)	675,358	3,604,585
29	2019	1,282,836	828,969	(6,849)	0	460,716	0	(3,389,943)	675,358	4,065,301
30	2020	1,282,836	1,397,347	1,140	0	(115,651)	0	(3,274,292)	675,358	3,949,650
31	2021	1,282,836	1,371,009	716	0	(117,511)	0	(3,156,781)	675,358	3,832,139
32	2022	1,282,836	1,140,336	(1,336)	0	108,468	0	(3,265,249)	675,358	3,940,607
SUBTOTALS		22,931,417	19,530,652	(603,832)	675,358	3,940,607	675,358			
33	2023	1,282,836	986,200	(93,065)	58,781	389,701	58,781	(3,596,169)	734,139	4,330,308
34	2024	1,558,695	1,003,500	(105,720)	58,781	660,915	58,781	(4,198,303)	792,920	4,991,223
35	2025	1,650,648	1,023,200	(122,577)	109,381	750,025	109,381	(4,838,947)	902,301	5,741,248
36	2026	1,650,648	1,042,100	(70,204)	5,180,781	678,752	5,180,781	(336,918)	6,083,082	6,420,000
37	2027	1,650,648	1,059,900	(16,580)	58,781	607,328	58,781	(885,465)	6,141,863	7,027,328
38	2028	1,650,648	1,059,900	9,114	1,467,099	581,634	3,024,500	1,557,401	9,166,363	7,608,962
39	2029	1,650,648	1,059,900	56,551	534,197	534,197	1,588,700	2,611,904	10,755,063	8,143,159
40	2030	1,650,648	1,059,900	67,896	522,852	522,852	304,900	2,393,952	11,059,963	8,666,011
41	2031	1,650,648	1,059,900	57,710	533,038	533,038	0	1,860,914	11,059,963	9,199,049
42	2032	1,650,648	1,059,900	48,470	542,278	542,278	394,000	1,712,636	11,453,963	9,741,327
43	2033	1,650,648	1,059,900	39,282	551,466	551,466	22,400	1,183,570	11,453,963	10,270,393
44	2034	1,650,648	1,059,900	24,425	566,323	566,323	0	617,247	11,446,036	10,828,789
45	2035	1,650,648	1,059,900	38,891	551,857	551,857	2,184,700	2,250,090	13,630,736	11,380,646
46	2036	1,650,648	1,059,900	53,754	536,994	536,994	0	1,713,096	13,630,736	11,917,640
47	2037	1,650,648	1,059,900	42,383	548,365	548,365	247,000	1,411,731	13,877,736	12,466,005
48	2038	1,650,648	1,059,900	30,730	560,018	560,018	2,200	853,913	13,877,736	13,023,823
49	2039	1,650,648	1,059,900	65,375	525,373	525,373	2,580,300	2,908,840	16,458,036	13,549,196
50	2040	1,650,648	1,059,900	101,399	489,349	489,349	33,400	2,452,891	16,482,036	14,029,145
51	2041	1,650,648	1,059,900	102,479	488,269	488,269	1,023,800	2,988,422	16,460,151	13,471,729
52	2042	1,650,648	1,059,900	120,354	470,394	470,394	1,006,500	3,524,528	17,366,327	13,841,799
53	2043	1,650,648	1,059,900	136,708	454,040	454,040	804,700	3,875,188	17,590,927	13,715,739
54	2044	1,650,648	1,059,900	136,288	454,460	454,460	0	3,420,728	17,590,927	14,170,199
55	2045	1,650,648	1,059,900	124,178	466,570	466,570	28,200	2,982,358	17,567,948	14,585,590
56	2046	1,650,648	1,059,900	111,765	478,983	478,983	2,200	2,505,575	17,567,948	15,062,373
57	2047	1,650,648	1,059,900	104,856	485,892	485,892	453,300	2,472,983	17,576,747	15,103,764
58	2048	1,650,648	1,059,900	103,966	486,782	486,782	448,300	2,434,501	17,584,347	15,149,846
59	2049	1,650,648	1,059,900	102,261	488,487	488,487	176,000	2,122,014	17,704,718	15,582,704
60	2050	1,650,648	1,059,900	96,472	494,276	494,276	87,900	1,715,638	17,764,418	16,048,780
61	2051	1,650,648	1,059,900	87,619	503,129	503,129	72,400	1,284,909	17,836,818	16,551,909
62	2052	1,650,648	1,059,900	118,346	472,402	472,402	1,492,800	2,305,307	18,687,126	16,381,819
63	2053	1,650,648	1,059,900	155,358	435,390	435,390	339,700	2,209,617	18,627,826	16,418,209
64	2054	1,650,648	1,059,900	151,671	439,077	439,077	6,600	1,777,140	18,632,226	16,855,086
65	2055	1,650,648	1,059,900	159,592	431,156	431,156	524,200	1,870,184	19,104,226	17,234,042
66	2056	1,650,648	1,059,900	182,522	408,226	408,226	1,023,400	2,485,358	19,083,205	16,597,847
67	2057	1,650,648	1,059,900	194,977	395,771	395,771	213,200	2,302,787	19,274,005	16,971,218
68	2058	1,650,648	1,059,900	200,654	390,094	390,094	533,800	2,446,493	19,227,705	16,781,212
69	2059	1,650,648	1,059,900	197,901	392,847	392,847	0	2,053,646	19,227,705	17,174,059
70	2060	1,650,648	1,059,900	195,191	395,557	395,557	87,400	1,745,489	19,295,605	17,550,116
71	2061	1,650,648	1,059,900	192,407	398,341	398,341	0	1,347,148	19,236,824	17,889,676
72	2062	1,650,648	1,059,900	197,061	393,687	393,687	381,500	1,334,961	19,100,743	17,765,782
73	2063	1,650,648	1,059,900	223,906	366,842	366,842	280,100	1,248,219	17,717,362	16,469,143
74	2064	1,650,648	1,059,900	242,461	348,287	348,287	65,600	965,532	17,517,081	16,551,549
75	2065	1,650,648	1,059,900	240,358	350,390	350,390	30,100	645,242	17,423,200	16,777,958
76	2066	1,650,648	1,059,900	295,100	295,648	295,648	376,100	725,694	14,906,800	14,181,106
77	2067	1,650,648	1,059,900	354,563	236,185	236,185	74,700	564,209	14,734,500	14,170,291
78	2068	1,650,648	1,059,900	359,519	231,229	231,229	74,000	406,980	14,367,800	13,960,820
79	2069	1,650,648	1,059,900	402,527	188,221	188,221	110,700	329,459	12,983,700	12,654,241
80	2070	1,650,648	1,059,900	443,564	147,184	147,184	11,500	193,775	12,690,300	12,496,525
81	2071	1,650,648	1,059,900	457,479	133,269	133,269	54,900	115,406	11,743,800	11,628,394
82	2072	1,650,648	1,059,900	474,639	115,406	116,109	0	(703)	0	703
TOTALS		105,004,052	72,341,052	6,290,744	26,307,563	26,308,266	26,307,563			
SUBTOTALS		82,072,635	52,810,400	6,894,576	25,632,205	22,367,659	25,632,205			

SCHEDULE OF SIGNIFICANT CHANGES AND  
COMPARISON OF PREVIOUS  
FORECASTS WITH ACTUAL  
RESULTS AND PRESENT FORECASTS

**SCHEDULE OF SIGNIFICANT CHANGES AND COMPARISON OF PREVIOUS FORECASTS TO ACTUAL PERFORMANCE AND PRESENT FORECASTS**

Paragraph 10.n of RA 6120.2 requires that the new Power Repayment Study be accompanied by the following schedules which show significant changes compared with the previous study and a comparison of the previous forecasts to actual performance for the same period.

<b>EVALUATION OF R. D. WILLIS RATE</b>				
(\$ THOUSANDS)				
<u>ANNUAL</u>	<u>2015 STUDY</u>	<u>2023 STUDY</u>	<u>DIFF.</u>	<u>PERCENTAGE PRS IMPACT</u>
	<u>1/</u>	<u>2/</u>		
GROSS REVENUE (AVG)	1,282.8	1,282.8	0.0	0.0%
OPERATING EXPENSE (AVG)	580.6	1,057.6	477.0	37.2%
INTEREST EXPENSE (AVG)	222.6	142.6	-80.0	-6.2%
AMORTIZATION (AVG)	479.1	448.5	-30.6	-2.4%
	INCREASED EXPENSE	366.5		
	INCREASED REVENUE	0.0		
	INCREASED RATES	366.5	AVERAGE	28.6% <u>3/</u>

**DETAIL**

OPERATING EXPENSE

CORPS O&M	556.9	1028.8	471.9	
SWPA MARKETING EXP	<u>23.7</u>	<u>28.8</u>	<u>5.1</u>	
TOTAL	580.6	1057.6	477.0	37.2%

INTEREST

REPLACEMENTS	237.8	158.5	-79.3	
CREDIT	<u>-15.2</u>	<u>-15.9</u>	<u>-0.7</u>	
TOTAL	222.6	142.6	-80.0	-6.2%

AMORTIZATION (INVESTMENT)

ORIGINAL	0.0	0.0	0.0	
REPLACEMENTS	<u>479.1</u>	<u>448.5</u>	<u>-30.6</u>	
TOTAL	479.1	448.5	-30.6	-2.4%

1/ The average amounts are based on the repayment period 2015 to 2064.

2/ The average amounts are based on the repayment period 2023 to 2072.

3/ To meet repayment requirements, the annual revenue amount in the Current Table 1 needs to be increased by \$367,812 or 28.6 percent.

R. D. WILLIS  
GROSS REVENUE

<u>Fiscal Year</u>	<u>September 2015 Study \$</u>	<u>April 2023 Study \$</u>	<u>Percent Increase -Decrease</u>
FY 2022	1,282,836	1,282,836	
FY 2023	1,282,836	1,282,836	
FY 2024	1,282,836	1,558,695	
FY 2025	1,282,836	1,650,648	
FY 2026	1,282,836	1,650,648	
FY 2027	1,282,836	1,650,648	
Repayment Period Totals	<u>63,852,357</u>	<u>82,072,635</u>	
Average Revenue	<u>1,282,300</u>	<u>1,648,800</u>	<u>28.6%</u>

Note:

The 2015 PRS average amounts are based on the repayment period 2015 to 2064.

The 2023 PRS average amounts are based on the repayment period 2023 to 2072

May 2024

R. D. WILLIS

	September 2015 Study \$	April 2023 Study \$	Percent Increase -Decrease
<u>CORPS OF ENGINEERS O&amp;M EXPENSE 1/</u>			
FY 2022	565,500	1,140,336	
FY 2023	565,500	956,400	
FY 2024	565,500	975,100	
FY 2025	565,500	994,300	
FY 2026	565,500	1,013,800	
FY 2027	565,500	1,031,000	
Repayment Period Totals	<u>27,813,200</u>	<u>51,365,600</u>	51,365,600
Average Expense	<u>556,900</u>	<u>1,028,800</u>	<u>84.7%</u>
<u>SOUTHWESTERN MARKETING EXPENSE 2/</u>			
FY 2022	23,400	28,622	
FY 2023	23,800	29,800	
FY 2024	23,800	28,400	
FY 2025	23,800	28,900	
FY 2026	23,800	28,300	
FY 2027	23,800	28,900	
Repayment Period Totals	<u>1,187,300</u>	<u>1,444,800</u>	1,444,800
Average Expense	<u>23,800</u>	<u>28,800</u>	<u>21.0%</u>
<u>TOTAL OPERATING EXPENSE</u>			
FY 2022	548,529	1,168,958	
FY 2023	548,700	986,200	
FY 2024	440,300	1,003,500	
FY 2025	447,600	1,023,200	
FY 2026	456,100	1,042,100	
FY 2027	589,300	1,059,900	
Repayment Period Totals	<u>29,000,500</u>	<u>52,810,400</u>	
Average Expense	<u>580,600</u>	<u>1,057,600</u>	<u>82.2%</u>

1/ INCREASE DUE TO INCREASED CORPS ESTIMATES TO BETTER REFLECT ACTUAL EXPENSES. OCCURRING AT THE PROJECT. INCLUDES ADJUSTMENT FOR UNFUNDED CIVIL SERVICE RETIREMENT SYSTEM AND RETIREMENT HEALTH BENEFITS. (\$17,600 ANNUALLY FOR CORPS.)

2/ SOUTHWESTERN MARKETING EXPENSE ESTIMATES INCREASED DUE TO INCREASE ACTUAL O&M COSTS. INCLUDES ADJUSTMENT FOR UNFUNDED CIVIL SERVICE RETIREMENT SYSTEM

May 2024

R. D. WILLIS  
INTEREST EXPENSE

	September 2015 Study \$	April 2023 Study \$	Percent Increase -Decrease
FY 2022	248,677	(1,336)	
FY 2023	233,994	(93,065)	
FY 2024	218,805	(105,720)	
FY 2025	203,103	(122,577)	
FY 2026	189,870	(70,204)	
FY 2027	190,584	(16,580)	
Repayment Period Totals	<u>10,824,685</u>	<u>6,894,576</u>	<u>1/</u>
Average Expense	<u>222,600</u>	<u>142,600</u>	<u>1/</u> -35.9%

1/ Interest expense decreased due to a decrease in future investments and a decrease in the interest rate from 3.375% in 2015 to 2.75% in 2023.

NOTE: Positive numbers represent an Interest Expense while negative numbers represent an Interest Credit.

R. D. WILLIS  
INVESTMENT

		September 2015 Study \$	April 2023 Study \$	Percent Increase -Decrease
THRU				
FY 2022	Investments	13,600,145	675,358 <sup>1/</sup>	
FY 2023	Additions/Replacements	19,000	58,781	
FY 2024	Additions/Replacements	0	58,781	
FY 2025	Additions/Replacements	196,700	109,381	
FY 2026	Additions/Replacements	852,900	5,180,781	
FY 2027	Additions/Replacements	167,500	2,473,363	
FY 2028	Replacements	0	3,024,500	
FY 2029	Replacements	29,600	1,588,700	
FY 2030	Replacements	2,711,400	304,900	
FY 2031	Replacements	12,400	0	
FY 2032	Replacements	0	394,000	
FY 2033	Replacements	880,600	0	
FY 2034	Replacements	42,600	0	
FY 2035	Replacements	220,200	2,184,700	
FY 2036	Replacements	8,500	0	
FY 2037	Replacements	0	247,000	
FY 2038	Replacements	51,800	0	
FY 2039	Replacements	156,500	3,637,400	
FY 2040	Replacements	966,100	24,000	
FY 2041	Replacements	41,800	0	
FY 2042	Replacements	1,095,500	1,252,700	
FY 2043	Replacements	336,900	297,400	
FY 2044	Replacements	559,700	0	
FY 2045	Replacements	152,000	0	
FY 2046	Replacements	6,500	0	
FY 2047	Replacements	5,900	59,300	
FY 2048	Replacements	880,600	13,000	
FY 2049	Replacements	24,300	373,500	
FY 2050	Replacements	574,500	131,800	
FY 2051	Replacements	218,400	184,700	
FY 2052	Replacements	18,900	2,809,300	
FY 2053	Replacements	856,600	181,300	
FY 2054	Replacements	948,500	20,100	
FY 2055	Replacements	128,700	1,379,700	
FY 2056	Replacements	16,800	96,700	
FY 2057	Replacements	46,400	601,800	
FY 2058	Replacements	146,300	0	
FY 2059	Replacements	92,300	0	
FY 2060	Replacements	263,400	569,100	
FY 2061	Replacements	64,400	0	
FY 2062	Replacements	0	676,300	
FY 2063	Replacements	117,400	0	
FY 2064	Replacements	0	271,300	
FY 2065	Replacements	0	0	
FY 2066	Replacements		1,724,400	
FY 2067	Replacements		51,900	
FY 2068	Replacements		93,300	
FY 2069	Replacements		1,561,400	
FY 2070	Replacements		0	
FY 2071	Replacements		0	
FY 2072	Replacements		453800	
	Repayment Period Totals	<u>26,274,900</u>	<u>32,089,087</u>	22.1%
	Amortization Reserve	(2,248,140)	(3,156,781)	
	Average Investment	<u>479,100</u>	<u>574,600</u>	19.9%

<sup>1/</sup> Actual Repayable Investment through FY 2022, per Southwestern Federal Power System audited financials, estimated thereafter.

RESOURCE

## POWER RESOURCES

Two generating units with a total of 7.4 megawatts (MW) of name-plate capacity are installed at the R.D. Willis project. Those units replaced the two units called for in the Corps' original design which were expected to total 6 MW of name-plate capacity (3 MW per unit). The generating units actually installed were originally expected to produce approximately 41.5 gigawatt-hours (GWh) of average annual energy. After the Corps' operational testing was complete, the rated capacity was determined to be 7.4 MW (3.675 MW per unit) and the average annual energy was estimated to be 37.3 GWh. The proposed rate for the R.D. Willis project is based on annual operating costs and addition or replacement of investment, rather than marketed on a capacity and energy basis. The customer would receive the entire output from this run-of-the river project.

April 2023

R. D. WILLIS  
ANNUAL NET GENERATION

FY	kWh
1990	30,947,280
1991	28,444,670
1992	35,612,440
1993	39,566,110
1994	43,328,460
1995	30,020,690
1996	34,202,330
1997	32,248,620
1998	38,644,200
1999	34,900,280
2000	36,311,830
2001	28,798,730
2002	32,617,760
2003	40,384,860
2004	26,443,220
2005	20,300,620
2006	12,794,230
2007	3,304,890
2008	14,272,670
2009	18,806,930
2010	26,927,590
2011	12,756,740
2012	26,021,180
2013	27,340,010
2014	22,287,450
2015	12,124,570
2016	3,393,560
2017	81,320
2018	19,597,230
2019	4,077,250
2020	(141,610)
2021	12,051,030
2022	23,626,160
2023	9,444,640
HISTORICAL TOTAL	<b>781,537,940</b>
HISTORICAL ACTUAL AVERAGE ENERGY	<b>22,986,410</b>
ESTIMATED AVERAGE YEAR GENERATION	37,260,600
ESTIMATED CRITICAL YEAR GENERATION	29,200,000

Customer receives the actual output of the project for an annual rate fixed by the contract regardless of production.

NOTE: FY 1990 represents net generation for a 10-month period beginning December 1, 1989.

COST ALLOCATION

## COST ALLOCATION

Based on the following paragraphs from the Town Bluff (Robert D. Willis) project, Detailed Evaluation Report, Addition of Hydropower, Approved 7 January 1983, no cost allocation report is necessary.

Paragraph 5, page 35

### "COST SHARING

The authorization for Town Bluff (Robert D. Willis) (P.L. 14-79-1) states the project is authorized in accordance with the plans contained in Senate Document 98-76-1. According to the document, the local sponsor was to contribute \$5,000,000 as the non-Federal share of the first cost of the entire Neches-Angelina plan of improvement. The plan consisted of Sam Rayburn, Town Bluff (Robert D. Willis), Rockland, and Dam A, including hydropower at all four projects. The local sponsor (Lower Neches Valley Authority) has contributed the \$5,000,000; therefore, the cost sharing requirements have already been met, and no additional local contribution is necessary."

Paragraph 1, page 38

### "COST ALLOCATION

By law, cost apportionment was established as stated in the cost sharing section. In addition, there has never been a cost allocation performed on the Town Bluff (Robert D. Willis) project. Inasmuch as there is no allocation for the existing project, and the project purposes will not be changed by the addition of power, no new allocation has been performed for power. In other words, the cost allocated to power is simply the total cost of adding the power facilities."

DRAFT

PROJECT  
CAPITAL COST OF FACILITIES AND ANNUAL O&M EXPENSE - AS OF 9/30/2022

**ROBERT D WILLIS**

	POWER PRODUCTION \$	FLOOD CONTROL \$	STREAMFLOW REGULATION \$	FISH AND WILDLIFE \$	TOTAL ALLOCABLE \$	RECREATION \$	BETTERMENT OF ROADS \$	WATER SUPPLY \$
<u>CAPITAL COSTS OF FACILITIES</u>								
PLANT IN SERVICE	17,092,129	9,523,654	0	0	26,615,783	1,964,500	0	
LESS CIAC	(18,643,020)	(2,000,000)	0	0	(20,643,020)	0	0	
PLUS NON-FED FINANCE RETIREMENTS	2,226,249	0	0	0	2,226,249	0	0	
INVESTMENT COST	675,358	7,523,654	0	0	8,199,012	1,964,500	0	0
<u>ALLOCATION OF COSTS</u>								
SPECIFIC	17,092,129	9,523,654	0	0	26,615,783	1,964,500	0	
JOINT USE	0	0	0	0	0	0	0	
LESS CIAC	(18,643,020)	(2,000,000)	0	0	(20,643,020)	0	0	
PLUS NON-FED FINANCE RETIREMENTS	2,226,249	0	0	0	2,226,249	0	0	
TOTAL	675,358	7,523,654	0	0	8,199,012	1,964,500	0	0

DATA FROM CORPS OF ENGINEERS STATEMENT OF ASSETS AND LIABILITIES - SEPTEMBER 30, 2022

OPERATION AND MAINTENANCE EXPENSES

SPECIFIC	1,001,860	4,137,035	0	426,813	5,565,708	679,957	0	0
JOINT USE	0	0	0	0	0	0	0	0
LESS CREDITS TO OP.EXP.	0	0	0	(420)	(420)	(226,321)	0	0
GAIN ON LAND RET	0	0	0	0	0	0	0	0
AUDIT ADJUSTMENTS	0							
POST RETIREMENT/HEALTH BEN	138,474	0	0	0	138,474	0	0	0
NET O&M EXPENSES	1,140,334	4,137,035	0	426,393	5,703,762	453,636	0	0

DRAFT

SUPPORTING DATA

DRAFT

ELECTRIC PLANT-IN-SERVICE

ELECTRIC PLANT IN SERVICE -FY 2022  
R. D. WILLIS PROJECT

<u>HYDRAULIC PRODUCTION PLANT</u>	<u>BALANCE BEG OF YEAR</u>	<u>ADDITIONS</u>	<u>RETIREMENTS</u>	<u>ADJUSTMENTS</u>	<u>TRANSFERS</u>	<u>BALANCE END OF YEAR</u>
330 LAND & LAND RIGHTS CE ACCT.NOS. 01 & 02	\$0					\$0
331 STRUCTURES AND IMPROVEMENTS CE ACCTS NOS. 07.1, 07.6, 13, 14, 19	\$9,688,202		0			\$9,688,202
332 RESERVOIRS, DAMS AND WATERWAYS CE ACCT NOS. 03, 04, 05 06, 07.5, 09, 11	\$1,193,777					\$1,193,777
333 WATER WHLS, TURBS & GENERATORS CE ACCT NO, 07.2	\$4,313,520					\$4,313,520
334 ACCESSORY ELECTRIC EQUIPMENT CE ACCT NO. 07.3	\$1,494,552	\$0	\$0	0		\$1,494,552
335 MISC POWER PLANT EQUIPMENT CE ACCT NOS. 07.4, 20	\$402,077					\$402,077
336 ROADS, RAILROADS & BRIDGES CE ACCT NO. 08	\$0					\$0
<b>TOTAL HYDRAULIC PRODUCTION</b>	<b>\$17,092,129</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$17,092,129</b>
						<b>LESS NON-FEDERAL CONTRIBUTION</b>
						<b>16,416,771</b>
						<b>REPAYABLE INVESTMENT</b>
						<b>\$675,358</b>

FOOTNOTES:

(a) ORIGINAL CONSTRUCTION = CONTRIBUTED FUNDS -	18,643,020
LESS RETIREMENTS OF	(2,305,726)
PLUS CAPITALIZED O&M EXPENDITURES OF	<u>754,835</u>
	17,092,129
 (a) ORIGINAL CONSTRUCTION = CONTRIBUTED FUNDS -	18,643,020
LESS NON-FEDERALLY FINANCED RETIREMENTS	<u>(2,226,249)</u>
	16,416,771

DRAFT

## DISTRIBUTION OF REVENUE

**DISTRIBUTION OF REVENUE**

May 2024

<b>Fiscal Year</b>	<b>Investment</b>	<b>Due Date</b>	<b>Interest Rate</b>	<b>Interest Expense</b>	<b>Amortization</b>	<b>Amount Repaid</b>	<b>Balance To Be Repaid</b>	<b>Allowable Balance</b>	<b>Status Of Repayment</b>
<b>RobertDWillis</b>									
ORIGINAL INVESTMENT									
2017	395,492	2052	0.02375	0	0	0	0	0	0
2022	0	0	0.02375	0	395,492	395,492	0	395,492	395,492
<b>Total</b>	395,492			0	395,492				
<b>RobertDWillis</b>									
ORIGINAL INVESTMENT									

**DISTRIBUTION OF REVENUE**

May 2024

Fiscal Year	Investment	Due Date	Interest Rate	Interest Expense	Amortization	Amount Repaid	Balance To Be Repaid	Allowable Balance	Status Of Repayment
<b>RobertDWillis</b>									
ADDITIONAL INVESTMENT									
1999	7,927	2034	0.06000	0	0	0	0	0	0
2006	21,885	2041	0.04625	0	0	0	0	0	0
2007	100,324	2042	0.04875	0	0	0	0	0	0
2010	22,979	2045	0.04000	0	0	0	0	0	0
2012	50,501	2047	0.04000	0	0	0	0	0	0
2014	33,229	2049	0.03000	0	0	0	0	0	0
2018	43,021	2056	0.02750	0	0	0	0	0	0
2022	0	0	0.02750	0	43,021	43,021	0	43,021	43,021
2022	0	0	0.03000	0	33,229	33,229	0	33,229	33,229
2022	0	0	0.04000	0	73,480	73,480	0	73,480	73,480
2022	0	0	0.04625	0	21,885	21,885	0	21,885	21,885
2022	0	0	0.04875	0	100,324	100,324	0	100,324	100,324
2022	0	0	0.06000	0	7,927	7,927	0	7,927	7,927
2023	58,781	2061	0.02750	808	58,781	101,802	0	101,802	101,802
2024	58,781	2062	0.02750	808	58,781	160,583	0	160,583	160,583
2025	58,781	2063	0.02750	808	58,781	219,364	0	219,364	219,364
2026	58,781	2064	0.02750	808	58,781	278,145	0	278,145	278,145
2027	58,781	2065	0.02750	808	58,781	336,926	0	336,926	336,926
<b>Total</b>	<b>573,771</b>			<b>4,040</b>	<b>573,771</b>				
<b>RobertDWillis</b> ADDITIONAL INVESTMENT									

RobertDWillis      ADDITIONAL INVESTMENT

**DISTRIBUTION OF REVENUE**

May 2024

Fiscal Year	Investment	Due Date	Interest Rate	Interest Expense	Amortization	Amount Repaid	Balance To Be Repaid	Allowable Balance	Status Of Repayment
<b>RobertDWillis</b>									
REPLACEMENTS									
2025	22,400	2033	0.02750	308	22,400	22,400	0	22,400	22,400
2025	9,400	2040	0.02750	129	9,400	9,400	0	9,400	9,400
2025	18,800	2045	0.02750	259	18,800	18,800	0	18,800	18,800
2026	1,228,100	2076	0.02750	16,886	1,228,100	1,228,100	0	1,228,100	1,228,100
2026	1,001,400	2041	0.02750	13,769	1,001,400	1,010,800	0	1,010,800	1,010,800
2026	2,892,500	2066	0.02750	39,772	2,892,500	2,892,500	0	2,892,500	2,892,500
2028	1,604,700	2063	0.02750	22,065	47,299	47,299	1,557,401	1,604,700	47,299
2028	399,000	2053	0.02750	5,486	399,000	399,000	0	399,000	399,000
2028	580,100	2043	0.02750	7,976	580,100	1,590,900	0	1,590,900	1,590,900
2028	440,700	2048	0.02750	6,060	440,700	459,500	0	459,500	459,500
2029	1,494,800	2069	0.02750	20,554	0	2,892,500	1,494,800	4,387,300	2,892,500
2029	93,900	2064	0.02750	44,120	534,197	581,496	1,117,104	1,698,600	581,496
2030	9,400	2045	0.02750	129	9,400	1,600,300	0	1,600,300	1,600,300
2030	2,200	2038	0.02750	30	2,200	24,600	0	24,600	24,600
2030	28,200	2050	0.02750	388	28,200	487,700	0	487,700	487,700
2030	0	0	0.02750	30,720	483,052	1,064,548	634,052	1,698,600	1,064,548
2030	265,100	2070	0.02750	44,752	0	2,892,500	1,759,900	4,652,400	2,892,500
2031	0	0	0.02750	17,436	533,038	1,597,586	101,014	1,698,600	1,597,586
2031	0	0	0.02750	48,397	0	2,892,500	1,759,900	4,652,400	2,892,500
2032	0	0	0.02750	48,397	47,264	2,939,764	1,712,636	4,652,400	2,939,764
2032	394,000	2047	0.02750	5,418	394,000	1,994,300	0	1,994,300	1,994,300
2032	0	0	0.02750	2,778	101,014	1,698,600	0	1,698,600	1,698,600
2033	0	0	0.02750	47,097	529,066	3,468,830	1,183,570	4,652,400	3,468,830
2033	22,400	2041	0.02750	308	22,400	47,000	0	24,600	24,600
2034	0	0	0.02750	32,548	566,323	4,035,153	617,247	4,652,400	4,035,153
2035	2,131,800	2075	0.02750	46,286	498,957	4,534,110	2,250,090	6,784,200	4,534,110
2035	42,800	2055	0.02750	589	42,800	530,500	0	530,500	530,500
2035	10,100	2060	0.02750	139	10,100	409,100	0	409,100	409,100
2036	0	0	0.02750	61,877	536,994	5,071,104	1,713,096	6,784,200	5,071,104
2037	0	0	0.02750	47,110	301,365	5,372,469	1,411,731	6,784,200	5,372,469
2037	247,000	2052	0.02750	3,396	247,000	2,241,300	0	2,241,300	2,241,300

RobertDWillis REPLACEMENTS

## DISTRIBUTION OF REVENUE

May 2024

Fiscal Year	Investment	Due Date	Interest Rate	Interest Expense	Amortization	Amount Repaid	Balance To Be Repaid	Allowable Balance	Status Of Repayment
2038	0	0	0.02750	38,823	557,818	5,930,287	853,913	6,784,200	5,930,287
2038	2,200	2046	0.02750	30	2,200	49,200	0	24,600	24,600
2039	105,500	2079	0.02750	24,934	0	5,930,287	959,413	6,889,700	5,930,287
2039	113,200	2064	0.02750	1,557	113,200	522,300	0	522,300	522,300
2039	889,600	2089	0.02750	12,232	0	1,228,100	889,600	2,117,700	1,228,100
2039	1,472,000	2074	0.02750	20,240	412,173	2,110,773	1,059,827	3,170,600	2,110,773
2040	24,000	2065	0.02750	330	24,000	546,300	0	546,300	546,300
2040	0	0	0.02750	26,384	0	5,930,287	959,413	6,889,700	5,930,287
2040	0	0	0.02750	29,145	455,949	2,566,722	603,878	3,170,600	2,566,722
2040	9,400	2055	0.02750	129	9,400	2,250,700	0	2,241,300	2,241,300
2040	0	0	0.02750	24,464	0	1,228,100	889,600	2,117,700	1,228,100
2041	22,400	2049	0.02750	308	22,400	71,600	0	24,600	24,600
2041	0	0	0.02750	26,384	0	5,930,287	959,413	6,889,700	5,930,287
2041	0	0	0.02750	16,607	0	2,566,722	603,878	3,170,600	2,566,722
2041	1,001,400	2056	0.02750	13,769	465,869	2,716,569	535,531	2,241,300	1,705,769
2041	0	0	0.02750	24,464	0	1,228,100	889,600	2,117,700	1,228,100
2042	0	0	0.02750	24,464	0	1,228,100	889,600	2,117,700	1,228,100
2042	0	0	0.02750	26,384	0	5,930,287	959,413	6,889,700	5,930,287
2042	0	0	0.02750	14,727	470,394	3,186,963	65,137	2,241,300	2,176,163
2042	62,600	2062	0.02750	861	0	530,500	62,600	593,100	530,500
2042	943,900	2077	0.02750	29,586	0	2,566,722	1,547,778	4,114,500	2,566,722
2043	0	0	0.02750	24,464	0	1,228,100	889,600	2,117,700	1,228,100
2043	0	0	0.02750	1,722	0	530,500	62,600	593,100	530,500
2043	224,600	2078	0.02750	45,652	0	2,566,722	1,772,378	4,339,100	2,566,722
2043	0	0	0.02750	26,384	0	5,930,287	959,413	6,889,700	5,930,287
2043	580,100	2058	0.02750	9,767	454,040	3,641,003	191,197	2,241,300	2,050,103
2044	0	0	0.02750	48,740	200,663	2,767,385	1,571,715	4,339,100	2,767,385
2044	0	0	0.02750	5,258	191,197	3,832,200	0	2,241,300	2,241,300
2044	0	0	0.02750	26,384	0	5,930,287	959,413	6,889,700	5,930,287
2044	0	0	0.02750	1,722	62,600	593,100	0	593,100	593,100
2044	0	0	0.02750	24,464	0	1,228,100	889,600	2,117,700	1,228,100
2045	0	0	0.02750	26,384	0	5,930,287	959,413	6,889,700	5,930,287
2045	9,400	2060	0.02750	129	9,400	3,841,600	0	2,241,300	2,241,300

RobertDWillis

REPLACEMENTS

## DISTRIBUTION OF REVENUE

May 2024

Fiscal Year	Investment	Due Date	Interest Rate	Interest Expense	Amortization	Amount Repaid	Balance To Be Repaid	Allowable Balance	Status Of Repayment
2045	0	0	0.02750	24,464	0	1,228,100	889,600	2,117,700	1,228,100
2045	0	0	0.02750	43,222	438,370	3,205,755	1,133,345	4,339,100	3,205,755
2045	18,800	2065	0.02750	259	18,800	611,900	0	593,100	593,100
2046	0	0	0.02750	26,384	0	5,930,287	959,413	6,889,700	5,930,287
2046	2,200	2054	0.02750	30	2,200	73,800	0	24,600	24,600
2046	0	0	0.02750	31,167	476,783	3,682,538	656,562	4,339,100	3,682,538
2046	0	0	0.02750	24,464	0	1,228,100	889,600	2,117,700	1,228,100
2047	0	0	0.02750	24,464	0	1,228,100	889,600	2,117,700	1,228,100
2047	0	0	0.02750	26,384	0	5,930,287	959,413	6,889,700	5,930,287
2047	394,000	2062	0.02750	5,418	394,000	4,235,600	0	2,241,300	2,241,300
2047	0	0	0.02750	18,055	32,592	3,715,130	623,970	4,339,100	3,715,130
2047	59,300	2072	0.02750	815	59,300	605,600	0	605,600	605,600
2048	7,600	2083	0.02750	17,264	46,082	3,761,212	585,488	4,346,700	3,761,212
2048	0	0	0.02750	26,384	0	5,930,287	959,413	6,889,700	5,930,287
2048	0	0	0.02750	24,464	0	1,228,100	889,600	2,117,700	1,228,100
2048	440,700	2068	0.02750	6,060	440,700	1,052,600	0	593,100	593,100
2049	52,600	2094	0.02750	723	0	0	52,600	52,600	0
2049	0	0	0.02750	24,464	0	1,228,100	889,600	2,117,700	1,228,100
2049	22,400	2057	0.02750	308	22,400	96,200	0	24,600	24,600
2049	101,000	2089	0.02750	27,773	0	5,930,287	1,060,413	6,990,700	5,930,287
2049	0	0	0.02750	16,101	466,087	4,227,299	119,401	4,346,700	4,227,299
2050	0	0	0.02750	24,464	0	1,228,100	889,600	2,117,700	1,228,100
2050	28,200	2070	0.02750	388	28,200	1,080,800	0	593,100	593,100
2050	0	0	0.02750	1,447	0	0	52,600	52,600	0
2050	24,300	2085	0.02750	3,618	143,701	4,371,000	0	4,371,000	4,371,000
2050	35,400	2090	0.02750	29,648	322,375	6,252,662	773,438	7,026,100	6,252,662
2051	0	0	0.02750	24,464	0	1,228,100	889,600	2,117,700	1,228,100
2051	72,400	2091	0.02750	22,266	503,129	6,755,791	342,709	7,098,500	6,755,791
2051	0	0	0.02750	1,447	0	0	52,600	52,600	0
2052	1,112,500	2087	0.02750	15,297	225,402	4,596,402	887,098	5,483,500	4,596,402
2052	247,000	2067	0.02750	3,396	247,000	4,482,600	0	2,241,300	2,241,300
2052	0	0	0.02750	24,464	0	1,228,100	889,600	2,117,700	1,228,100
2052	133,300	2092	0.02750	11,257	0	6,755,791	476,009	7,231,800	6,755,791

RobertDWillis

REPLACEMENTS

**DISTRIBUTION OF REVENUE**

May 2024

Fiscal Year	Investment	Due Date	Interest Rate	Interest Expense	Amortization	Amount Repaid	Balance To Be Repaid	Allowable Balance	Status Of Repayment
2052	0	0	0.02750	1,447	0	0	52,600	52,600	0
2053	0	0	0.02750	24,464	0	1,228,100	889,600	2,117,700	1,228,100
2053	0	0	0.02750	24,395	158,090	4,754,492	729,008	5,483,500	4,754,492
2053	62,400	2093	0.02750	13,948	0	6,755,791	538,409	7,294,200	6,755,791
2053	0	0	0.02750	1,447	0	0	52,600	52,600	0
2053	277,300	2078	0.02750	3,813	277,300	882,900	0	483,900	483,900
2054	2,200	2062	0.02750	30	2,200	98,400	0	24,600	24,600
2054	0	0	0.02750	1,447	0	0	52,600	52,600	0
2054	0	0	0.02750	14,806	0	6,755,791	538,409	7,294,200	6,755,791
2054	0	0	0.02750	20,048	436,877	5,191,369	292,131	5,483,500	5,191,369
2054	4,400	2104	0.02750	24,525	0	1,228,100	894,000	2,122,100	1,228,100
2055	9,400	2070	0.02750	129	9,400	4,492,000	0	2,241,300	2,241,300
2055	34,900	2075	0.02750	480	34,900	1,115,700	0	585,200	585,200
2055	128,700	2095	0.02750	16,576	0	6,755,791	667,109	7,422,900	6,755,791
2055	0	0	0.02750	24,585	0	1,228,100	894,000	2,122,100	1,228,100
2055	351,200	2090	0.02750	12,863	386,856	5,578,225	256,475	5,834,700	5,578,225
2055	0	0	0.02750	1,447	0	0	52,600	52,600	0
2056	0	0	0.02750	7,053	0	5,578,225	256,475	5,834,700	5,578,225
2056	1,001,400	2071	0.02750	13,769	408,226	4,900,226	593,174	2,241,300	1,648,126
2056	22,000	2101	0.02750	1,750	0	0	74,600	74,600	0
2056	0	0	0.02750	24,585	0	1,228,100	894,000	2,122,100	1,228,100
2056	0	0	0.02750	18,345	0	6,755,791	667,109	7,422,900	6,755,791
2057	0	0	0.02750	2,052	0	0	74,600	74,600	0
2057	0	0	0.02750	24,585	0	1,228,100	894,000	2,122,100	1,228,100
2057	0	0	0.02750	18,345	0	6,755,791	667,109	7,422,900	6,755,791
2057	0	0	0.02750	16,312	373,371	5,273,597	219,803	2,241,300	2,021,497
2057	190,800	2092	0.02750	9,677	0	5,578,225	447,275	6,025,500	5,578,225
2057	22,400	2065	0.02750	308	22,400	120,800	0	24,600	24,600
2058	0	0	0.02750	24,585	0	1,228,100	894,000	2,122,100	1,228,100
2058	0	0	0.02750	2,052	0	0	74,600	74,600	0
2058	533,800	2073	0.02750	13,385	390,094	5,663,691	363,509	2,195,000	1,831,491
2058	0	0	0.02750	12,300	0	5,578,225	447,275	6,025,500	5,578,225
2058	0	0	0.02750	18,345	0	6,755,791	667,109	7,422,900	6,755,791

RobertDWillis

REPLACEMENTS

## DISTRIBUTION OF REVENUE

May 2024

Fiscal Year	Investment	Due Date	Interest Rate	Interest Expense	Amortization	Amount Repaid	Balance To Be Repaid	Allowable Balance	Status Of Repayment
2059	0	0	0.02750	9,996	363,509	6,027,200	0	2,195,000	2,195,000
2059	0	0	0.02750	12,300	29,338	5,607,563	417,937	6,025,500	5,607,563
2059	0	0	0.02750	2,052	0	0	74,600	74,600	0
2059	0	0	0.02750	18,345	0	6,755,791	667,109	7,422,900	6,755,791
2059	0	0	0.02750	24,585	0	1,228,100	894,000	2,122,100	1,228,100
2060	0	0	0.02750	2,052	0	0	74,600	74,600	0
2060	0	0	0.02750	11,493	384,157	5,991,720	33,780	6,025,500	5,991,720
2060	7,300	2075	0.02750	100	7,300	6,034,500	0	2,192,900	2,192,900
2060	0	0	0.02750	18,345	0	6,755,791	667,109	7,422,900	6,755,791
2060	4,100	2085	0.02750	56	4,100	887,000	0	477,900	477,900
2060	76,000	2110	0.02750	25,630	0	1,228,100	970,000	2,198,100	1,228,100
2061	0	0	0.02750	2,052	0	0	74,600	74,600	0
2061	0	0	0.02750	929	33,780	6,025,500	0	6,025,500	6,025,500
2061	0	0	0.02750	18,345	364,561	7,120,352	302,548	7,422,900	7,120,352
2061	0	0	0.02750	26,675	0	1,228,100	970,000	2,198,100	1,228,100
2062	0	0	0.02750	26,675	0	1,228,100	970,000	2,198,100	1,228,100
2062	244,600	2077	0.02750	3,363	244,600	6,279,100	0	2,043,500	2,043,500
2062	2,200	2070	0.02750	30	2,200	123,000	0	24,600	24,600
2062	107,600	2102	0.02750	9,800	119,787	7,240,139	290,361	7,530,500	7,240,139
2062	0	0	0.02750	2,052	0	0	74,600	74,600	0
2062	27,100	2082	0.02750	373	27,100	1,142,800	0	549,700	549,700
2063	280,100	2098	0.02750	3,851	280,100	6,305,600	0	4,700,900	4,700,900
2063	0	0	0.02750	26,675	0	1,228,100	970,000	2,198,100	1,228,100
2063	0	0	0.02750	2,052	0	0	74,600	74,600	0
2063	0	0	0.02750	7,985	86,742	7,326,881	203,619	7,530,500	7,326,881
2064	14,400	2099	0.02750	198	14,400	6,320,000	0	4,621,400	4,621,400
2064	0	0	0.02750	5,600	203,619	7,530,500	0	7,530,500	7,530,500
2064	22,900	2114	0.02750	26,990	27,368	1,255,468	965,532	2,221,000	1,255,468
2064	0	0	0.02750	2,052	74,600	74,600	0	74,600	74,600
2064	28,300	2089	0.02750	389	28,300	915,300	0	393,000	393,000
2065	0	0	0.02750	26,552	320,290	1,575,758	645,242	2,221,000	1,575,758
2065	19,400	2073	0.02750	267	19,400	142,400	0	21,600	21,600
2065	5,200	2090	0.02750	72	5,200	920,500	0	374,200	374,200

RobertDWillis

REPLACEMENTS

## DISTRIBUTION OF REVENUE

May 2024

Fiscal Year	Investment	Due Date	Interest Rate	Interest Expense	Amortization	Amount Repaid	Balance To Be Repaid	Allowable Balance	Status Of Repayment
2065	5,500	2085	0.02750	76	5,500	1,148,300	0	536,400	536,400
2066	54,600	2111	0.02750	751	34,748	109,348	19,852	129,200	109,348
2066	60,600	2116	0.02750	18,577	0	1,575,758	705,842	2,281,600	1,575,758
2066	260,900	2106	0.02750	3,587	260,900	7,791,400	0	4,898,900	4,898,900
2067	71,500	2082	0.02750	983	71,500	6,350,600	0	1,868,000	1,868,000
2067	0	0	0.02750	19,411	141,633	1,717,391	564,209	2,281,600	1,717,391
2067	3,200	2112	0.02750	590	23,052	132,400	0	132,400	132,400
2068	3,800	2118	0.02750	15,568	161,029	1,878,420	406,980	2,285,400	1,878,420
2068	70,200	2088	0.02750	965	70,200	1,218,500	0	165,900	165,900
2069	46,000	2119	0.02750	11,825	123,521	2,001,941	329,459	2,331,400	2,001,941
2069	64,700	2109	0.02750	890	64,700	7,856,100	0	3,468,800	3,468,800
2070	2,200	2090	0.02750	30	2,200	1,220,700	0	139,900	139,900
2070	600	2078	0.02750	8	600	143,000	0	20,000	20,000
2070	7,600	2110	0.02750	105	7,600	7,863,700	0	3,211,300	3,211,300
2070	1,100	2085	0.02750	15	1,100	6,351,700	0	1,859,700	1,859,700
2070	0	0	0.02750	9,060	135,684	2,137,625	193,775	2,331,400	2,137,625
2071	54,900	2086	0.02750	755	54,900	6,406,600	0	913,200	913,200
2071	0	0	0.02750	5,329	78,369	2,215,994	115,406	2,331,400	2,215,994
2072	0	0	0.02750	3,174	115,406	2,331,400	0	0	0
<b>Total</b>	25,338,300			2,546,422	25,338,300				
<b>RobertDWillis</b>				REPLACEMENTS					

**DISTRIBUTION OF REVENUE**

May 2024

<b>Fiscal Year</b>	<b>Investment</b>	<b>Due Date</b>	<b>Interest Rate</b>	<b>Interest Expense</b>	<b>Amortization</b>	<b>Amount Repaid</b>	<b>Balance To Be Repaid</b>	<b>Allowable Balance</b>	<b>Status Of Repayment</b>
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**Grand Totals**

<b>Investment</b>	<b>Interest</b>	<b>Amortization</b>
26,307,563	2,550,462	26,307,563

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<b>Total Amortization Above</b>		<b>26,307,563</b>
<b>Total Interest Above</b>	<b>2,550,462</b>	
<b>Interest on Unprorated Replacements</b>	<b>5,217,308</b>	
<b>Interest on Operating Revenue (Credit)</b>	<b>-873,194</b>	
<b>Historical Interest</b>	<b>-603,832</b>	
<b>Totals</b>	<b>6,590,744</b>	<b>26,307,563</b>
See Table 1 Revised	(COL 5)	(COL 7)

SUMMARY OF INTEREST EXPENSES

FY 2023 THRU 2072  
SUMMARY OF INTEREST EXPENSE  
BY FISCAL YEAR

FY	INTEREST \$	INTEREST CREDIT \$	NET INTEREST \$
2023	808	93,873	(93,065)
2024	808	106,528	(105,720)
2025	1,504	124,081	(122,577)
2026	71,235	141,439	(70,204)
2027	808	17,388	(16,580)
2028	41,587	32,473	9,114
2029	64,674	8,123	56,551
2030	76,019	8,123	67,896
2031	65,833	8,123	57,710
2032	56,593	8,123	48,470
2033	47,405	8,123	39,282
2034	32,548	8,123	24,425
2035	47,014	8,123	38,891
2036	61,877	8,123	53,754
2037	50,506	8,123	42,383
2038	38,853	8,123	30,730
2039	73,498	8,123	65,375
2040	109,522	8,123	101,399
2041	110,602	8,123	102,479
2042	128,477	8,123	120,354
2043	144,831	8,123	136,708
2044	144,411	8,123	136,288
2045	132,301	8,123	124,178
2046	119,888	8,123	111,765
2047	112,979	8,123	104,856
2048	112,089	8,123	103,966
2049	110,384	8,123	102,261
2050	104,595	8,123	96,472
2051	95,742	8,123	87,619
2052	126,469	8,123	118,346
2053	163,481	8,123	155,358
2054	159,794	8,123	151,671
2055	167,715	8,123	159,592
2056	190,645	8,123	182,522
2057	203,100	8,123	194,977
2058	208,777	8,123	200,654
2059	206,024	8,123	197,901
2060	203,314	8,123	195,191
2061	200,530	8,123	192,407
2062	205,184	8,123	197,061
2063	232,029	8,123	223,906
2064	250,584	8,123	242,461
2065	248,481	8,123	240,358
2066	303,223	8,123	295,100
2067	362,686	8,123	354,563
2068	367,642	8,123	359,519
2069	410,650	8,123	402,527
2070	451,687	8,123	443,564
2071	465,602	8,123	457,479
2072	482,762	8,123	474,639
TOTAL	\$7,767,770	\$873,194	\$6,894,576

May 2024

FY 2023 THRU 2072  
SUMMARY OF INTEREST EXPENSE  
BY FISCAL YEAR

FY	UNPRORATED REPLACEMENTS \$	INTEREST RATE %	INTEREST \$
2023	0	2.75	0
2024	0	2.75	0
2025	0	2.75	0
2026	0	2.75	0
2027	0	2.75	0
2028	0	2.75	0
2029	0	2.75	0
2030	0	2.75	0
2031	0	2.75	0
2032	0	2.75	0
2033	0	2.75	0
2034	0	2.75	0
2035	0	2.75	0
2036	0	2.75	0
2037	0	2.75	0
2038	0	2.75	0
2039	1,057,100	2.75	14,535
2040	0	2.75	29,070
2041	0	2.75	29,070
2042	246,200	2.75	32,455
2043	72,800	2.75	36,842
2044	0	2.75	37,843
2045	0	2.75	37,843
2046	0	2.75	37,843
2047	0	2.75	37,843
2048	5,400	2.75	37,917
2049	219,900	2.75	41,015
2050	72,100	2.75	45,030
2051	112,300	2.75	47,565
2052	1,563,500	2.75	70,608
2053	240,600	2.75	95,414
2054	15,700	2.75	98,938
2055	907,700	2.75	111,635
2056	74,700	2.75	125,143
2057	411,000	2.75	131,821
2058	46,300	2.75	138,110
2059	0	2.75	138,746
2060	501,200	2.75	145,638
2061	0	2.75	152,529
2062	753,600	2.75	162,891
2063	1,324,600	2.75	191,466
2064	412,800	2.75	215,355
2065	35,100	2.75	221,514
2066	4,240,800	2.75	280,308
2067	224,200	2.75	341,702
2068	460,000	2.75	351,109
2069	2,945,500	2.75	397,935
2070	293,400	2.75	442,469
2071	946,500	2.75	459,518
2072	513,100	2.75	479,588
<b>TOTAL</b>	<b>\$ 17,696,100</b>		<b>\$ 5,217,308</b>

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## MAJOR PROJECT REPLACEMENTS

May 2024

R. D. WILLIS  
 MAJOR REPLACEABLE ITEMS  
 IN SERVICE YEAR 1990

YEAR OF REPLACEMENT	SERVICE LIFE (SL)	FERC ACCT	BASE YEAR	COST TO POWER \$	ADJUSTED COST \$
2001	8	335	2017	15,200	22,400
2022	8	333	2022	2,280	2,200
<b>TOTAL</b>	<b>8 YR SL</b>			17,480	24,600
2013	15	335	2022	101,678	118,600
2013	15	335	2017	12,753	18,800
2011	15	334	2022	858,800	1,001,400
2013	15	335	2022	358,785	418,300
2010	15	334	2017	6,376	9,400
2013	15	334	2017	10,202	15,000
2013	15	334	2017	6,376	9,400
2000	15	334	2017	6,376	9,400
2002	15	334	2022	337,900	394,000
2022	15	333	2022	254,887	247,000
<b>TOTAL</b>	<b>15 YR SL</b>			1,954,133	2,241,300
1985	20	334	2017	12,753	18,800
2010	20	334	2017	19,129	28,200
2008	20	334	2020	50,000	67,900
2008	20	334	2022	319,717	372,800
1989	20	331	2017	0	0
2015	20	335	2017	29,023	42,800
2022	20	333	2022	64,593	62,600
<b>TOTAL</b>	<b>20 YR SL</b>			495,215	593,100
2003	25	331	2022	279,055	399,000
2010	25	333	2017	9,227	10,100
1989	25	333	2017	103,222	113,200
1990	25	335	2017	16,309	24,000
2022	25	333	2022	61,172	59,300
<b>TOTAL</b>	<b>25 YR SL</b>			468,985	605,600
1993	35	331	2017	79,730	145,700
1993	35	334	2017	9,600	14,100
1993	35	335	2017	57,388	84,500
1993	35	331	2017	26,466	48,400
1993	35	331	2017	10,586	19,300
1993	35	334	2022	518,245	604,300
1993	35	334	2022	558,110	650,800
1993	35	335	2017	25,506	37,600
1994	35	334	2017	63,764	93,900
2004	35	334	2022	529,459	617,300
2004	35	334	2022	529,459	617,300
2004	35	334	2020	250,000	339,300
2004	35	334	2017	25,000	36,800
1972	35	334	2017	127,528	187,800
1972	35	331	2017	206,410	377,100
1972	35	331	2017	330,256	603,400
1972	35	331	2017	11,926	21,800
1973	35	333	2017	271,064	297,400
1978	35	331	2017	7,138	13,000
1980	35	334	2017	31,882	47,000
1982	35	334	2017	161,000	237,200
1982	35	334	2017	1,500,000	2,209,500
1985	35	333	2021	880,000	949,500
2022	35	333	2022	621,052	601,800
<b>TOTAL</b>	<b>35 YR SL</b>			6,831,569	8,854,800

R. D. WILLIS  
 MAJOR REPLACEABLE ITEMS  
 IN SERVICE YEAR 1990

YEAR OF REPLACEMENT	SERVICE LIFE (SL)	FERC ACCT	BASE YEAR	COST TO POWER \$	ADJUSTED COST \$
1986	40	333	2022	1,717,600	1,664,400
1986	40	331	2022	858,800	1,228,100
1989	40	331	2022	881,130	1,260,000
1989	40	334	2017	159,410	234,800
1990	40	334	2017	180,000	265,100
1994	40	331	2017	0	0
1995	40	333	2022	1,100,000	1,065,900
1995	40	333	2022	1,100,000	1,065,900
1999	40	334	2017	55,833	82,200
1999	40	331	2017	19,849	36,300
1999	40	331	2017	13,233	24,200
2009	40	331	2017	125,000	228,400
2010	40	333	2017	77,328	84,800
1971	40	331	2017	101,121	184,700
1972	40	331	2017	0	0
1972	40	331	2017	198,493	362,600
1973	40	331	2017	99,247	181,300
1975	40	331	2017	0	0
1975	40	334	2017	292,089	430,200
1975	40	334	2017	697,913	676,300
<b>TOTAL</b>	<b>40 YR SL</b>			<b>7,677,046</b>	<b>9,075,200</b>
2004	45	331	2017	79,397	145,100
1966	45	331	2017	52,932	96,700
1976	45	331	2017	403,461	737,100
2022	45	333	2022	53,579	51,900
<b>TOTAL</b>	<b>45 YR SL</b>			<b>589,369</b>	<b>1,030,800</b>
1976	50	331	2022	858,800	1,228,100
1989	50	335	2017	139,164	205,000
1989	50	333	2017	137,629	151,000
1989	50	333	2017	137,629	151,000
1989	50	333	2017	68,814	75,500
1989	50	333	2017	68,814	75,500
1989	50	333	2017	137,629	151,000
1989	50	333	2017	34,407	37,700
1989	50	331	2017	165,411	302,200
1989	50	334	2017	19,129	28,200
1989	50	334	2017	19,129	28,200
1989	50	335	2017	0	0
1989	50	335	2017	6,376	9,400
1989	50	331	2017	13,233	24,200
1989	50	331	2017	79,397	145,100
1989	50	331	2017	158,795	290,100
1989	50	331	2017	52,932	96,700
2004	50	331	2017	11,009	20,100
1960	50	335	2017	386,383	569,100
1964	50	331	2017	148,505	271,300
1966	50	333	2017	900,000	987,300
1966	50	333	2017	0	0
2018	50	334	2022	80,000	93,300
1969	50	335	2017	1,060,000	1,561,400
2022	50	333	2022	468,319	453,800
<b>TOTAL</b>	<b>50 YR SL</b>			<b>5,151,504</b>	<b>6,955,200</b>
<b>TOTAL</b>				<b>23,185,301</b>	<b>29,380,600</b>

\*\* Handy-Whitman Index of Public Utility Construction Costs indices.

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CORPS OF ENGINEERS  
OPERATIONS AND MAINTENANCE EXPENSES

SOUTHWESTERN POWER ADMINISTRATION  
PROJECTED CORPS O&M EXPENSES

	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
BEAVER	2,506,700	2,556,800	2,607,900	2,660,100	2,826,600
BLAKELY MOUNTAIN	2,717,100	2,771,500	2,826,900	2,883,400	3,063,900
BROKEN BOW	2,295,300	4,585,500	2,122,500	2,164,900	2,300,500
BULL SHOALS	4,302,600	4,388,600	4,476,400	4,565,900	4,851,800
CLARENCE CANNON	1,814,300	1,850,600	1,887,600	1,925,400	2,045,900
DARDANELLE	4,241,300	4,326,100	4,412,600	4,500,900	4,782,600
DEGRAY	1,842,700	1,879,600	1,917,200	1,955,500	2,077,900
DENISON	2,735,700	3,471,900	11,344,300	2,903,200	3,084,900
EUFALA	2,363,400	3,918,300	8,566,800	2,237,200	2,377,200
FORT GIBSON	3,148,000	2,983,200	3,009,700	3,069,800	3,262,000
GREERS FERRY	2,360,000	2,407,200	2,455,300	2,504,400	2,661,200
ROBERT S KERR	3,789,600	6,179,500	3,296,300	3,362,200	3,572,700
KEYSTONE	2,293,200	2,373,200	2,368,400	4,989,300	2,567,000
NARROWS	1,581,700	1,613,300	1,645,600	1,678,500	1,783,600
NORFORK	1,909,900	1,948,100	1,987,100	2,026,800	2,153,700
OZARK	4,010,800	4,091,000	4,172,800	4,256,300	4,522,700
STOCKTON	1,808,200	1,844,400	1,881,200	1,918,900	2,039,000
TABLE ROCK	3,267,100	3,332,400	3,399,100	3,467,100	3,684,100
TENKILLER FERRY	2,402,700	3,630,500	2,132,300	2,175,000	2,311,100
HARRY S TRUMAN	6,631,700	6,764,300	6,899,600	7,037,600	7,478,200
WEBBERS FALLS	2,544,400	3,875,500	2,647,200	2,700,200	2,869,200
WHITNEY	2,620,800	2,673,200	2,726,600	2,781,200	2,710,600
SAM RAYBURN	2,690,400	2,744,200	2,799,100	2,855,100	2,281,500
<b>R. D WILLIS</b>	<b>938,800</b>	<b>957,500</b>	<b>976,700</b>	<b>996,200</b>	<b>1,013,400</b>

TOTALS

1/ Corps base estimates with inflation.

Table II Column 5 totals include \$17,600 per year unfunded Civil Service Retirement System and post-retirement health benefit costs.

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SOUTHWESTERN POWER ADMINISTRATION  
OPERATIONS AND MAINTENANCE EXPENSES

OPERATION AND MAINTENANCE EXPENSE  
SUPPORTING DATA FOR TABLE II, COLUMN 6

HISTORIC SWPA O&M EXPENSE

FY	<u>TRANSMISSION EXPENSES</u>		<u>GA&amp;O TO PURCHASED POWER &amp; WHEELING</u>		<u>SWPA MARKETING EXPENSES</u>		<u>TOTAL POWER MARKETING EXPENSES</u>		<u>TOTAL TRANSMISSION &amp; MKTING EXP - CSRS</u>		<u>PRESIDENTIAL BUDGET PROJECTIONS</u>
2018	\$18,478,301	77.3%	\$1,482,863	6.2%	\$5,578,391	23.3%	\$7,061,254	29.5%	\$23,899,406		\$48,015,000
2019	\$18,463,450	77.7%	\$1,445,346	6.1%	\$5,437,253	22.9%	\$6,882,599	29.0%	\$23,753,047		\$50,001,000
2020	\$15,868,966	63.6%	\$2,192,641	8.8%	\$8,248,507	33.1%	\$10,441,148	41.9%	\$24,942,849		\$48,796,000
2021	\$22,615,978	73.3%	\$2,025,999	6.6%	\$7,621,617	24.7%	\$9,647,616	31.3%	\$30,862,198		\$0
2022	\$20,092,209	68.5%	\$2,234,559	7.6%	\$8,406,197	28.7%	\$10,640,756	36.3%	\$29,316,101		\$0
TOTAL	\$548,267,250	76.8%	\$52,793,812	7.4%	\$143,881,917	20.2%	\$196,675,729	27.6%	\$713,566,071	77.2%	\$924,017,680

FUTURE YEAR PROJECTION SWPA O&M EXPENSE

2023 PRS O&M

	<u>TOTAL SYSTEMS</u>	<u>SAM</u>	<u>R. D. WILLIS</u>	<u>INTEGRATED SYS</u>	<u>TOTAL POWER SYSTEM O&amp;M</u>	<u>MARKETING &amp; CSRS LESS SAM &amp; WILLIS</u>
2023	\$42,880,000	\$334,700	\$47,400	\$42,497,900	\$28,601,000	\$13,896,900
2024	\$40,886,000	\$325,200	\$46,000	\$40,514,800	\$27,271,000	\$13,243,800
2025	\$41,564,000	\$328,400	\$46,500	\$41,189,100	\$27,723,200	\$13,465,900
2026	\$40,691,000	\$324,300	\$45,900	\$40,320,800	\$27,140,900	\$13,179,900
2027	\$41,527,000	\$328,300	\$46,500	\$41,152,200	\$27,698,500	\$13,453,700

(The CSRS cost for Sam & Willis were allocated based on the percentage of generation capacity- - the same as other Power Marketing Costs) (\$900 for Willis and \$6,500 for Sam) (The Corps' portion was allocated the same way. It was \$14,300 for Willis & \$101,000 for Sam)