

Operation and Maintenance, Southwestern Power Administration

Proposed Appropriation Language

For necessary expenses of operation and maintenance of power transmission facilities and of marketing electric power and energy, and for construction and acquisition of transmission lines, substations and appurtenant facilities, and for administrative expenses, including official reception and representation expenses in an amount not to exceed \$1,500 in carrying out the provisions of section 5 of the Flood Control Act of 1944 (16 U.S.C. 825s), as applied to the southwestern power area, [\$28,100,000] \$28,038,000, to remain available until expended; in addition, notwithstanding the provisions of 31 U.S.C. 3302, not to exceed [\$4,200,000] \$5,200,000 in reimbursements, to remain available until expended; Provided, That *up to \$1,512,000* collected by the Southwestern Power Administration pursuant to the Flood Control Act to recover purchase power and wheeling expenses shall be credited to this account as offsetting collections, to remain available until expended for the sole purpose of making purchase power and wheeling expenditures [as follows: for fiscal year 2001, up to \$288,000; for fiscal year 2002, up to \$288,000; for fiscal year 2003, up to \$288,000; and for fiscal year 2004, up to \$288,000].

Explanation of Change

The language change deletes the prior year reference to FY 2001 purchase power and wheeling activity, and includes up to \$1,512,000 in use of offsetting collections for FY 2002 purchase power and wheeling requirements in addition to the \$288,000 made available for FY 2002 in FY 2001 in Public Law 106-377, providing a total of up to \$1,800,000 in use of offsetting collections for FY 2002.

Operation and Maintenance

Executive Budget Summary

Mission

Southwestern Power Administration's (Southwestern) mission fulfills requirements of Section 5 of the Flood Control Act of 1944 by marketing and reliably delivering Federal hydroelectric power, with preference given to public bodies and cooperatives. This will be accomplished by maximizing the use of Federal assets to repay the Federal investment while balancing power needs with the diverse interests of other water resource users and implementing public policy. As part of the Department of Energy's (DOE) Strategic Plan in the Energy Resources and Corporate Management business lines, Southwestern's program promotes secure, reliable, competitive, and environmentally responsible energy systems by reducing the vulnerability of the U.S. economy to disruptions in energy supplies.

Southwestern's goals and objectives are to market and deliver power in a safe and reliable manner while providing environmental and economic benefits to the region, encouraging competition in the cost of electric power, and repaying all annual costs as well as the Federal investment plus interest.

To integrate the operation of the Federal hydroelectric generating plants and to transmit power from U.S. Army Corps of Engineers (Corps) dams to its customers, Southwestern maintains 1,380 miles of high-voltage transmission line, 23 substations, and 46 microwave and very high frequency (VHF) radio sites. Southwestern's headquarters is in Tulsa, Oklahoma; its Dispatch Center is in Springfield, Missouri; and its maintenance crews are based in Jonesboro, Arkansas; Gore, Oklahoma; and Springfield, Missouri.

Strategy

In order to achieve safety and reliability while staying competitive, Southwestern will accomplish its mission with 177 Federal employees, 39 contractor employees, budget authority of \$28,038,000, offsetting collections of \$1,800,000, non-Federal reimbursable authority of \$5,200,000, and through four program activities: Operations and Maintenance, Construction, Purchased Power and Wheeling, and Program Direction. In addition, Southwestern will perform reimbursable work activities for Federal entities under the Economy Act of 1932. All carryover balances have been reviewed as potential funding sources and have been determined to be unavailable to offset new budget authority.

Major Changes

- # In FY 2002, Southwestern will continue to use power revenues to pay for the purchase of power and wheeling activities. The escalation of energy prices and the reduced level of energy banking that other electric utilities are willing to provide requires Southwestern to propose an increase in the use of revenues to finance the delivery of power. Southwestern will also continue to encourage its customers to use alternative financing arrangements (net billing, bill crediting, and reimbursable authority) to fund these activities.

- # In response to the May 16, 2000, memorandum issued by the Deputy Secretary of Energy directing the Power Marketing Administrations to participate in the process of Regional Transmission Organization (RTO) formation, Southwestern filed an informational letter with the Federal Energy Regulatory Commission (FERC) on October 13, 2000, describing its efforts to participate in an RTO.
- # On October 13, 2000, Southwestern signed a membership agreement with the Southwest Power Pool (SPP) to participate in the proposed SPP/RTO, as currently developed. The membership agreement becomes effective when FERC issues an order approving the SPP/RTO. Southwestern has been participating in SPP's regional transmission tariff since June 1, 1998. In addition, Southwestern continues to actively participate in the SPP's ongoing process to comply with the FERC's RTO requirements. One of the impacts of this participation is Southwestern's need for upfront funding of facility additions/interconnections desired by the RTO. This results in a requirement for additional non-Federal reimbursable authority.

Major Issues

- # The increased demand for energy with the resulting loads on the Federal power facilities and the age of these facilities are forcing increased maintenance and replacement of equipment. In FY 2002, appropriations and alternative financing arrangements (net billing, bill crediting, and reimbursable authority) will assure the reliability of the power facilities.
- # Southwestern's ability to meet its contractual obligations in the delivery of power is challenged with the electric utility industry experiencing escalating energy prices and changing electric utility practices.
- # As electric industry restructuring continues, Southwestern is participating with the SPP in the development of a region-wide tariff and a RTO structure that will allow Southwestern to participate and still meet its statutory obligations and mission requirements. The outcome may impact Southwestern's operations and its future funding requirements.

Site Funding and Federal and Contractor Staffing Profile

(dollars in thousands)

	FY 2000	FY 2001	FY 2002
Operations and Maintenance	3,625	3,787	3,339
Purchased Power and Wheeling	833 ^a	288	1,800
Construction	6,663	6,802	6,031
Program Direction	17,543	18,349	18,668
Total Southwestern Program Level	<u>28,664^b</u>	<u>29,226^c</u>	<u>29,838</u>
Offsetting Collections Realized	0	-288	-1,800
Use of Prior Year Balances	0	-900	0
Budget Authority, Southwestern Power Administration	<u>28,664</u>	<u>28,038</u>	<u>28,038</u>
Full-Time Equivalents	177	177	177
Contractor Staffing	45	39	39

^aReflects an appropriation transfer of \$773,000.

^bReflects a Congressional rescission of \$109,000.

^cReflects a Congressional rescission of \$62,000.

Program Performance Measures

- # Based on the annual performance measurements review in FY 2000, Southwestern continues to implement performance goals and objectives validated by performance measurements that crosscut programs.
 - ▶ Operate and maintain the transmission system to receive monthly a control compliance rating of “pass” using the North American Electric Reliability Council (NERC) performance standard, to achieve a System Average Interruption Duration Index (SAIDI) of not more than 150 minutes of total preventable outages per year per delivery point, and to achieve solutions and determine priorities to operating challenges through participation with the Southwest Power Pool (SPP), the Corps, and various regional groups.
 - ▶ Maximize the use of Federal assets to meet planned repayment of principal on power reinvestments, to achieve a 1.0 debt service coverage ratio, and to develop new sources of revenue and/or cost savings.
 - ▶ Achieve a safety performance of a 3.3 recordable accident frequency rate for recordable injuries per 200,000 hours worked or the Bureau of Labor Statistics’ industry rate, whichever is lower.
 - ▶ Market and deliver all available hydroelectric power as measured by the amount of firm capacity and associated energy delivered, economic benefits realized, nonrenewable resources saved, and information technology management systems secured.



March 23, 2001

Michael A. Deihl, Administrator
Southwestern Power Administration

Date

Southwestern Power Administration

Program Mission

Southwestern Power Administration's (Southwestern) mission fulfills requirements of Section 5 of the Flood Control Act of 1944 by marketing and reliably delivering Federal hydroelectric power, with preference given to public bodies and cooperatives. This will be accomplished by maximizing the use of Federal assets to repay the Federal investment while balancing power needs with the diverse interests of other water resource users and implementing public policy. As part of the Department of Energy's (DOE) Strategic Plan in the Energy Resources and Corporate Management business lines, Southwestern's program promotes secure, competitive, and environmentally responsible energy systems by reducing the vulnerability of the U.S. economy to disruptions in energy supplies.

To integrate the operation of the Federal hydroelectric generating plants and to transmit power from U.S. Army Corps of Engineers (Corps) dams to its customers, Southwestern maintains 1,380 miles of high-voltage transmission line, 23 substations, and 46 microwave and very high frequency (VHF) radio sites. Southwestern's headquarters is in Tulsa, Oklahoma; its Dispatch Center is in Springfield, Missouri; and its maintenance crews are based in Jonesboro, Arkansas; Gore, Oklahoma; and Springfield, Missouri.

In order to achieve safety and reliability while staying competitive, Southwestern will accomplish its mission with 177 Federal employees, 39 contractor employees, budget authority of \$28,038,000, offsetting collections of \$1,800,000, non-Federal reimbursable authority of \$5,200,000, and through four program activities: Operations and Maintenance, Construction, Purchased Power and Wheeling, and Program Direction. In addition, Southwestern will perform reimbursable work activities for Federal entities under the Economy Act of 1932.

Program Goals

- # Market and deliver all available hydroelectric power from Corps dams while balancing power needs with the diverse interests of other water resource users.
- # Operate and maintain a Federal transmission system to assure reliability of the interconnected system while meeting utility safety standards and encouraging competition in the cost of electrical power through open access to its facilities.
- # Maximize the use of Federal assets to repay the investment, including principal and interest, and operation and maintenance costs of the Federal power program.

Program Objectives

- # Assure all power and energy is marketed, offering it first to public bodies and cooperatives.
- # Provide widespread economic benefits.
- # Provide environmental benefits by reducing the use of non-renewable resources.

- # Ensure the security of and enhance information technology management systems needed to meet Southwestern's mission goals.
- # Provide reliable deliveries of electric power to customers.
- # Operate the electric system to assure efficient matching of generation to load.
- # Operate and maintain the transmission system safely.
- # Foster additional partnerships with customers and other stakeholders to determine priorities and solutions.
- # Assure that the Government's hydropower costs are repaid according to sound business principles.
- # Develop new sources of revenue and/or cost savings through providing new services and/or partnering with other utilities to jointly share costs of needed facilities.
- # Develop staffing resources to avoid the loss of technical and leadership expertise.

Performance Measures

Southwestern's Strategic Plan, revised in FY 2000, supports the DOE Strategic Plan and goals related to reliability, safety, and repayment.

- # Receive monthly a control compliance rating of "pass" using the North American Electric Reliability Council (NERC) performance standards.
- # Meet planned repayment of principal on power investment.
- # Achieve a safety performance of a 3.3 recordable accident frequency rate for recordable injuries per 200,000 hours worked or the Bureau of Labor Statistics' industry rate, whichever is lower.

Southwestern's Strategic Plan further assures that requirements of the authorizing program legislation, Section 5 of the Flood Control Act of 1944, is fulfilled. Additional performance measurements are:

- # Market 100 percent of firm capacity and associated energy offering it first to public bodies and cooperatives according to Southwestern's marketing plan.
- # Exceed \$400 million in regional economic benefits under average water conditions. Values calculated using operational data from Southwestern, Federal Energy Regulatory Commission (FERC), and the Corps.
- # Save 9.2 million barrels of oil, 2.7 million tons of coal, or 56 billion cubic feet of natural gas under average water conditions through hydropower generation. Values calculated using operational data from Southwestern, FERC, and the Corps.
- # Streamline the process for review, development, and implementation of new information management systems.
- # Refine cyber security plan, review risk assessment for threats, and develop countermeasures.

- # Achieve a System Average Interruption Duration Index of not more than 150 minutes of total preventable outages per year per delivery point.
- # Participate in the SPP/RTO, Corps joint action agreements, and various regional interest groups consistent with Southwestern's mission.
- # Perform annual Power Repayment Studies to assure that the cumulative status of repayment remains on schedule by filing new rates, if necessary.
- # Achieve a debt service coverage ratio of 1.0 based on average water conditions.
- # Achieve additional revenues and cost savings.
- # Establish plans to minimize the loss of corporate expertise and leadership.

Significant Accomplishments and Program Shifts

Program Shift

- # In FY 2002, Southwestern will continue to use power revenues to pay for the purchase of power and wheeling activities. The escalation of energy prices and the reduced level of energy banking that other electric utilities are willing to provide requires Southwestern to propose an increase in the use of revenues to finance the delivery of power. Southwestern will also continue to encourage its customers to use alternative financing arrangements (net billing, bill crediting, and reimbursable authority) to fund these activities.

Accomplishments

- # Marketed 3.8 gigawatt hours and transmission services with a gross revenue of \$95,392,308. Cumulative repayable Federal investment is \$1,124,617,163. Repayment of the principal is \$479,211,906 or 42.6 percent and \$662,739,918 in interest by the end of FY 2000.
- # Produced 3,761,800,000 kilowatt-hours and 2,211,600 kilowatts under actual water conditions, equating to \$367.2 million in economic benefits. Values calculated using operational data from Southwestern, FERC, and the Corps.
- # Saved 6.2 million barrels of oil, 1.8 million tons of coal, or 38 billion cubic feet of natural gas through hydropower generation. Values calculated using operational data from Southwestern, FERC, and the Corps.
- # Implemented an automated tracking system to facilitate the review, development, and implementation of new information management projects.
- # Received approval of Southwestern's cyber security plan from the Department of Energy.
- # Achieved a System Average Interruption Duration Index of not more than 150 minutes of total preventable outages per year.
- # Received a Control Compliance Rating of "Pass" for each month of the fiscal year using the North American Electric Reliability Council performance standard.

- # Achieved a safety performance of no recordable accident rate for recordable injuries per 200,000 hours worked compared to the Bureau of Labor Statistics industry rate of 5.1.
- # Signed a membership agreement on October 13, 2000 with the SPP to participate in the proposed SPP/RTO, as currently developed. The membership agreement does not become effective until the FERC issues an order approving the SPP/RTO. Southwestern has been participating in SPP's regional transmission tariff since June 1, 1998. In addition, Southwestern continues to actively participate in the SPP's ongoing process to comply with the FERC's RTO requirements. One of the impacts of this participation is Southwestern's need for upfront funding of facility additions/interconnections desired by the RTO. This results in a need for additional non-Federal reimbursable authority.
- # Performed annual Power Repayment Studies on Southwestern's three power systems: the Integrated System, Sam Rayburn Dam, and Robert D. Willis Dam. Rates were set to ensure repayment remains on schedule.
- # Achieved a cumulative principal repayment level of 40.66 percent on the Federal investment of the power facilities.
- # Achieved a debt service ratio of 0.536 due to below average water condition during the year.
- # Developed partnering and leasing arrangements resulting in additional revenues returned to the U.S. Treasury and cost savings.
- # Developed preliminary plans to minimize the loss of corporate expertise and leadership in the organization.

Funding Profile

(dollars in thousands)

	FY 2000 Comparable Appropriation	FY 2001 Original Appropriation	FY 2001 Adjustments	FY 2001 Comparable Appropriation	FY 2002 Request
Southwestern Power Administration					
Operations and Maintenance	3,625	3,795	-8	3,787	3,339
Purchased Power and Wheeling	833 ^a	288	0	288	1,800
Construction	6,663	6,817	-15	6,802	6,031
Program Direction	17,543	18,388	-39	18,349	18,668
	28,664 ^b				
Total, Southwestern Program Level		29,288 ^c	-62 ^d	29,226	29,838
Offsetting Collections Realized	0	-288	0	-288	-1,800
Use of Prior Year Balances	0	-900	0	-900	0
Budget Authority, Southwestern Power Administration	28,664	28,100	-62	28,038	28,038

Public Law Authorizations:

Public Law 78-534, "Flood Control Act of 1944"
 Public Law 95-91, "DOE Organization Act of 1977", Section 302
 Public Law 102-486, "Energy Policy Act of 1992"

^aReflects an appropriation transfer of \$773,000.

^bReflects Congressional rescission of \$109,000.

^cIncludes carryover of \$773,000 and prior year deobligations of \$127,000.

^dReflects adjustment for a 0.22 percent based on the Consolidated Appropriations Act, 2001, Public Law 106-554.

Funding by Site

(dollars in thousands)

	FY 2000	FY 2001	FY 2002	\$ Change	% Change
Southwestern Power Administration	28,664 ^a	29,226 ^b	29,838	+612	+2.1%
Total, Southwestern Program Level	28,664	29,226	29,838	+612	+2.1%
Offsetting Collections Realized	0	-288	-1,800	-1,512	+525.0%
Use of Prior Year Balances	0	-900	0	+900	N/A
Budget Authority Southwestern Power Administration	28,664	28,038	28,038	0	0.0%

Site Description

An agency of the Department of Energy, Southwestern was created in 1943 to market power and energy produced at Corps hydroelectric power projects. Southwestern markets power at wholesale rates to 78 municipal utilities, 22 rural electric cooperatives, and three government agencies in the six states of Arkansas, Kansas, Louisiana, Missouri, Oklahoma, and Texas. To integrate the operation of the Federal hydroelectric generating plants and to transmit power from Corps dams to customers, Southwestern operates and maintains 1,380 miles of high-voltage transmission line, 23 substations, and 46 microwave and VHF radio sites. Southwestern operates from four locations. The Headquarters is located in Tulsa, Oklahoma; the Dispatch Center in Springfield, Missouri; and the maintenance crews are located in Jonesboro, Arkansas; Gore, Oklahoma; and Springfield, Missouri.

^aReflects a funds transfer of \$773,000 and a rescission of \$109,000

^bIncludes carryover of \$773,000, prior year deobligations of \$127,000, and a Congressional rescission of \$62,000.

Operations and Maintenance

Mission Supporting Goals and Objectives

Southwestern's Operations and Maintenance (O&M) activity fulfills the requirements of Section 5 of the Flood Control Act of 1944 and reflects Southwestern's goals and objectives to market and deliver power in a safe and reliable manner while providing environmental and economic benefits to the region, encouraging competition in the cost of electrical power, and repaying the Federal investment plus interest. The O&M program also supports the DOE's Strategic Plan to promote secure, competitive, and environmentally responsible energy systems by reducing the vulnerability of the U.S. economy to disruptions in energy supplies.

Southwestern markets power in a six-state area from 24 multi-purpose Federal dams operated by the Corps. To integrate the operation of the Federal hydroelectric generating plants and to transmit power from the Corps dams to customers, Southwestern maintains 1,380 miles of high-voltage transmission line, 23 substations, and 46 microwave and VHF radio sites.

Southwestern's facilities were built 40-57 years ago and are constantly evaluated to develop a systematic maintenance program through the Maintenance Management Information System (MMIS). Data from the MMIS (age, risk of failure, life cycle of equipment), field crew evaluation, obsolescence of technology, and lack of replacement parts are all variables that are assessed when determining the level of funding required for a fiscal year.

The estimates provided in this activity are for Power Marketing, Operations, and Maintenance activities. Power Marketing provides for technical and economic studies to support Southwestern's transmission planning, water resources, communications, environment, safety and health, and maintenance activities. Technical and economic studies provide data to analyze and evaluate the impacts of proposed operational changes and for decision making based on cost/benefit analysis. In addition, this activity provides for environmental day-to-day activities such as waste disposal, monitoring equipment, environmental assessments, and contractor support.

The Operations activity provides for the software and hardware maintenance support, upgrades, day-to-day communications support of the Supervisory Control and Data Acquisition/Energy Management System (SCADA/EMS), and other associated communication activities. The SCADA/EMS has been identified as a critical infrastructure by the DOE. Communications also support fiber optic and microwave radio projects in the Construction budget. In conjunction with this activity, Southwestern works with customers through alternative financing arrangements and with other Federal entities in studying and implementing dissolved oxygen monitoring and to optimize Federal hydropower production to fulfill Southwestern's contractual obligations, while balancing power needs with the diverse interests of other water users.

The Maintenance activity provides for the day-to-day routine replacements on the transmission facilities. Activities are divided into substation and line maintenance and includes communication tower maintenance, protection of facilities, hazardous waste removal, right-of-way clearing, air patrol of lines, diagnostic testing, and general building maintenance.

Southwestern expects to increase its alternative financing program in FY 2002 based on its compliance with transmission open access mandates of FERC Order Nos. 888, 889, and 2000 establishing the rules for the creation of regional transmission organizations (RTOs), and Southwestern's participation in the Southwest Power Pool (SPP), an electrical regional reliability council in Southwestern's marketing area. These FERC initiatives combined with the general restructuring of the electrical utility industry are requiring that existing transmission systems, including Southwestern's, be modified to accommodate increased power flow transactions.

Southwestern's compliance may involve modifications to its power system components such as circuit breakers, disconnect switches, current and potential transformers, and related equipment for operation of the power system.

Southwestern also provides assistance to others which could include the relocation of some Southwestern transmission and substation facilities. These are existing and recurring activities and the requesting entity is required to fund such projects.

Funding Schedule

(dollars in thousands)

	FY 2000	FY 2001	FY 2002	\$ Change	% Change
Power Marketing	693	896	902	+ 6	1.0%
Operations	505	480	474	-6	-1.2%
Maintenance	2,427	2,411	1,963	-448	-18.6%
Total, Operations and Maintenance	3,625	3,787	3,339	-448	-11.8%

Detailed Program Justification

(dollars in thousands)

FY 2000	FY 2001	FY 2002
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Power Marketing **693** **896** **902**

Power marketing includes technical and economic studies for transmission planning activities. Such activities include protective relaying, environmental program, safety and health, water resources, communication, maintenance, and system modifications. Performance is measured by the amount of firm capacity and associated energy delivered, economic benefits realized, non-renewable resources saved, and the DOE/Southwestern performance goal of repaying the Federal investment on schedule.

Technical and Economic Studies **528** **578** **567**

Mandatory transmission planning studies are performed annually. Those studies include one or more dynamic stability evaluations, two or more Southwestern Federal Power System short circuit investigations, and 38 SPP model updates needed to assess the impacts of Southwestern's SPP/RTO participation. Essential transmission planning studies include: 25 power system protective relay coordination studies; 4 Available Transmission Capacity updates (one per season); and 6 customer interconnection/facility addition analyses arising from open transmission access and market pressures on Southwestern customers and other connected utilities. The number, scope, and magnitude of business essential studies are increasing at a rate of 25 percent per year based on historical records. The funding level is appropriate for the average number of studies required per year that would have operational impacts on how Southwestern markets and delivers power. Estimate is derived from the negotiated architect/engineering and other contracts. Decrease in funding reflects 2 fewer SPP studies being anticipated.

Environmental Program **165** **318** **335**

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FY 2002 Congressional Budget

(dollars in thousands)

FY 2000	FY 2001	FY 2002
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Environmental activities include waste disposal/clean-up of oil and polychlorinated biphenyl (PCB) contaminants from old circuit breakers and transformers; environmental assessments for threatened and endangered species, property transfers, and wetland assessments; environmental library access; and for contractor services. Increase in funding reflects the disposal of a greater amount of contaminated equipment.

Operations **505** **480** **474**

Operations includes costs for transmission communication activities associated with the delivery of power and other transmission activity costs. Performance is measured by the SAIDI, operational efficiencies through joint partnerships, and the DOE/Southwestern goals of receiving a control compliance rating of “pass” using the NERC performance standard, and based on electric industry safety standards, achieving a safety performance of no more than 3.3 recordable injuries per 200,000 hours worked.

Communications **413** **373** **406**

The communication activities include the purchase of supplies and materials, digital test equipment, repair and purchase of system modules and equipment, work stations for SCADA support, SCADA maintenance agreement, and SCADA software and hardware upgrades (previously budgeted in Construction). Upgrades are required as Southwestern continues to actively participate in the SPP/RTO development. Upgrade requirements are estimates based on projected hardware and software replacement costs to implement security measures and meet the demand of the changing electric utility industry. The funding level for communications maintenance is derived from maintenance history, the age of the equipment, expected life span, annual diagnostic maintenance test, and historical price information.

Other Transmission Activities **92** **107** **68**

These costs provide funding for FERC service charges, Energy Efficiency and Renewable Resources Program (EE&RR) and the day-to-day expenses of the Dispatch Center. Decrease in funding reflects a reduction in publications and equipment for the EE&RR Program and a decrease for FERC service charges.

Maintenance **2,427** **2,411** **1,963**

(dollars in thousands)

FY 2000	FY 2001	FY 2002
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Maintenance provides for day-to-day maintenance of Southwestern's 23 substations and 1,380 miles of high-voltage transmission lines and assures power is reliably and safely delivered to customers. Performance is measured by the SAIDI and the DOE/Southwestern goals of receiving a control compliance rating of "pass" using the NERC performance standard and achieving a safety performance based on electric industry safety standards.

Substation Maintenance **1,185** **1,177** **729**

Maintenance estimates are based on data in the MMIS which provides the age and condition of the existing equipment that predicts maintenance intervals. Estimates are calculated on age plus risk and number of units times the maintenance price per unit.

In FY 2002, work includes purchase and installation of 30 interchange and/or revenue meters, electrical equipment such as battery chargers, coupling capacitors voltage transformers, and potential transformers to maintain system reliability as required by Southwestern's participation as a member of the SPP/RTO; and to complete essential general maintenance projects. Alternative financing arrangements account for the decrease in the funding request.

Transmission Line Maintenance **1,242** **1,234** **1,234**

In the Right-of-Way (ROW) Reclearing Program, the vegetation growing cycle in Southwestern's geographical area has shown that the mechanical reclearing of brush and trees in a 3-4 year cycle is needed to avoid outages. Southwestern has begun an aggressive herbicide treatment program in addition to reclearing to eliminate undesirable vegetation and extend the reclearing cycle to reduce on going costs in the outyears. The funding estimate is to provide for 400 miles of vegetation control annually with 150 miles of herbicide application. The estimate is based on number of miles, type of terrain, and historical pricing information.

In FY 2002, plans are to purchase 20 steel structures and 20 wood structures complete with crossarms and braces; complete an estimated 400 miles of planned right-of-way reclearing, including reclearing the floor of the right-of-way and side clearing; apply 150 miles of herbicide; and perform routine vehicle repair and maintenance. The estimate for steel and wood structures is based on data from the Overhead Transmission Maintenance System (OTMS) program. Through the use of the OTMS, the number of units (poles, crossarms, insulators) to be replaced, age of such units, and testing criteria is predetermined enabling extraction of this information at any given period of time. The funding estimate is calculated on existing inventory plus historical average crew production, condition of the equipment, and historical pricing information for parts and materials.

Explanation of Funding Changes from FY 2001 to FY 2002

FY 2002 vs. FY 2001 (\$000)

Operations and Maintenance

#	Decrease in Power Marketing reflects 2 fewer SPP model updates, (-\$11,000). Environmental activities reflect an increase in funding for the disposal of oil-filled equipment considered to be PCB contaminated, (+\$17,000).	+6
#	Decrease in overall Operations costs is due to an increase in SCADA hardware and software upgrades required to meet the demands of continued changes in the electric utility industry, (\$+33,000), offset by a decrease in Energy Efficiency and Renewable Resources (EE&RR), and FERC service charges, (-\$39,000).	-6
#	Decrease in Maintenance costs reflect a reduction in circuit breakers, current transformers, potential transformers, and post insulators. It is expected that these projects will be funded through alternative financing arrangements based on requirements from Southwestern's participation in the SPP/RTO.	-448
Total Funding Change, Operations and Maintenance		-448

Purchased Power and Wheeling

Mission Supporting Goals and Objectives

Southwestern's Purchased Power and Wheeling (PPW) program purchases non-discretionary energy as necessary to supplement hydroelectric generation to meet contractual obligations with its customers and replacement losses associated with the transmission of non-Federal power. This activity also provides for wheeling services associated with delivery of this energy to customers not directly connected to the transmission system.

In FY 2002, Southwestern will continue to use power revenues to pay for the purchase of power and wheeling activities. The escalation of energy prices and the reduced level of energy banking that other electric utilities are willing to provide requires Southwestern to propose an increase in the use of revenues to finance the delivery of power. Southwestern will also continue to encourage its customers to use alternative financing arrangements to fund these activities.

Funding Schedule

	(dollars in thousands)				
	FY 2000	FY 2001	FY 2002	\$ Change	% Change
System Support Activities					
Purchased Power	2,073	2,428	4,528	+2,100	+86.5%
Power Losses	0	0	2,400	+2,400	N/A
Other Contractual Activities					
Wheeling	3,260	2,860	2,360	-500	-17.5%
Subtotal, Purchased Power and Wheeling	5,333	5,288	9,288	+4,000	+75.6%
Alternative Financing					
Purchased Power - Reimbursable Authority .	-1,300	-2,200	-2,788	-588	-26.7%
Power Losses - Net Billing, Bill Crediting	0	0	-2,400	-2,400	NA
Wheeling - Net Billing, Bill Crediting	-3,200	-2,800	-2,300	+500	+17.9%
Subtotal, Alternative Financing	-4,500	-5,000	-7,488	-2,488	-49.8%
Subtotal, Purchased Power and Wheeling	833	288	1,800	+1,512	+663.2%
Offsetting Collections Realized	0	-288	-1,800	-1,512	-663.2%
Total, PPW Budget Authority	833	0	0	0	NA

Detailed Program Justification

(dollars in thousands)

FY 2000	FY 2001	FY 2002
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System Support Activities **2,073** **2,428** **6,928**

System support activities assure that all contractual obligations for purchase power demand and repayment of the Federal investment plus interest is met, as measured by the DOE/Southwestern performance goal to meet the planned repayment of principal on the power investment. In FY 2002, Southwestern will continue to deliver power for average hydropower generation and provide for power losses through power purchases. Reimbursable authority and power revenues is expected to provide for power purchases and net billing and bill crediting will provide for power losses. Increase in funding is due to additional purchase power demand, such as replacement losses associated with the transmission of non-Federal power, increased market prices, and a reduction in the availability of banked energy.

Purchased Power **2,073** **2,428** **4,528**

Reimbursable authority (\$2,788,000) and power revenues (\$1,740,000) are expected to provide for power purchases.

Power Losses **0** **0** **2,400**

Net billing and bill crediting will provide for power losses.

Other Contractual Activities **3,260** **2,860** **2,360**

Other contractual activities provide for wheeling services associated with the delivery of power to customers not directly connected to the transmission system. Performance is measured by the amount of firm capacity and associated energy delivered and the DOE/Southwestern performance goal to meet the planned repayment of principal on the power investment.

Wheeling **3,260** **2,860** **2,360**

In FY 2002, Southwestern will continue to use net billing, bill crediting, and power revenues to meet wheeling requirements. Decrease is due to the expiration of contracts requiring wheeling services. Alternative financing methods (\$2,300,000) and power revenues (\$60,000) are expected to provide for wheeling. Estimates are based on contractual pricing and delivery terms.

Alternative Financing **-4,500** **-5,000** **-7,488**

Purchased Power - Reimbursable Authority **-1,300** **-2,200** **-2,788**

Alternative financing methods increase due to factors mentioned above. Funding estimates shown here are based on customer and supplier participation in alternative financing arrangements.

Power Losses - Net Billing, Bill Crediting **0** **0** **-2,400**

**Operation and Maintenance,
Southwestern Power Administration/
Purchased Power and Wheeling**

FY 2002 Congressional Budget

(dollars in thousands)

FY 2000	FY 2001	FY 2002
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Alternative financing methods for power losses are reflected due to requirements of FERC Order No. 888.

# Wheeling - Net Billing, Bill Crediting	-3,200	-2,800	-2,300
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Alternative methods of financing for wheeling requirements decrease due to the expiration of contracts requiring wheeling services. Estimates shown here are based on customer and supplier participation in alternative financing arrangements.

Explanation of Funding Changes from FY 2001 to FY 2002

FY 2002 vs. FY 2001 (\$000)

System Support Activities

# Increase in system support is due to purchase power, power losses, reduced availability of energy banks, and escalating energy prices.	+4,500
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Other Contractual Activities

# Decrease in other contractual requirements results from the expiration of contractual arrangements for wheeling services.	-500
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Alternative Financing

# Increase in Southwestern's FY 2002 alternative financing is a result of having additional purchase power demand while experiencing escalating energy prices and less ability to use energy banks.	-2,488
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Total Funding Change, Purchased Power and Wheeling	<u>+1,512</u>
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Construction

Mission Supporting Goals and Objectives

Southwestern's Construction activity fulfills the requirements of Section 5 of the Flood Control Act of 1944 and reflects Southwestern's goals and objectives to market and deliver power in a safe and reliable manner while providing environmental and economic benefits to the region, encouraging competition in the cost of electrical power, and repaying the Federal investment plus interest. This activity also supports the DOE's Strategic Plan to promote secure, competitive, and environmentally responsible energy systems by reducing the vulnerability of the U.S. economy to disruptions in energy supplies.

The Construction activity provides for modification and replacement of transmission, substation, switching and communication facilities, and other power system equipment which enables Southwestern to market Federal hydropower in the most efficient and cost effective manner, and to meet operational criteria required as a member of the SPP regional electric reliability council. Southwestern maintains 1,380 miles of high-voltage transmission line, 23 substations, and 46 microwave and VHF radio sites, thereby assuring continued safe, reliable delivery of power to preference customers. Southwestern participates with non-Federal entities in joint power projects of mutual interest and benefit and encourages new initiatives for more effective use of existing regional resources. In addition to appropriated funds, Southwestern uses alternative financing arrangements to fund Federal power system replacement projects to assure the reliability of the Federal power system.

Substation and communication equipment replacements are planned as needed to assure system reliability. The projects reflect Southwestern's efforts to reduce the risk of more frequent and extended service outages, avoid more costly replacements in the future, and support the increased transmission system usage. System age, risk of equipment failure, life cycles, maintenance crew observations, obsolescence of technology, unavailability of replacement parts, budget constraints, cost, and need of more capacity are all variables that are assessed when determining the requirements of the Construction activity.

Southwestern's planned Construction projects are subject to change based on unanticipated equipment failure or customer needs. The realities of maintaining a complex interconnected power system means unforeseen priority projects will surface from time to time causing a reprioritization of planned projects. However, all projects share a commonality in that they are replacements of aging existing equipment necessary to maintain the reliability of the Federal power system.

Southwestern expects to increase its alternative financing program in FY 2002 based on its compliance with transmission open access mandates of FERC Order Nos. 888, 889, and 2000 establishing the rules for the creation of regional transmission organizations (RTOs), and Southwestern's participation in the Southwest Power Pool (SPP), an electrical regional reliability council in Southwestern's marketing area. These FERC initiatives combined with the general restructuring of the electrical utility industry are requiring that existing transmission systems, including Southwestern's, be modified to accommodate increased power flow transactions.

Southwestern's compliance may involve modifications to its power system components such as circuit breakers, disconnect switches, current and potential transformers, and related equipment for operation of the power system.

Southwestern also provides assistance to others which could include the relocation of some Southwestern transmission and substation facilities. These are existing and recurring activities and the requesting entity is required to fund such projects.

Funding Schedule

(dollars in thousands)

	FY 2000	FY 2001	FY 2002	\$ Change	% Change
Transmission System Replacements	6,257	6,216	5,581	-635	-10.2%
Capital Equipment Not Related to Construction	406	586	450	-136	-23.2%
Total, Construction	6,663	6,802	6,031	-771	-11.3%

Detailed Program Justification

(dollars in thousands)

	FY 2000	FY 2001	FY 2002
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Transmission System Replacements 6,257 6,216 5,581

Construction projects are planned to assure system reliability and reliable service to Southwestern’s customers as measured the SAIDI, the amount of firm capacity and associated energy delivered, and the DOE/Southwestern goals of receiving a control compliance rating of “pass” using the NERC performance standard, achieving a safety performance based on electric industry safety standards, and meeting planned repayment of principal on the power investment.

Substation Equipment Replacements 1,503 976 120

(dollars in thousands)

FY 2000	FY 2001	FY 2002
---------	---------	---------

The age of substation equipment to be replaced ranges from 30-39 years. The funding level for transmission system replacements is based on the useful service life expended multiplied by adjustment factors that reflect whether or not the equipment's electrical rating is sufficient to safely carry the calculated available current, and a factor that dictates relative maintenance demands. Funding estimates are derived from competitive negotiated prices per number of units. Funding reduction is due to a decrease in facility design cost and breaker bay additions. In FY 2002, replacements include a grounding and drainage program at one site. Breaker bay additions and related facility design work will not be done in FY 2002. Disconnect switches are expected to be funded through alternative financing arrangements as a result of Southwestern's participation in the SPP/RTO.

Substation Relay Replacements **524** **399** **0**

Substation protective relaying equipment replacements are planned because Southwestern's electro-mechanical protective relays are 28 years old and have ever-increasing maintenance costs. This work will assure system reliability, cost efficiency, and reliable service to Southwestern's customers. In FY 2002, the replacement of two duplex switch board relay panels is expected to be funded through alternative financing arrangements as a result of Southwestern's participation in the SPP/RTO.

Communication Equipment Replacements **4,230** **4,566** **5,461**

Communication equipment replacements are planned to provide necessary levels of system reliability and reduce future maintenance and equipment costs. In FY 2002, replacements include installation of 102 miles of optical ground wire (OPGW), design/supply 105 miles of OPGW, microwave tower and radio upgrades and sitework at six sites, and 30 revenue meters/telemetry replacements. Increase in funding is due primarily to the replacement of the mobile radio system. This is a Federal Communication Commission's rule adopted by the National Telecommunications and Information Administration.

SCADA Upgrades **0** **275** **0**

The open transmission access regulations imposed by FERC with emphasis on internet use is requiring development and implementation of additional software on the SCADA system thus placing an increased processing load on the current configuration. Funding is required to acquire additional hardware component upgrades to meet this demand. Implementation of this policy contributes to increased reliability and ease of maintenance which are paramount for the operation of the SCADA system. In FY 2002, funding for this activity is included in the Operations and Maintenance Budget under Operations/Communications.

Capital Equipment Not Related to Construction **406** **586** **450**

(dollars in thousands)

FY 2000	FY 2001	FY 2002
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Replace vehicles, tractor trailers, and heavy equipment used for maintenance and repair of transmission system and facilities to enable Southwestern to meet its goals to operate and maintain the transmission system equipment and facilities as measured by the NERC standards, the SAIDI, the amount of firm capacity and energy delivered, and the repayment of the Federal investment. The funding level is based on General Services Administration (GSA) and DOE usage and replacement guidelines and the type of equipment needed to maintain 1,380 miles of transmission line. Estimates are derived from GSA pricing schedules. In FY 2002, Southwestern plans to replace 9 special purpose vehicles. Decrease in funding requested is due to a reduction in the number and the type of vehicles purchased.

Explanation of Funding Changes from FY 2001 to FY 2002

FY 2002 vs. FY 2001 (\$000)

Transmission System Replacements

# Decrease due to less facility design work costs (-269,000), reduction in breaker bay additions (-313,000), and the use of alternative financing arrangements for disconnect switch replacements program (-274,000)	-856
# Decrease due to the replacement of two duplex switch board relay panels which will be funded through alternative financing arrangements.	-399
# Increase includes purchase of mobile radio system replacement.	+895
# Decrease reflects a funding shift for SCADA upgrades from Construction to O&M activity. Major portion of upgrades will be completed in FY 2001.	-275
Subtotal Funding Change, Transmission Systems Replacements	-635

Capital Equipment Not Related to Construction

# Decrease due to reduction in the number and type of vehicles purchased	-136
Total Funding Change, Construction	-771

Program Direction

Mission Supporting Goals and Objectives

Southwestern's Program Direction activity fulfills the requirements of Section 5 of the Flood Control Act of 1944 and reflects Southwestern's goals and objectives to market and deliver power in a safe and reliable manner to 103 customers and approximately 7 million end users, while providing environmental and economic benefits to the region, encouraging competition in the cost of electrical power, and repaying the Federal investment plus interest. This activity continues Southwestern's Organization 2000 Plus Initiative to reduce costs, streamline the organization, and provide for salaries and benefits, travel, support services, and other related expenses. This activity also supports the DOE's Strategic Plan to promote secure, competitive, and environmentally responsible energy systems by reducing the vulnerability of the U.S. economy to disruptions in energy supplies.

Southwestern's Program Direction activity provides compensation and all related expenses for Federal personnel who operate and maintain Southwestern's high-voltage power system and associated facilities including the critical SCADA/EMS and who plan, design, and supervise the construction of replacements, upgrades, and additions (capital investments) to the power system facilities. Also included are personnel who negotiate and administer power marketing contracts, develop wholesale power rates to repay the Federal investment, develop and implement operational arrangements with competing water users, schedule and deliver power to preference customers, bill and invoice customers, implement environment, safety and health programs, assure facility and cyber security, and provide for general administration and management. These employees include, but are not limited to, civil, electrical, and electronics engineers, high-voltage linemen and electricians; power system dispatchers; public utilities specialists; information technology specialists; environmental and safety specialists; and administrative staff. Southwestern will continue to share facilities and administrative services with another DOE office.

The investment in support services continues to assure program support for Southwestern in the areas of word processing, records management, public affairs, computer programming, data processing, environmental services, engineering, drafting and design, and accounting. Other related expenses support Southwestern in the areas of rental space, telecommunications, utilities, printing, training, supplies, materials, non-capitalized equipment, and the working capital fund.

Funding Schedule

(dollars in thousands, whole FTE's)

	FY 2000	FY 2001	FY 2002	\$ Change	% Change
Program Direction ^a					
Salaries and Benefits	13,082	13,598	14,327	+729	+5.4%
Travel	620	635	635	0	-0.0%
Support Services	1,966	1,953	1,915	-38	-1.9%
Other Related Expenses	1,875	2,163	1,791	-372	-17.2%
Total, Program Direction	17,543	18,349	18,668	+319	+1.5%
Full-Time Equivalent (FTE)	177	177	177 ^b	N/A	N/A

^a The amounts included in Program Direction represent all salaries and benefits, all travel expenses, and related personnel costs for Operations and Maintenance and Construction activities. It should be noted that this value represents not only Southwestern's administrative and/or overhead expenses, but also direct program activity costs associated with FTE usage.

^b Outyear FTE levels may be higher than 177 FTE. Usage projections for the outyears will be determined based on industry restructuring requirements. This will result in a continued policy to ensure that staffing levels are adequate to maintain a safe and reliable Federal transmission system.

Detailed Program Justification

(dollars in thousands)

FY 2000	FY 2001	FY 2002
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Salaries and Benefits	13,082	13,598	14,327
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Funding in this activity is for skilled Federal employees who market the Federal hydropower and operate and maintain Southwestern's high-voltage interconnected power system and associated facilities, and the administrative support staff. Estimate is derived from the current year budgeted salaries and benefits, plus cost-of-living adjustments, promotions, within grade increases, and plus or minus the FTE change. Benefits are calculated based on a percentage of prior year actuals as applied against FY 2002 budgeted salaries. This level is for 177 FTE of which 40 percent of the salaries are driven by union contract requirements and regional pay surveys. The other 60% is a function of the President's proposal increases in salary. This activity also includes overtime, awards, and workers compensation. Performance is measured by the DOE/Southwestern goals of receiving a Control Compliance Rating of "pass" using the NERC performance standard, meeting planned repayment of principal on the power investment, and achieving a safety performance based on electric industry standards.

Travel	620	635	635
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Estimate includes transportation and per diem incurred in the operation and maintenance of Southwestern's geographically dispersed power system and the performance of general administrative functions. Estimate is derived from the daily requirement of the field maintenance personnel to maintain 1,380 miles of transmission line and a limitation on all other travel.

Support Services	1,966	1,953	1,915
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Estimate includes expenses for automated data processing (ADP), design, and general administrative support. Estimate is derived from the negotiated contract amount for support services essential to Southwestern's mission. Funding level is based on the critical and essential computer based systems needed at Southwestern, the number of construction projects, and basic clerical and record support. Decrease is due to a shift in costs for contract services supporting O&M and Construction replacement projects.

Other Related Expenses	1,875	2,163	1,791
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Estimate includes funding for rental space, but a reduced funding level for telecommunications, utilities, printing and reproduction, training tuition fees, maintenance and repair of office equipment, supplies, and non-capitalized equipment such as facility and cyber security software. The estimate is based on fixed costs plus a 2.1 percent inflation factor, age of equipment, comparative vendor estimates, and DOE assessments. This estimate is based on 43,000 square feet of leased space, communications, utilities, and repair and purchase of office equipment at Southwestern's Headquarters, and three field offices. Decrease related to reductions in software requirements.

Explanation of Funding Changes from FY 2001 to FY 2002

FY 2002 vs. FY 2001 (\$000)

Salaries and Benefits

# Increase in salaries and benefits (+\$633,500) represents a 3.7% cost of living increase and within grade increase for General Schedule employees, a 5% increase for dispatchers, and a 4% increase for power system maintenance crews and increases in awards, overtime, and workers compensation (+\$95,500)	+729
Subtotal Funding Changes, Salaries and Benefits	+729

Travel

# Funding level remains the same in FY 2002 due to efforts to limit travel costs	0
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Support Services

# Drafting and Design Support (-\$80,000) and Environmental and Engineering Support (-\$230,000) are now included in estimates for replacement projects in the O&M and Construction budgets. Clerical/Records Management Support (+\$39,000) reflects contractor cost-of-living raises. ADP Support (+\$233,000) reflects increased efforts to implement facility and cyber security, upgrades to Oracle Financials accounting system, contractor cost-of-living raises, and SCADA support to meet the demands of the changing utility industry.	-38
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Other Related Expenses

# Training decreases slightly due to Southwestern's initiative to increase in-house training and prioritize offsite training.	-2
# Working Capital Fund decreases as Southwestern is not directly assessed for this activity. Beginning in FY 2002 this funding is included in "Other"	-95
# Printing and reproduction reflects a reduction in the printing of procurement solicitations and public publications due to an increase use of the internet.	-41
# Rental space costs increases due to the terms of the negotiated lease for the Tulsa facility.	+3
# Software Procurement/Maintenance Activities/Capital Acquisitions decreases due to reductions in upgrades to facility and computer security systems, various procurement interfaces to the integrated financial system, and records management system software.	-279
# Other increases due to anticipated rate changes for telecommunications, utilities, and contract services for facility, office equipment, and security maintenance.	+42
Subtotal Funding Changes, Other Related Expenses.	-372
Total Funding Change, Program Direction	+319

Support Services

(dollars in thousands)

	FY 2000	FY 2001	FY 2002	\$ Change	% Change
Technical Support Services					
Drafting and Design Support	90	130	50	-80	-61.5%
Environmental & Engineering Support . . .	200	295	65	-230	-78.0%
Total, Technical Support Services	290	425	115	-310	-72.9%
Management Support Services					
Clerical/Records Management	827	893	932	+39	+4.4%
ADP Support	849	635	868	+233	+36.7%
Total, Management Support Services	1,676	1,528	1,800	+272	+17.8%
Total, Support Services	1,966	1,953	1,915	-38	-1.9%

Other Related Expenses

(dollars in thousands)

	FY 2000	FY 2001	FY 2002	\$ Change	% Change
Training	173	98	96	-2	-2.0%
Working Capital Fund	55	95	0	-95	-100.0%
Printing and Reproduction	108	134	93	-41	-30.6%
Rental Space	465	543	546	+3	+0.6%
Software Procurement/Maintenance Activities/Capital Acquisitions	839	919	640	-279	-30.4%
Other	235	374	416	+42	+11.2%
Total, Other Related Expenses	1,875	2,163	1,791	-372	-17.2%

DEPARTMENT OF ENERGY
 FY 2002 CONGRESSIONAL BUDGET REQUEST
 POWER MARKETING ADMINISTRATION

REVENUES AND RECEIPTS
 (Dollars in Thousands)

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
<u>Southwestern Power Administration</u>						
Gross Revenues	\$ 95,392	\$102,605	106,694	106,917	106,931	107,028
Sale & transmission of electric energy	\$ 95,392	\$102,605	106,694	106,917	106,931	107,028
Net billing credited as an offsetting receipt	-15,372	-6,400	-14,092	-14,226	-14,708	-15,155
Offsetting collections realized	0	-288	-1,800	-288	-288	0
Total Proprietary Receipts	\$ 80,020	\$ 95,917	\$90,802	\$92,403	\$91,935	\$91,873
Percent of sales to preference customers	100%	100%	100%	100%	100%	100%
Energy Sales and Power Marketed (in billions of kilowatt hours)	3.8	5.5	5.5	5.5	5.5	5.5

Note: Gross Revenues include revenues to recover the unfunded portion of the Civil Service Retirement System and Post-Retirement Health/Life Benefits for Southwestern and the U.S. Army Corps of Engineers power related employees.

DEPARTMENT OF ENERGY
 FY 2002 CONGRESSIONAL BUDGET REQUEST
 SYSTEM STATISTICS

SOUTHWESTERN POWER ADMINISTRATION

	FY 2000 <u>Actual</u>	FY 2001 <u>Estimate</u>	FY 2002 <u>Estimate</u>
<u>Generating Capacity:</u>			
Installed Capacity (KW)	2,157,800	2,157,800	2,157,800
Peak Capacity (KW)	2,093,500	2,052,500	2,052,500
<u>Generating Stations:</u>			
Generating Projects (No.)	24	24	24
Substations/Switchyards (No.)	23	23	23
Substations/Switchyards (KVA Capacity)	1,026,900	1,026,900	1,026,900
<u>Available Energy:</u>			
Energy Generated (Megawatthours)	3,761,778	5,361,800	5,330,700
Energy Received (Megawatthours)	61,540	170,900	170,900
Energy Available for Marketing (Megawatthours)	3,823,318	5,532,700	5,501,600
<u>Transmission Lines (Circuit Miles):</u>			
161 KV	1,117	1,117	1,117
138 KV	164	164	164
69 KV	99	99	99
Total Circuit Miles	1,380	1,380	1,380

DEPARTMENT OF ENERGY
 FY 2002 CONGRESSIONAL BUDGET REQUEST

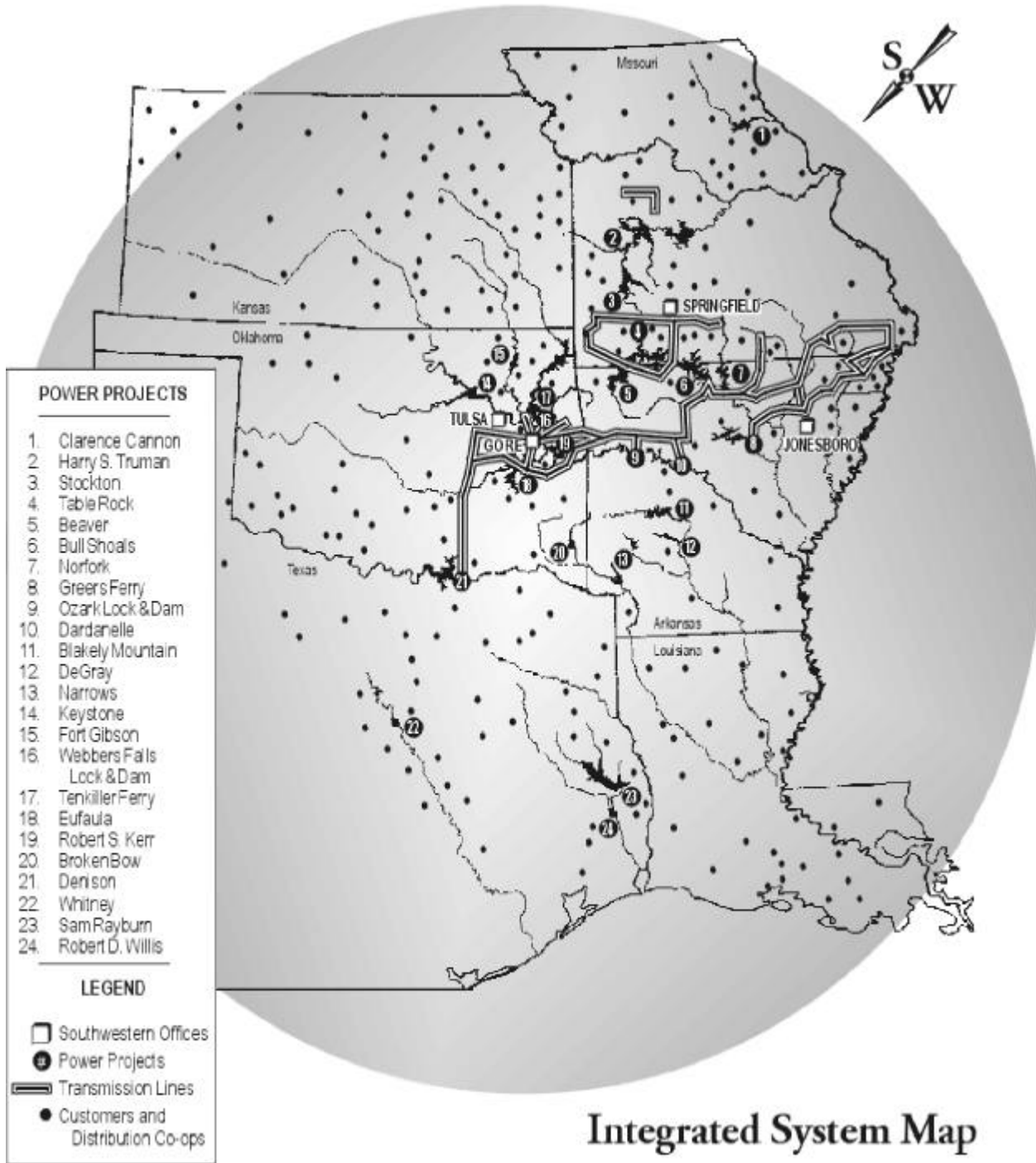
POWER MARKETED, WHEELED OR EXCHANGED BY PROJECT

SOUTHWESTERN POWER ADMINISTRATION

<u>Project</u>	<u>State</u>	<u>No. Of Plants</u>	<u>Installed Capacity (KW)</u>	<u>FY 2000 Actual Energy (GWh)</u>	<u>FY 2001 Estimated Energy (GWh)</u>	<u>FY 2002 Estimated Energy (GWh)</u>
<u>Power Marketed:</u>	Missouri	4	463,200	943	1,329	1,321
Interconnected System	Arkansas	9	1,021,100	861	1,212	1,205
	Oklahoma	7	514,100	947	1,333	1,326
	Texas	2	100,000	405	570	566
	Louisiana	0	0	306	431	429
	Kansas	0	0	359	506	503
Subtotals		22	2,098,400	3,821	5,381	5,350
Isolated:						
Robert D. Willis Project						
Sam Rayburn Project						
50% to Texas		2	59,400	46	76	76
50% to Louisiana		0	0	46	76	76
Subtotals		2	59,400	92	152	152
<u>Total Power Marketed</u>		24	2,157,800	3,913	5533	5502
<u>Power Wheeled/Exchanged:</u>						
Wheeled (MW)				687	752	764
Exchanged (GWh)				146	71	69

DEPARTMENT OF ENERGY
 FY 2002 CONGRESSIONAL BUDGET REQUEST
 SYSTEM MAP

Southwestern Power Administration



Integrated System Map

DEPARTMENT OF ENERGY
FY 2002 CONGRESSIONAL BUDGET REQUEST
PENDING LITIGATION
SOUTHWESTERN POWER ADMINISTRATION

NONE