Construction, Rehabilitation, Operation and Maintenance
Western Area Power Administration

Proposed Appropriation Language

For carrying out the functions authorized by title III, section 302(a)(1)(E) of the Act of August 4, 1977 (42 U.S.C. 7152), and other related activities including conservation and renewable resources programs as authorized, including official reception and representation expenses in an amount not to exceed $1,500, [$165,830,000] *$169,465,000*, to remain available until expended, of which [$154,616,000] *$163,951,000* shall be derived from the Department of the Interior Reclamation Fund: *Provided*, That of the amount herein appropriated, [$5,950,000] $1,227,000 is for deposit into the Utah Reclamation Mitigation and Conservation Account pursuant to title IV of the Reclamation Projects Authorization and Adjustment Act of 1992: *Provided further*, That [amounts] *up to $152,624,000* collected by the Western Area Power Administration pursuant to the Flood Control Act of 1944 and the Reclamation Project Act of 1939 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 $65,224,000; for fiscal year 2002, up to $33,500,000; for fiscal year 2003, up to $30,000,000; and for fiscal year 2004, up to $20,000,000]. *(Energy and Water Development Appropriations Act, 2001, as enacted by section 1(a)(2) of P.L. 106-377.)*

Explanation of Change

The language change deletes the prior year reference to FY 2001 purchase power and wheeling activity, and includes up to $152,624,000 in use of offsetting collections for FY 2002 purchase power and wheeling requirements in addition to the $33,500,000 made available for FY 2002 in FY 2001 in Public Law 106-377, providing a total of up to $186,124,000 in use of offsetting collections for FY 2002.

Falcon and Amistad Operating and Maintenance Fund

Proposed Appropriation Language

For operation, maintenance, and emergency costs for the hydroelectric facilities at the Falcon and Amistad Dams, [$2,670,000] *$2,663,000*, to remain available until expended, and to be derived from the Falcon and Amistad Operating and Maintenance Fund of the Western Area Power Administration, as provided in section 423 of the Foreign Relations Authorization Act, Fiscal Years 1994 and 1995.

Western Area Power Administration

Program Mission

The mission of the Western Area Power Administration (Western) is to market and deliver reliable, cost-based hydroelectric power and related services. Western provides electric power to more than 600 customers over a 1.3-million-square-mile area in the central and western United States. Western repays the Federal investment for which it is responsible within the time frames established by law and regulations.

Western's Goal

- Western will be a premier power marketing and transmission organization.

Program Objectives

- Western uses sound business practices to create and deliver high-value products and services to our customers.
- Western recruits, develops and retains a safety-focused, highly productive, customer-oriented and diverse work force.
- Western promotes competition and reliability in the evolving electric utility industry.

Performance Measures

Western's performance measures support the Department of Energy's (DOE) Strategic Plan and Comprehensive National Energy Strategy. These measures are aimed at achieving specific outcomes including establishment of rates sufficient to make full and timely repayment to the U.S. Treasury; maintenance of the health and safety of all employees; and development, achievement and operation of a reliable, low-cost, environmentally-sound power system which facilitates competitive, efficient and reliable power deliveries. Outputs include:

- *Transmission System Performance*: Ensure that each power system control area operated by Western receives, for each month of the fiscal year, a Control Performance Standard (CPS) Rating of "Pass" using the North American Electric Reliability Council (NERC) performance standard. Control criteria compliance measures are used to determine if utility employees, control equipment, and generation are responsive to the minute-by-minute load changes throughout the year. Good control performance is required to maintain system reliability and to reduce losses, as well as maintain equity among interconnected systems. Western's annual average compliance ratings in FY 2000 were 199.40 for CPS1 and 98.28 for CPS2, well exceeding the NERC minimum of 100 and 90, respectively. Industry averages were 173.74 and 96.27, respectively.

- *Safety*: Achieve a safety performance of at most a 3.3 frequency rate for recordable injuries per 200,000 hours worked, or the Bureau of Labor Statistics industry rate, whichever is lower. Total recordable case (accident) rate measures the recordable accident frequency rate by multiplying the number of recordable injuries by 200,000, then dividing by the total hours worked. Western's calendar year 2000 rate of 1.9 is well below the latest published (1999) industry case rate of 4.9.
- *Repayment of Power Investment*: Meet planned repayment of principal on power investment. Western's planned repayment for FY 2000 was $99.9 million. Actual repayment amounts will not be available until financial audits are completed (July 2001).

Significant Accomplishments and Program Shifts

- In FY 2001, DOE obtained new authority to fund purchase power and wheeling (PPW) activities. The change provides authority to use revenues collected from customers for the recovery of the PPW expenditures to finance those same expenditures. As a result of the new authority and continued alternative financing methods, no appropriations are required for the PPW program.
- In FY 2000, Western
  - Sold 45.3 billion kilowatt-hours of energy; and had preliminary gross operating revenues of $919.3 million. Audited actual revenues are not yet available.
  - Western actively participated in several evolving regional transmission entities during FY 2000. Western served as a board member of the California Independent System Operator (CAISO) and is a certified scheduling coordinator for several Western customers in conducting transactions with the CAISO. Western holds an *ex officio* seat on the board of Desert STAR. In addition, Western has been exploring the possibility of joining the Midwest Independent System Operator or the Crescent Moon regional transmission organizations (RTO) and is monitoring the activities of the RTO West.
- During the September 2000 California energy crisis, Western responded to the CAISO's urgent request for energy to avert rolling-blackouts throughout the state. Actions included suspending low-flow studies at Glen Canyon Dam (in collaboration with the Bureau of Reclamation) to increase power production and diverting additional power to California through power exchanges for varying lengths of time.
- Western completed its first year of operation under the Western Systems Coordinating Council's (WSCC) Reliability Management System (RMS). RMS is a 3-phase, contract-based approach to ensure reliability of the interconnected system. Monetary sanctions are imposed for violating criteria. Western's monetary sanctions totaled 0.26 percent of total identified sanctions.
- In FY 2000, Western implemented power allocations through contract negotiations with 25 tribes in its Upper Great Plains region. In its Sierra Nevada region, power allocations were offered to four tribal entities as part of its 2004 Power Marketing Plan. The power allocation application process was initiated with approximately 61 tribes in its Rocky Mountain Region and its Colorado River Storage

Project Management Center. The power allocations will allow these tribes to receive the benefits associated with cost-based Federal hydropower.

- In FY 2000, Western operated and maintained 16,819 circuit-miles of high-voltage transmission lines, 258 substations, and associated power system control, communication and electrical facilities located across 15 western states; marketed cost-based, reliable hydroelectric power to 647 power customers, and provided system operations and load dispatching, power billing and collection, power marketing, power resource planning, energy services, technology transfer, security and emergency management for 15 separate power projects. Western exceeded both the NERC and industry generation control performance measures. In addition, NERC again placed Western on its Generating Availability Data System's Honor Roll for timely and accurate reporting of availability data for 41 U.S. Army Corps of Engineers and Bureau of Reclamation hydro generating units in Western's Upper Great Plains Region.

- Western continued to maintain power system reliability and integrity by replacing aging substation equipment and degraded transmission facilities through coordinated and reliability-based maintenance and construction programs. Replacement of outdated analog communications equipment with digital and fiber optics continued, in concert with radio replacements to meet Federal Communications Commission-mandated compliance with narrow-band requirements.

- In FY 2000, Western launched a 2-year program to locate and seal sulfur hexafluoride (SF6) leaks throughout its transmission system. SF6 is a gas used to insulate circuit breakers, switches and other electrical equipment, and has been identified by the Environmental Protection Agency as a potential greenhouse gas. In a joint effort with EPRI, a non-profit research organization for the utility industry, Western participated in the assessment and use of back-scanning laser equipment that detects SF6 leaks. Western aggressively repairs any detected leaks to reduce SF6 emissions.

- Following two years of intensive planning, testing and preparation, and the involvement of about 400 employees, Western encountered no Y2K-related problems during the year 2000 roll over.

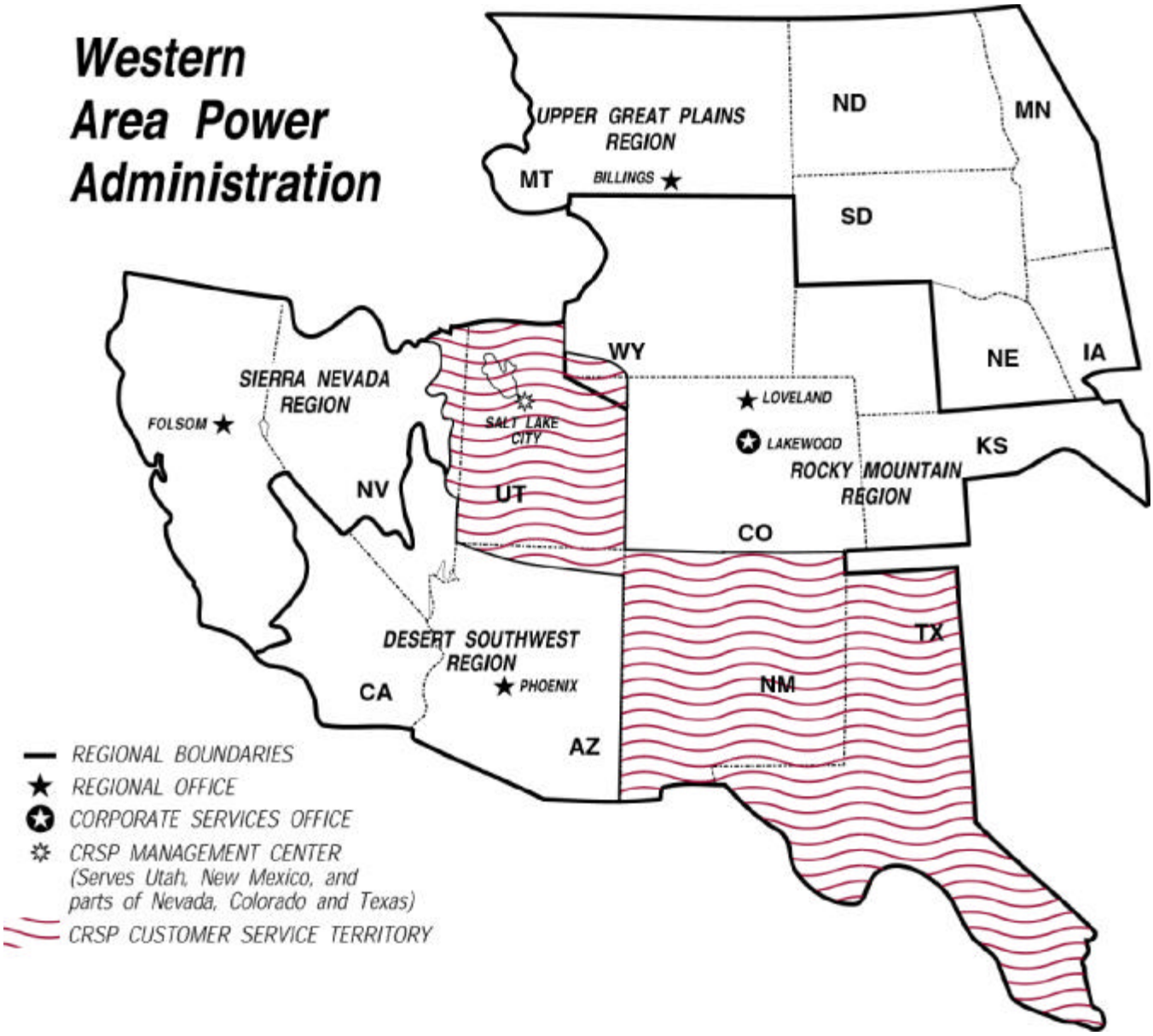
- DOE approved Western's Cyber Security Program Plan, and in March 2000, the DOE Office of Independent Oversight and Special Review completed Western's network vulnerability assessment. Western has corrected the limited vulnerabilities found during the assessment.

- Full occupancy of the new building for Western's corporate services office occurred in FY 2000. The space, obtained through a General Services Administration contract, results in reduced annual lease costs.

- Work continues to stabilize Western's recently-implemented integrated financial support system, maintenance information system, and time and attendance system.

- In December 2000, the U. S. Environmental Protection Agency accepted Western into its National Environmental Achievement Track. Acceptance denotes a sustained history of compliance with environmental regulations and a continued commitment to maximize opportunities to improve our nation's environmental health.

- Western, in alliance with numerous other Colorado Federal agencies, agreed to act as an agent in acquiring the environmental benefits of 10 megawatts of wind power in support of "green energy" technologies.
- In addition to loaning technical equipment and providing assistance to customers under its energy services program, Western's final rule for Integrated Resource Planning (IRP) criteria was published in the Federal Register on March 30, 2000. The revised criteria streamline the IRP reporting process and allow greater flexibility for customers to tailor compliance to their individual needs.
- The cost of Western's work is often shared with other Federal entities under reimbursable agreements and with non-Federal participants under the authorities provided in the Interior Department Appropriations Act of 1928 and the Contributed Funds Act. We continue to pursue alternative forms of financing for our programs, such as bill crediting and customer advance funding, to reduce our dependence on annual appropriations while maintaining the same level of oversight and control.


Western
Area Power
Administration
UPPER GREAT PLAINS
REGION
ND
MN
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BILLINGS
SD
WY
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IA
SIERRA NEVADA
REGION
FOLSOM
SALT LAKE
CITY
LOVELAND
LAKEWOOD
KS
ROCKY MOUNTAIN
REGION
NV
UT
CO
DESERT SOUTHWEST
REGION
TX
NM
CA
PHOENIX
AZ
REGIONAL BOUNDARIES
REGIONAL OFFICE
CORPORATE SERVICES OFFICE
CRSP MANAGEMENT CENTER
(Serves Utah, New Mexico, and
parts of Nevada, Colorado and Texas)
CRSP CUSTOMER SERVICE TERRITORY

Construction, Rehabilitation, Operation and Maintenance

Funding Profile

(dollars in thousands)

	FY 2000 Comparable Appropriation	FY 2001 Original Appropriation	FY 2001 Adjustments	FY 2001 Comparable Appropriation	FY 2002 Request
Construction, Rehabilitation, Operation and Maintenance Account					
Program Direction	104,537	106,644	-226	106,418	114,378
Operation and Maintenance	35,096	36,104	-90	36,014	37,796
Construction and Rehabilitation	26,802	23,115	-49	23,066	16,064
Purchase Power and Wheeling	41,131	65,224		65,224	186,124
Utah Mitigation and Conservation	5,036	5,950		5,950	1,227
Total Program, Operating Expenses	212,602	237,037	-365 [1]	236,672	355,589
Planned Use of Prior Year Balances	-20,000	-5,983	0	-5,983	0
Offsetting Collections Realized	0	-65,224	0	-65,224	-186,124
Transfer to Colorado River Dam Fund	-976	0	0	0	0
Total Budget Authority Request	191,626	165,830	-365	165,465	169,465

Public Law Authorizations:
Public Law 57-161, "The Reclamation Act of 1902"
Public Law 95-91, "Department of Energy Organization Act" (1977)
Public Law 102-486, "Energy Policy Act of 1992"
Public Law 66-389, "Sundry Civil Appropriations Act" (1922)
Public Law 76-260, "Reclamation Project Act of 1939"
Public Law 80-790, "Emergency Fund Act of 1948"
Public Law 102-575, "Reclamation Projects Authorization and Adjustment Act of 1992"
"Economy Act" of 1932, as amended
"Interior Department Appropriation Act of 1928" (44 stat. 957)

Funding by Site

(dollars in thousands)

	FY 2000	FY 2001	FY 2002	$ Change	% Change
Western Area Power Administration	212,602	236,672	355,589	+118,917	+50.2%
Planned Use of Prior Year Balances	-20,000	-5,983	0	+5,983	+100.0%
Offsetting Collections Realized	0	-65,224	-186,124	-120,900	+185.4%
Transfer to Colorado River Dam Fund	-976	0	0	0	0
Total, Construction, Rehabilitation, Operation and Maintenance Account	191,626	165,465	169,465	+4,000	+2.4%

[1] Rescission included in Public Law 106-554, "The Consolidated Appropriations Act of Fiscal Year 2001."

Site Description

Western's service area covers 1.3-million square miles in 15 states. In FY 2000, Western sold energy to 647 wholesale customers including 287 municipalities, 59 cooperatives, 16 public utility and 44 irrigation districts, 53 Federal and 54 State facilities, 26 investor-owned utilities, 30 marketers, and 78 Bureau of Reclamation customers. They, in turn, provide retail electric service to millions of consumers in these central and western states: Arizona, California, Colorado, Iowa, Kansas, Minnesota, Montana, Nebraska, Nevada, New Mexico, North Dakota, South Dakota, Texas, Utah and Wyoming.

Western annually markets and transmits more than 10,000 megawatts of power from 55 hydropower plants. We sell about 40 percent of regional hydroelectric generation. Western also markets the United States' entitlement from the coal-fired Navajo Generating Station near Page, Arizona.

Western operates and maintains an extensive and complex high-voltage transmission system to deliver power to its customers. In FY 2002, using this nearly 17,000-circuit-mile Federal transmission system, Western will market and deliver reliable electric power to most of the western half of the United States.

The power facilities are made up of 14 multipurpose water resource projects and one transmission project. The systems include Western's transmission facilities and power generation facilities owned and operated by the U.S. Bureau of Reclamation, the U.S. Army Corps of Engineers and the U.S. Section of the International Boundary and Water Commission.

Power sales, transmission operations and engineering services for our system are accomplished by our employees at 51 duty stations located throughout our service area. These include our Corporate Services Office in Lakewood, Colorado, and four customer service regional offices in Billings, Montana; Loveland, Colorado; Phoenix, Arizona; and Folsom, California. The Colorado River Storage Project is also supported by a Project Management Center in Salt Lake City, Utah.

Construction, Rehabilitation, Operation and Maintenance Program Direction

Mission Supporting Goals and Objectives

Western's Program Direction activity provides compensation and all related expenses for the workforce that operates and maintains Western's high-voltage interconnected transmission system and associated facilities; those that plan, design, and supervise the construction of replacements, upgrades and additions (capital investments) to the transmission facilities; and those that market the power and energy produced to repay annual expenses and capital investment.

Western operates and maintains the transmission system to ensure an adequate supply of reliable electric power in a clean and environmentally-safe, cost-effective manner throughout its 15-state service territory. Western achieves continuity of service by maintaining its power system at or above industry standards, rapidly restoring service following any system disturbance, mitigating adverse environmental impacts, performing clean-up activities, and maximizing the benefits gained from non-firm energy sales. Additionally, Western operates the Western Systems Coordinating Council's Rocky Mountain/Desert Southwest Security Coordination Office.

Western markets power generated at 55 hydropower plants which are operated primarily by the Bureau of Reclamation, the U. S. Army Corps of Engineers, and the U.S. Section of the International Boundary and Water Commission. Western also markets the United States' entitlement from the Navajo coal-fired powerplant near Page, Arizona.

In concert with its customers, Western reviews required replacements and upgrades to its existing infrastructure to sustain reliable power delivery to its customers and to contain annual maintenance expenses. The timing and scope of these replacements and upgrades are critical to assure that Western's facilities do not become the "weak link" in the interconnected system. Western pursues opportunities to join with neighboring utilities to jointly finance activities, which result in realized cost savings and/or increased efficiencies for all participants, and avoids redundant facilities.

Funding Schedule

(dollars in thousands, whole FTEs)

	FY 2000	FY 2001	FY 2002	$ Change	% Change
Salaries & Benefits	72,006	74,886	79,151	+4,265	+5.7%
Travel	7,634	7,634	8,412	+778	+10.2%
Support Services	9,827	10,045	13,451	+3,406	+33.9%
Other Related Expenses	15,070	13,853	13,364	-489	-3.5%
Total, Program Direction	104,537	106,418	114,378	+7,960	+7.5%
Transfer to Colorado River Dam Fund	-747	0	0	0	N/A
Total, Program Direction Budget Authority	103,790	106,418	114,378	+7,960	+7.5%
Full-Time Equivalents	1,021	1,031	1,052	+21	+2.0%

Detailed Program Justification

(dollars in thousands)

FY 2000	FY 2001	FY 2002

Salaries and Benefits 72,006 74,886 79,151

In FY 2002, salaries and benefits are provided for Federal employees to operate and maintain, on a continuing basis, Western's high-voltage interconnected transmission system, comprised of 16,811 circuit-miles of line, 261 substations, and associated power system control, communication and general plant facilities. Craft workers rapidly restore the transmission system following any disturbance, and routinely maintain and/or replace equipment to assure capability for reliable delivery of power. Dispatchers provide 24-hour-a-day operation of four dispatching centers and one security coordination office. Dispatchers respond to minute-by-minute changes to meet or exceed North American Electric Reliability Council and industry average for Transmission System Performance. Energy schedulers maximize revenues from non-firm energy sales, thereby supporting the Repayment of Power Investment Performance Measure. Staff provide continuing services such as system operations, power billing and collection, power marketing, power scheduling, energy services, technology transfer, environmental, safety, security and emergency management activities. Due to the extreme hazards associated with a high-voltage electrical system, staff support the Safety Performance Measure by continually making safety a priority in each and every task. Staff inspect construction activities in progress (identified in the Construction and Rehabilitation activity) to ensure quality results and safe working methods. General power resources planning and preconstruction activities continue, including planning, environmental clearance, collection of field data, design of facilities, and issuance of specifications for future rehabilitation and upgrades of existing transmission lines. Staff evaluate general power resources, collaborating and planning with customers and other members of the interconnected transmission system, to identify the most effective transmission system improvements to maximize benefits to all participants.

Total FTE numbers for FY 2002 include 1,023 for Western's Construction, Rehabilitation, Operation and Maintenance (CROM) Account activities and 29 for Boulder Canyon Project (BCP) activities accomplished under a reimbursable agreement with the Bureau of Reclamation. FY 2001 FTE include 1,001 for the CROM Account and 30 for BCP activities. The FY 2000 FTEs reflect actual execution: 1,000 for CROM and 21 for BCP. The $4.3 million increase in FY 2002 reflects application of a four percent inflation factor and funding for an additional 22 FTEs to meet additional workload associated with industry restructuring activities.

	(dollars in thousands)		
	FY 2000	FY 2001	FY 2002
Travel	**7,634**	**7,634**	**8,412**

Transportation and per diem allowance for day-to-day performance of duties of Federal staff, including crews who maintain the interconnected system. The remote and rural locations in Western's 15-state service area lead to less competitive pricing. Rental/lease of GSA vehicles and transportation of things are also included. Estimates are based on historical costs and an assessment of planned activity. The increase reflects inflationary estimates and GSA vehicle leases which were inadvertently omitted from the category previously.

Support Services	**9,827**	**10,045**	**13,451**

Support services funded in this activity include information processing, warehousing, computer-aided drafting, engineering, and general administrative support. Beginning in FY 2002, the request also includes technical services associated with Western's Construction and Rehabilitation (C&R) program which were previously included as part of major construction contract awards. Since more of the C&R program is being done with Western's own forces, these technical services are now identified separately. The increase of $3.4 million is the result of the inclusion of technical services ($2.3 million) and changes in scope in contracts in Western's Rocky Mountain, Desert Southwest, and Sierra Nevada Regions (approximately $1 million).

Other Related Expenses	**15,070**	**13,853**	**13,364**

Other related expenses include rental space, utilities, supplies and materials, telecommunications, personal computers, printing and reproduction, training tuition, DOE's working capital fund assessment, and distribution of National Archive and Records Administration costs. Rental space costs assume the General Services Administration's (GSA) inflation factor. Other costs are based on historical usage and actual cost of similar items. The decrease reflects the movement of GSA vehicle leases to the travel category and a reduction in rental space costs due to the reflection of a portion of A&GE employees in other Accounts. These decreases are partially offset by an increase in DOE's working capital fund assessment attributed to the inclusion of operation costs for the payroll/personnel system and DOENet.

Total, Program Direction	**104,537**	**106,418**	**114,378**

Explanation of Funding Changes from FY 2001 to FY 2002

	FY 2002 vs FY 2001 ($000)
Salaries and Benefits	
# Increase in salaries and benefits is primarily attributed to an increase of 22 FTEs in this Account and application of a four percent pay/benefit increase assumption. The increase in FTE is necessary primarily to meet Western's increasing workload as a result of new requirements imposed by the Federal Energy Regulatory Commission, NERC and WSCC.	+4,265
Travel	
# Increase in travel is attributed to inflation and the inclusion of GSA vehicle leases which were inadvertently omitted from this category previously.	+778
Support Services	
# Increase in support services is primarily attributed to including technical services for architectural/environmental assessment studies associated with Western's C&R program in this category (+$2,361,000). Previously these costs were included as part of construction contract awards. Information support services increase due to increased scope in the Rocky Mountain Region for e-tagging and OASIS needs and re-bid of the contract in the Desert Southwest Region. General administrative support also increases due to additional support for the power billing program in the Sierra Nevada Region, re-bid of the janitorial/landscaping contract in the Desert Southwest Region, and for funds to fully staff to the authorized contract level in the Upper Great Plains Region. .	+3,406
Other Related Expenses	
# The decrease in other related expenses primarily reflects the movement of GSA vehicle leases to the travel category and a reduction in rental space costs due to the reflection of a portion of A&GE employees in other Accounts. These decreases are partially offset by an increase in DOE's working capital fund assessment attributed to the inclusion of operation costs for the payroll/personnel system and DOENet.	-489
Total Funding Change, Program Direction	+7,960

Support Services

(dollars in thousands)

	FY 2000	FY 2001	FY 2002	$ Change	% Change
Technical Support Services					
Economic and Environmental Analysis	0	0	2,361	+2,361	N/A
Test and Evaluation Studies	0	0	0	0	N/A
Total, Technical Support Services	0	0	2,361	+2,361	N/A
Management Support Services					
Management Studies	165	153	192	+39	+25.5%
Training and Education	85	85	0	-85	-100.0%
ADP Support	4,314	4,728	5,062	+334	+7.1%
Administrative Support Services	5,263	5,079	5,836	+757	+14.9%
Total, Management Support Services	9,827	10,045	11,090	+1,045	+10.4%
Total, Support Services	9,827	10,045	13,451	+3,406	+33.9%

Other Related Expenses

(dollars in thousands)

	FY 2000	FY 2001	FY 2002	$ Change	% Change
Training	1,024	1,000	1,000	0	N/A
Working Capital Fund	349	452	968	+516	+114.2%
Printing and Reproduction	325	300	300	0	N/A
Rental Space	2,891	2,726	2,354	-372	-13.6%
Software Procurement/Maintenance Activities/Capital Acquisitions	4,835	3,760	3,692	-68	-1.8%
Other	5,646	5,615	5,050	-565	-10.1%
Total, Other Related Expenses	15,070	13,853	13,364	-489	-3.5%

Operation and Maintenance

Mission Supporting Goals and Objectives

Western's operation and maintenance (O&M) activity supports the DOE's Strategic Plan to promote secure, competitive, and environmentally responsible energy systems that serve the needs of the public. Western ensures an adequate supply of reliable electric power in a safe, cost-effective manner, and achieves continuity of service throughout its 15-state service territory by maintaining its power system at or above industry maintenance standards, rapidly restoring service following any system disturbance, mitigating adverse environmental impacts, performing clean-up activities, and maximizing the revenues gained from non-firm energy sales.

Supplies and materials, such as wood poles, instrument transformers, meters and relays must be procured to provide necessary resources to respond to routine and emergency situations in Western's high-voltage interconnected transmission system. Western has implemented reliability-centered maintenance (RCM) scheduling to contain costs. RCM focuses on identifying critical components in a system and uses preventive and predictive maintenance practices to repair or replace equipment as needed. Technical services, such as waste management disposal, environmental impact analyses, and pest and weed control, are utilized as needed.

Western's planned replacement and addition activity is based on an assessment of condition and criticality of equipment, maintenance/frequency of problems of individual items of equipment, availability of replacement parts, safety of the public and Western's personnel, environmental concerns, and an orderly work plan. The work plans, coordinated with Western's power customers, who ultimately bear the burden of all Western expenses, reflect an overall sustainable level of effort, with shifts in emphasis between categories (i.e., electrical versus communication equipment) in any given year.

Electrical equipment replacements, such as circuit breakers, transformers, insulators, revenue meters, switches, control boards, relays and oscillographs, must be acquired to assure reliable service to Western's customers. System component age, environmental concerns, and risk to system reliability necessitate orderly replacement before significant problems develop.

Replacement, upgrade and installation of microwave, fiber optics, supervisory control and data acquisition, and other communication and control equipment continues to provide increased system reliability and operation, and to reduce maintenance and equipment costs.

Capitalized movable equipment, such as special purpose vehicles (e.g., cranes, auger trucks, manlifts), special purpose equipment (e.g., pole trailers, industrial tractors, brush chippers), specialized test equipment (e.g., motion analyzers and relay test equipment), computer-aided engineering equipment, office equipment, and IS equipment and software, must be upgraded and replaced.

The personnel expenses and personnel performance accomplishments associated with the O&M activity are combined with those of the Construction and Rehabilitation activity and are reflected in the Program Direction section of Western's budget request.

Funding Schedule

(dollars in thousands)

	FY 2000	FY 2001	FY 2002	$ Change	% Change
Regular Operation and Maintenance	19,844	19,800	20,280	+480	+2.4%
Replacements and Additions	15,252	16,214	17,516	+1,302	+8.0%
Total, Operation and Maintenance	35,096	36,014	37,796	+1,782	+4.9%
Planned Use of Prior Year Balances	0	-4,000	0	+4,000	+100.0%
Transfer to Colorado River Dam Fund	-229	0	0	0	N/A
Total, O&M Budget Authority	34,867	32,014	37,796	+5,782	+18.1%

Detailed Program Justification

(dollars in thousands)

FY 2000	FY 2001	FY 2002

Regular Operation and Maintenance 19,844 19,800 20,280

Supplies and materials necessary to respond to routine and emergency situations in Western's high-voltage interconnected transmission system will be purchased. Western's well-maintained transmission system supports its Transmission System Performance Measure by preventing sudden failure, unplanned outages, and possible regional power system disruptions. Daily discussions of safe working procedures before work is commenced supports the Safety Performance Measure. The request is based on projected work plans for activities funded from this account. Estimates are based on historical data of actual supplies needed to maintain the transmission system reliably, including emergency situations such as ice storms and tornadoes. Costs are based on recent procurement of similar items. The increase of $480,000, or about 2.4 percent, is attributed to inflation.

Replacements and Additions 15,252 16,214 17,516

Western's planned replacement and addition activity is based on an assessment of condition and criticality of equipment, maintenance/frequency of problems on individual items of equipment, availability of replacement parts, safety of the public and Western's personnel, environmental concerns, and an orderly work plan. Replacement of aged power system components supports the Transmission System Performance Measure by reducing the risk of equipment failure, unplanned outages, and possible regional power system disruptions. Removing environmental hazards and replacement of equipment that may create a safety hazard for the public and Western's personnel supports the Safety Performance Measure. Planned activity is detailed by category below:

(dollars in thousands)

	FY 2000	FY 2001	FY 2002
# Electrical Equipment	**7,811**	**7,198**	**7,052**

Electrical equipment, such as circuit breakers, transformers, relays and switches, will be replaced. Treatment and/or replacement of wood poles will extend the life of aging, deteriorating transmission lines. Costs are based on analysis of system operation/maintenance requirements and concerns, customer-coordinated work plans, actual costs of recent similar projects, and bottom-up budgeting techniques.

# Communications Equipment	**1,998**	**3,600**	**4,082**

Replacement/upgrade of microwave, supervisory control and data acquisition, and other communication and control equipment, including staged replacement to meet Federal Communications Commission (FCC) and National Telecommunications and Information Administration (NTIA) regulations requiring Western to move to narrow communications band spectrums by 2005 will continue. Costs are based on analysis of system operation/maintenance requirements, customer-coordinated work plans, actual costs of recent similar projects, and bottom-up budgeting techniques. The increase reflects accelerated purchases of equipment associated with the movement to narrow communications band spectrums in order to provide delivery and installation time to meet targeted movement dates, offset by decreases for software upgrades to accommodate industry changes.

# Capitalized Movable Equipment	**5,443**	**5,416**	**6,382**

Capitalized movable equipment, such as cranes, manlifts, chippers, snowcats and pole trailers, needed to support the O&M of the interconnected power system will be purchased. Replacement needs are based on age, reliability, and safety of equipment, customer-coordinated review, cost analysis of rebuild versus replacement, availability of replacement parts, and obsolescence of diagnostic maintenance tools. Costs are determined using actual costs of similar items. The increase is primarily attributed to the replacement of an additional aerial manlift and a crane, both in the Upper Great Plains Region.

Total, Operations and Maintenance	**35,096**	**36,014**	**37,796**

Explanation of Funding Changes from FY 2001 to FY 2002

	FY 2002 vs FY 2001 ($000)
Regular Operation and Maintenance	
# Increase in regular O&M is primarily attributed to inflation.	+480
Replacements and Additions	
# Increase in replacements and additions is primarily attributed to the replacement of an additional aerial manlift and a crane (+$966,000), and an increase in the level of equipment purchases associated with the FCC/NTIA-directed move to narrow communications bands ($1,120,000). The increase is offset by reductions in costs for software upgrades (-$638,000) and a slight reduction in electrical equipment (-$146,000).	+1,302
Total Funding Change, Operation and Maintenance	+1,782

Construction and Rehabilitation

Mission Supporting Goals and Objectives

Western's construction and rehabilitation (C&R) activity emphasizes replacement and upgrading of existing electrical system infrastructure to sustain reliable power delivery to our customers, to support a stable and reliable interconnected power system, to contain annual maintenance expenses, and to retain the value of our assets. In FY 2002, Western's transmission system will have 16,811 circuit-miles of line and 261 substations. In FY 2002, 2,496 of the 7,909 miles of wood pole line, or 32 percent, will be over 50 years old, and 2,626 miles, or 33 percent, will be between 41 and 50 years old. Western is continually testing, treating, and replacing individual wood poles and hardware to delay the need for replacing an entire transmission line. As substation equipment (such as power transformers, circuit breakers, and control equipment) reaches the end of its useful life, maintenance costs increase, replacement parts become unavailable, risk of outages increases, and system reliability declines. Western will have 216 transformers and 183 breakers over 41 years old in FY 2002. While the replacement of this equipment is systematically planned over a 10-year period, actual replacement varies depending on condition and criticality. All replacement and rehabilitation plans are coordinated with our customers to help establish the timing and scope of work at specific substations. When upgrades or additional capacity are required, Western actively pursues opportunities to join with neighboring utilities to jointly finance activities, which result in realized cost savings and increased efficiencies for all participants.

In order for Western's power rates to remain competitive and assure project repayment, Western has aggressively reduced its capital investment program. From levels around $110 million in FY 1992 through FY 1994, Western has reduced its total C&R program to a base of about $40 million since FY 1996 (total program includes equipment, contracts, related expenses, program direction and planned use of prior year balances). Our FY 2002 C&R request is $7.0 million less than FY 2001, and $10.7 million less than the FY 2000 program level. Western continues to refine a long-term C&R program level that will maintain the reliability of, and the Government's investment in, Western's power facilities while minimizing effects on power rates. Our challenge has been to evaluate Western's facilities which were built 40 to 50 years ago, and develop a systematic replacement/upgrade program at a level that retains the value of our assets and assures a safe and reliable transmission system, with minimal rate impacts.

Due to the increase in rehabilitation projects, decrease in new construction projects, and reduced C&R program budget, it is increasingly difficult to plan specific projects years in advance. A piece of equipment scheduled for replacement may test out fine two years later at the beginning of the execution year, resulting in deferring replacement in favor of equipment at higher risk of failure. Discovery of a failing piece of critical equipment may completely change the planned priority of work. Customer needs may also change, causing Western to revise or reprioritize planned construction projects. Utilities and other entities are also requesting interconnections to Western's transmission system under authority of FERC Order No. 888; in many cases this work is being accomplished by Western at the applicant's expense. These projects often surface suddenly and move quickly, and can significantly impact Western's C&R program planning and project priorities. While this section of our budget request incorporates Western's best efforts to identify and schedule necessary C&R projects, the increased focus on

replacements and the realities of operating and maintaining a complex interconnected power system mean unforeseen priority projects will surface from time to time. Western may have to slip or restructure planned projects to accommodate these sudden priority projects, but our projects will continue to be focused on replacements and upgrades of aging existing equipment necessary to maintain the reliability and integrity of Western's power transmission system. Western's policy will continue to assign the highest program priority to those situations which pose the highest risk to safety and system reliability, while meeting the mandates for open access to our transmission system.

Western's C&R program delays replacement costs for as long as reasonably possible while managing the risk of sudden failure and emergency replacement. Further postponement due to budget constraints will contribute to an overall degradation of Western's power facilities, leading to serious power system disruptions and lengthy power outages while crews repair or replace failed equipment under emergency conditions. "Breakdown maintenance" results in higher costs than scheduled replacements and increases safety risks to maintenance crews, as equipment failures are very often tied to extreme weather conditions and/or high system power loadings. Industry deregulation, mandated open access to transmission, and load growth have combined to cause unprecedented stress on the interconnected power system. Available transmission capacity is being utilized to the maximum extent possible, which means electrical equipment is being operated at its upper performance limits, for longer periods of time. This situation results in accelerated wear and aging to equipment, at the same time any failure has greater ramifications to the integrated power system. Reliability, always critical, has become a crucial issue since the impacts of outages have become so much greater. What would have been a local outage inconveniencing a small area now has the potential for significant region-wide impacts.

Personnel costs and related expenses for the workforce to plan, collect field data, write specifications, design facilities, award construction contracts, and purchase government-furnished equipment for the C&R activity are combined with those of the Operation and Maintenance activity and are reflected in the Program Direction section of Western's budget request.

Funding Schedule

(dollars in thousands)

	FY 2000	FY 2001	FY 2002	$ Change	% Change
Transmission Lines and Terminal Facilities	15,424	4,009	3,629	-380	-9.5%
Substations	5,454	12,884	6,831	-6,053	-47.0%
Other [a]	5,924	6,173	5,604	-569	-9.2%
Total, Construction & Rehabilitation	26,802	23,066	16,064	-7,002	-30.4%
Planned Use of Prior Year Balances	-5,000	-1,983	0	+1,983	-100.0%
Total, C&R Budget Authority	21,802	21,083	16,064	-5,019	-23.8%

[a] Other includes communication equipment (such as microwave, telecommunications, and supervisory control and data acquisition systems), maintenance facilities, power facility developmental costs, and minor unscheduled jobs.

Detailed Program Justification

(dollars in thousands)

FY 2000	FY 2001	FY 2002

For purposes of budget display, the C&R program is broken into three sections: Transmission Lines and Terminal Facilities, Substations, and Other. The Other category includes communications equipment (microwave, fiber optic, telecommunications, and supervisory control and data acquisition systems), maintenance facilities, power facility development costs, and minor unscheduled jobs. All three categories support the performance measures as presented under Program Mission. Replacement and upgrade of aged power system components are crucial to system reliability, and communications improvements maintain vital control over system operation. Both contribute to the Transmission System Performance Measure by reducing the risk of equipment failure, unplanned outages, and possible local and regional power system disruptions. The Safety Performance Measure is supported by reducing the hazards associated with worn or aging equipment, correcting design deficiencies, and by replacing deteriorated wood poles which present a serious climbing hazard to linemen. In addition, public safety is supported by avoiding or minimizing the negative impacts of unplanned outages, and by minimizing the instances of downed lines. C&R program activities support the Repayment of Power Investment Performance Measure by promoting a well-planned C&R program with a relatively stable budget, by avoiding significant additional costs of emergency "breakdown maintenance," and by preventing outages which could impact power deliveries, purchase power costs, and power revenues. Planned activity is detailed by category below:

Transmission Lines and Terminal Facilities	**15,424**	**4,009**	**3,629**
# Transmission Lines and Terminal Facilities, Continuing Work	**15,424**	**4,009**	**2,300**

Complete minor modifications and rehabilitation of transmission lines (TL) in FY 2002 to ensure power system reliability and stability:

- Remove 16.1-miles of the Blue River-Summit TL (Colorado) from a floodplain and scenic area;
- Reroute a 5-mile portion of Curecanti-Lost Canyon 230-kV TL (Colorado) located on active landslides which have moved and damaged existing structures;
- Rebuild Prospect Valley Tap-Prospect Valley Substation 115-kV TL (Colorado). This 7.3-mile line was constructed in 1944 and has badly deteriorated poles;
- Extend life on the Armour-Mt. Vernon 115-kV wood pole TL (South Dakota);
- Convert the Big George-Carter Mountain TL (Wyoming) from 69-kV to 115-kV operation. The TL was built at 115-kV, but temporarily operated at 69-kV. Project involves substation and equipment changes only;

(dollars in thousands)

FY 2000	FY 2001	FY 2002

- Rebuild four aging tap lines in Wyoming and add overhead ground wire to improve reliability;
- Treat or replace wood poles that have failed inspection in the Colorado River Storage Project and Pick-Sloan Missouri Basin Program as a means of TL life extension.

Funding level is determined by estimating the cost to complete each project, and breaking out these costs by fiscal year. The estimates are based on recent actual costs to complete similar projects, updated individual project requirements, and past experience. Any decrease in funding would delay completion of one or more of these active projects.

 # Transmission Lines and Terminal Facilities, Rehabilitation Starts 0 0 1,329

Two TL and terminal facility rehabilitation starts are planned in FY 2002:

- Rebuild the Cheyenne-Nunn 115-kV TL (Wyoming and Colorado) due to age and deterioration. Line will be rebuilt at 230-kV depending on system loading conditions. Modifications will be necessary at Ault (Colorado), Cheyenne, and possibly Archer (both in Wyoming) Substations;
- Replace wood poles, crossarms, sections of conductor, and conductor hardware as needed on the Lovell-Thermopolis 115-kV TL (Wyoming). This line was constructed in 1953 and an increasing percentage of its structures have shell or heart rot, decreasing reliability and raising maintenance safety issues;
- In addition to the TL and terminal facility rehabilitation starts, funds are requested for the Sacramento Area Voltage Support project (California) for design and land acquisition. An Environmental Impact Statement (EIS) is being prepared, and once the EIS is completed, it is expected that several participants will become involved in the construction of the project, greatly reducing Western's costs. The EIS will identify, through a public process, the benefits and drawbacks to several alternatives, thus establishing the specific construction proposal(s) and the basis for the participants' involvement. This project is vital to maintaining system reliability in the Sacramento region.

TL and terminal facility starts address specific system reliability risks or operational problems. Estimates are based on actual costs of recent similar projects, expected costs of needed equipment and services, cost estimating guides, and experience. Budget decreases will cause these starts to be delayed, impacting outyear planning. Delays increase the backlog of necessary work, increase the risk of equipment failure and system disruptions, and cause budget increases in future years. The work cannot be avoided indefinitely and must eventually be accomplished. Outages caused by Western equipment failure may increasingly result in fines levied by regional transmission organizations or coordinating councils, increasing costs and impacting funding.

(dollars in thousands)

FY 2000	FY 2001	FY 2002

 # Transmission Lines and Terminal Facilities, Work for Others 0 0 0

Transmission line and terminal work for others in FY 2002 includes construction of:

- Interconnection facilities for the Big Sandy, Blythe, South Point and Sundance energy projects (Arizona);
- Interconnection facilities for the City of Lodi, Calpine Corporation's Sutter Powerplant, Calpine's East Altamont Pass project, and Florida Power and Light's Rio Linda Powerplant (California);
- Los Banos-Gates 500-kV TL project, an extension of the California-Oregon Transmission Project (California);
- Boulder City and Hoover TL Bypasses (Nevada);
- Mead Substation Stage 08 project for Southern Nevada Water Authority and Nevada Power Company (Nevada). This project will tie in lines needed for Southern Nevada's water pumping project serving the Las Vegas area.

Western's work for others has increased significantly under the open access to transmission mandates in the FERC Order No. 888. These mandates require Western to provide access to its transmission system; the projects typically surface quickly and provide little advance warning for internal planning and budgeting. Western must work with requestors to meet their needs.

Western expects interconnection or capacity upgrade projects funded by the project proponents to be increasingly common in the next few years. Design of these facilities must be closely coordinated with, or accomplished by, our design staff in order to ensure compatibility with Western's equipment and facilities and compliance with applicable electrical and safety codes. These projects also affect transmission system loading and operation; potential impacts to other system facilities and equipment must be determined, since the cost of any necessary modifications should be borne by the interconnection project proponents.

(dollars in thousands)

	FY 2000	FY 2001	FY 2002
Substations	**5,454**	**12,884**	**6,831**
# Substations, Continuing Work	**5,454**	**12,884**	**810**

Complete the replacement of high-voltage equipment such as circuit breakers, transformers, reactors, disconnect switches, and fuses at: Davis, Gila and Parker (Arizona); Elverta (California); Haxtun, Hayden and Salida (Colorado); Denison (Iowa); Custer, Glendive and Yellowtail (Montana); Grand Island (Nebraska); Washburn (North Dakota); Beresford, Brookings, Flandreau, Ft. Thompson, Groton, Summit and Woonsocket (South Dakota); and Alcova, Archer, Lusk and Raderville (Wyoming). This equipment requires replacement primarily due to reliability factors and age, safety concerns, escalating annual maintenance costs, and/or availability of spare parts. Oil containment is added when appropriate to protect nearby water resources from possible contamination. Complete final phase-out and demolition of Basic Substation and construct three short tie-in lines from Henderson Substation to each of three New Basic step-down yards being constructed by the Colorado River Commission (Nevada).

The funding level is determined by estimating the cost to complete each project, and breaking out these costs by fiscal year. The estimates are based on recent actual costs to complete similar projects, updated individual project requirements, and past experience.

# Substations, Rehabilitation Starts	**0**	**0**	**6,021**

Substation rehabilitation starts planned in FY 2002 include:

- Replace two 230/161/13.2-kV transformers at the Parker 230-kV switchyard (California). The transformers are Allis Chalmers manufactured in 1950 and have reached the end of their service life. Allis Chalmers has been out of the transformer business for many years and parts are unavailable;
- Replace five 115-kV circuit breakers, one 69-kV circuit breaker, and associated disconnect switches and control boards at Philip Substation (South Dakota). These breakers were installed in 1962 and are becoming a reliability risk and spare parts are also scarce;
- Replace the main power transformer at Wall Substation (South Dakota). The existing transformer has been in service since 1963 and is experiencing operational problems and increased maintenance expenses. The transformer needs to be replaced before it fails completely;
- Replace two 230/115-kV transformer banks, one reactor bank, three potential transformers, three coupling capacity voltage transformers, and related equipment at Watertown Substation (South Dakota). Most of this equipment dates from the mid-1950s and requires replacement to maintain system reliability. Manufacturers are dropping support of this obsolete equipment and replacement parts are scarce;

(dollars in thousands)

FY 2000	FY 2001	FY 2002

- Add phase shifting transformers at Laramie River Station, Stegall Substation, Miracle Mile Substation, and a new Glenrock Substation (all in Wyoming) to reduce loop flow and increase available transfer capacity on the TOT3 transmission path. Western is a 25-percent owner in the existing facilities, and will contribute the same percentage to the project. Western's capacity on TOT3 is 370 megawatts (MW), but the loop flow has reduced this capacity by up to 100 MW. In order to move power from generation to its customers, Western has had to purchase transmission capacity, an annual cost of about $2 million. Construction of the project will allow Western to utilize its full existing transfer capacity, and eliminate the $2 million annual expense;
- In addition to the substation rehabilitation starts, several substation projects in the preconstruction stage during FY 2002 will require purchase of equipment for the planned projects. Lead times for equipment delivery are increasing as fewer domestic manufacturers remain in the marketplace, and more equipment must come from foreign sources. Worldwide demand for electrical equipment is also impacting delivery schedules. For major equipment such as transformers, delivery times are averaging 18 months, making it impossible to procure equipment in the same fiscal year as contract award. These projects are: Tucson Substation equipment replacement (Arizona); Creston Substation 08 additions and replacements (Iowa); Forman Substation 04 additions and replacements and Williston Substation transformer replacement (North Dakota); Armour Substation 07 replacements and New Underwood Substation replacements (South Dakota).

These substation starts address specific identified system reliability risks or operational problems. Estimates are based on actual costs of recent similar projects, including costs of equipment and services, data from specialized cost estimating guides, and organization experience. Any decrease in funding will cause one or more of these starts to be delayed, impacting outyear planning. Delays in planned construction projects increase the backlog of necessary work, increase the risk of equipment failure and system disruptions, and create increases in future budget years. The work cannot be avoided through delay, and must be accomplished before failure requires emergency replacement and related increased costs.

(dollars in thousands)

	FY 2000	FY 2001	FY 2002
# Substations, Work for Others	**0**	**0**	**0**

Substation work for others in FY 2002 includes:

- Headgate Rock Dam Stages 07 and 08 projects for the Bureau of Indian Affairs/Aha Macav Tribe (Arizona);
- Empire and Signal substations (Arizona);
- Tracy substation 500-kV transformer addition (California);
- Canon City West substation for WestPlains Electric (Colorado);
- Elk Creek substation addition for an interconnection, and Watertown (South Dakota) substation capacitor additions for Basin Electric Power Cooperative;
- Badwater substation 230/69-kV transformer and 69-kV yard (Wyoming).

At numerous locations work for others will be conducted to integrate Western's substation work with other connected utilities. Several inquiries have been made at various locations on the system that may develop into work for others projects.

Other	**5,924**	**6,173**	**5,604**
# Other, Communications Systems	**1,795**	**3,594**	**2,875**

Continue to replace/modernize/expand communication systems (supervisory control and data acquisition equipment, microwave, fiber optic and telecommunication) in the Central Valley Project and Pick-Sloan Missouri Basin Program to operate and control the transmission system. Replacement parts for the existing obsolescent communications systems are becoming very difficult to obtain and the increased use of remote control of facilities, coupled with the need for greater integration of the Federal system with the rest of the grid and technological advances in the communications field, make secure and reliable communications crucial to Western's mission. Rapid advances in communications technology, along with manufacturers' phase-out of support for existing systems, primarily drive the need for communications replacements and upgrades. Effective control of remote facilities is crucial to the operation of the power system.

Impacts from faulty communications can range from electrical equipment damage to system-wide power flow problems, including black-outs. Funding level is determined by using recent actual costs, including equipment costs and construction contracts. Decreases to this line item will delay scheduled communications replacements, increase the possibility of communication system failures, and potentially contribute to system-wide power problems.

(dollars in thousands)

	FY 2000	FY 2001	FY 2002
# Other, Miscellaneous	**4,129**	**2,579**	**2,729**

Complete addition of fire protection at various maintenance facilities in the Western Division of the Pick-Sloan Missouri Basin Program, including the Virginia Smith Converter Station (Nebraska). Complete projects providing additional storage for housing vehicles, electrical equipment, and supplies that are presently being stored outside, subjected to adverse weather conditions at Western maintenance facilities at Phoenix (Arizona); Elverta (California); Bismarck (North Dakota); Huron (South Dakota); and Casper (Wyoming). Complete construction of an outdoor pole storage yard at Armour Substation (South Dakota). Complete an alternate control building at Cheyenne Substation (Wyoming). FY 2002 starts include: construction of an alternate power source for the Rocky Mountain Region Power Marketing Operations Center (Colorado) and modifications and additions at the Devils Lake Maintenance Yard (North Dakota). The work includes replacing an existing section of the garage building to accommodate larger wheeled equipment, construction of a new 80x120-foot storage building for replacement electrical equipment, extending asphalt paving and replace fencing. Annual power facility development costs are included in this section. Miscellaneous minor construction jobs, not normally scheduled in advance or anticipated as part of larger projects, are also included. The miscellaneous work is partly cosponsored. Each project cost is determined using the actual costs of recent similar projects, estimated quantities of needed materials, past contract costs, specialized cost estimating guides, and in-house experience. Power facility development costs are rigorously reviewed by Western's Maintenance, Design and Construction Council, and each activity is funded only if anticipated benefits clearly outweigh the costs.

Preconstruction Activities	**0**	**0**	**0**

The following projects will have active preconstruction activities during FY 2002: Bouse Tap rehabilitation, Casa Grande 230-kV upgrade, Parker-Gila TL realignment at Quartzite, and South of Blythe TL rebuild (Arizona); Curecanti-Rifle TL reroute/stabilization, Granby-McKenzie ROW expansion, Power Marketing Operations Center fire detection/suppression and repair/remodel, and Rocky Mountain Region roof inspection/repair (Colorado); Sioux City bus repair (Iowa); Granite Falls transformer replacement (Minnesota); Gering Area voltage conversion (Nebraska); Carrington replacements and bus modifications, Devils Lake substation and TL reroute projects, Jamestown series capacitors, Rugby capacitor bank addition, and Valley City foundation and buswork repair (North Dakota); and Huron Stage 14 (South Dakota). Funds for these activities are included in the Program Direction section of Western's request.

Total, Construction and Rehabilitation	**26,802**	**23,066**	**16,064**

Explanation of Funding Changes from FY 2001 to FY 2002

	FY 2002 vs FY 2001 ($000)
Transmission Lines and Terminal Facilities	
# The decrease in Transmission Lines and Terminal Facilities is due to completion of projects, the lack of additional major starts in this category, and the need to comply with budget targets.	-380
Substations	
# The substantial decrease in funding for substation replacements and rehabilitation is due to the reduction of substation projects in the budget request. The amount of work for others related to interconnection requests is requiring increased attention and there is also the need to stay within budget targets.	-6,053
Other	
# The modest decrease in Other projects reflects normal fluctuation in the funding level of these activities, and adjustments to meet budget targets.	-569
Total Funding Change, Construction and Rehabilitation	-7,002

Purchase Power and Wheeling
Mission Supporting Goals and Objectives

Western's mission is to market and deliver reliable, cost-based hydroelectric power and related services. These services must be marketed at rates sufficient to provide recovery of expenses and Federal investment as established by law. In order to maximize the marketability of Western's products, Western has entered into long-term contractual commitments with customers for the delivery of an average firm power product. By its nature, hydropower is a variable resource. Thus, when variations occur as a result of drought or other unforeseen conditions, Western buys non-Federal power and related transmission services to support its firm power product. Western also buys transmission services, as needed, to provide the benefits of the Federal hydropower resource to numerous Federal, state, municipal, and other preference customers not directly connected to Western's system. Contracting for transmission services encourages the widespread use principles of the Flood Control Act of 1944 and avoids unnecessary Federal duplication of available transmission resources.

For Western's Central Valley Project (CVP), the combination of the project's relatively larger system capacity in proportion to its carryover storage requires the importation of additional power supplies during periods of low hydropower generation to meet firm contractual obligations to customers. In fact, construction of a base load thermal plant to assure the delivery of firm power during periods of low hydropower generation was contemplated during the initial planning for the CVP. Instead of funding the construction of a thermal plant, Congress acted to complement the purchase power program by approving the execution of a power integration contract with Pacific Gas and Electric (PG&E) and by providing the CVP with access to supplemental power markets via Federal participation and investment in the Pacific Northwest-Pacific Southwest Intertie authorized in 1964, and then again in the California-Oregon Transmission Project authorized in 1984. The acquisition of non-Federal power and transmission services increases the dependability of Western's deliveries, aids Western's efforts to market its products on a long-term basis, and ensures consistent repayment of the Federal investment in the power facilities.

The FY 2002 purchase power and wheeling (PPW) need has increased dramatically from $189.4 million in FY 2001 to $385.5 million as a result of escalating contractual and market prices for energy and below-normal reservoir conditions. However, the request requires no new budget authority as Western intends to finance 100 percent of the FY 2002 activities with a combination of offsetting collections from customer receipts and other off-budget methods. The request continues to rely significantly on traditional alternative financing methods, including net billing, bill crediting, and Federal reimbursable, to support $117.2 million of the annual PPW funding needs. In addition, Western will rely significantly on direct customer funding of $82.2 million. For the remaining funding requirements, the request seeks authority, as in FY 2001, for Western to use revenues collected from the recovery of PPW expenses to finance those same expenditures. The request recognizes that the revenue stream not only provides for recovery of annual PPW expenditures, but is also dependent on those same PPW expenditures to create the firm power product being marketed and sold.

Funding Schedule

Two funding schedules follow. The first shows the budgeted program requirement, consisting of new budget authority, use of prior year balances and offsetting collections, net of any alternative financing planned. The second illustrates the gross purchase power need including use of alternative financing methods.

Budget Program Requirement

(dollars in thousands)

	FY 2000	FY 2001	FY 2002	$ Change	% Change
Central Valley Project	36,224	59,424	92,324	+32,900	+55.4%
Pick-Sloan Missouri Basin and Other Programs	4,907	5,800	93,800	+88,000	+1517.2%
Total, PPW	41,131	65,224	186,124	+120,900	+185.4%
Use of Prior Year Balances, Net	-15,000	0	0	0	N/A
Offsetting Collections Realized	0	-65,224	-186,124	-120,900	-185.4%
Total, PPW Budget Authority	26,131	0	0	0	N/A

Program Activity (Gross)

(dollars in thousands)

	FY 2000	FY 2001	FY 2002	$ Change	% Change
Central Valley Project	101,236	148,562	189,053	+40,491	+27.3%
Pick-Sloan Missouri Basin and Other Programs	39,446	40,808	196,451	+155,643	+381.4%
Total, PPW (gross)	140,682	189,370	385,504	+196,134	+103.6%
Use of Alternative Financing					
Net Billing and Bill Crediting	-69,051	-85,646	-97,751	-12,105	+14.1%
Reimbursable, Federal Contract Loads	-18,500	-18,500	-19,400	-900	+4.9%
Subtotal, Alternative Financing	-87,551	-104,146	-117,151	-13,005	+12.5%
Additional Off-budget Customer Financing	-12,000	-20,000	-82,229	-62,229	+311.1%
Total, PPW	41,131	65,224	186,124	+120,900	+185.4%
Use of Prior Year Balances, Net	-15,000	0	0	0	N/A
Offsetting Collections Realized	0	-65,224	-186,124	-120,900	-185.4%
Total, PPW Budget Authority	26,131	0	0	0	N/A

Detailed Program Justification

(dollars in thousands)

FY 2000	FY 2001	FY 2002

For the Central Valley Project and the Pick-Sloan Missouri Basin Program, the PPW activity provides firming energy and wheeling services to support Western's mission and performance measures. The strong marketability gained by firming the extremely variable hydro resource provides a long-term dependable revenue stream and timely repayment of the taxpayer investment in the projects' power facilities (Repayment of Investment Performance Measure). In addition it provides full recovery of Western's and the generating agencies' annual costs allocated to power, including operation and maintenance, PPW, and interest to Treasury on unpaid project investment.

Central Valley Project	**36,224**	**59,424**	**92,324**
# Central Valley Project, Program Requirement	**101,236**	**148,562**	**189,053**

In FY 2002, Western seeks authority to use offsetting collections to enable CVP to finance contractual power commitments to its customers. As shown below, CVP customers are expected to provide significant alternative financing, supplementing the "use of revenue" authority by $96.7 million. Total program amounts shown here are based primarily on contractual pricing and delivery terms negotiated in the long-term firm purchase agreements with Pacific Gas & Electric, and to a lesser extent on market estimates for non-firm purchases. The increase in FY 2002 is due primarily to an increase in the cost of purchases from PG&E as a result of the depletion of low cost energy banked with them which provided for a credit of roughly 50 percent from their thermal rates. The increase in PG&E costs is partially offset by the suspension of purchases from market-based contracts.

# Central Valley Project, Alternative/Customer Financing	**-65,012**	**-89,138**	**-96,729**

In FY 2002, alternative financing methods which offset the CVP budget requirement are expected to increase from $89.1 million in FY 2001 to $96.7 million. The FY 2002 level reflects a significant change in the financing of the CVP purchase power program. As a result of unprecedented escalation in the price of market based energy purchases in California, Western negotiated the suspension of its long-term, market-based purchase power contracts. However, the suspension of these contracts also eliminated CVP's bill crediting and net billing activities of about $50 million. To offset the loss, CVP is working with customers to pay for portions of their firming energy requirement in advance of their receiving the power. The advance payments allow Western to finance a portion of the customers' firming energy requirements. Advances anticipated are increasing from $19.1 million in FY 2001 to $78.2 million in FY 2002. In addition to the advances from customers, use of Federal reimbursable funds is planned at the same level as FY 2001; $18.5 million. Authority for use of offsetting collections is requested to finance the remaining $92.3 million portion of the CVP PPW program.

(dollars in thousands)

	FY 2000	FY 2001	FY 2002
Pick-Sloan Missouri Basin and Other Programs	**4,907**	**5,800**	**93,800**
# Pick-Sloan Missouri Basin and Other Programs, Program Requirement	**39,446**	**40,808**	**196,451**

In FY 2002, the request continues to support long-term average firm power commitments to customers of the Eastern and Western Divisions of the Pick-Sloan Missouri Basin Program and the Fryingpan-Arkansas Project. As shown below, Pick-Sloan customers are expected to provide significant financing, supplementing the funding requirement for the energy, capacity, and wheeling services from suppliers. The total program estimates shown are based primarily on U. S. Army Corps of Engineers' firming resource estimates, market pricing of short-term firm energy, and negotiated transmission rates. The increase reflects two factors: first, purchase power prices are expected to double the composite 26.7 mill rate assumed in the FY 2001 budget. The FY 2002 composite rate, estimated at 51.6 mills, leads to an increase of $38.5 million. Second, increased support purchases of 2,268 GWhs totaling $117.1 million are anticipated for the Pick-Sloan to accommodate generation restrictions resulting from below-normal storage levels, continued poor precipitation, and vital dam safety work at the Bureau of Reclamation's Horsetooth Reservoir in Colorado.

# Pick-Sloan Missouri Basin and Other Programs, Alternative/Customer Financing	**-34,539**	**-35,008**	**-102,651**

In FY 2002, alternative financing methods which offset the Pick-Sloan budget requirement are expected to increase significantly from $35.0 million in FY 2001 to $102.7 million in FY 2002. The increase of $67.7 million accommodates nearly half of the $155.6 million increase in the FY 2002 program. The alternative financing increase is predominantly due to greater net billing and bill crediting activity, up $63.6 million from the FY 2001 level of $34.1 million. Also, Pick-Sloan has begun working with customers to pay for portions of their firming energy requirement in advance of their power bill. Advances of $4 million are anticipated in FY 2002. In addition, use of Federal reimbursable resources are planned at $0.9 million for the first time in FY 2002. Increased reliance on alternative financing methods, like bill crediting, puts Western at risk for late payment and/or default as use of customer resources is beyond Western's direct control. Further, alternative financing methods limit purchases to participating suppliers, many of which may not have resources available during seasonal peak periods. Authority for use of offsetting collections from the recovery of PPW expenses does not have these limitations. Use of offsetting collection authority is requested to finance the remaining $93.8 million portion of the Pick-Sloan PPW program.

Total, Purchase Power and Wheeling	**41,131**	**65,224**	**186,124**

Explanation of Funding Changes from FY 2001 to FY 2002

	FY 2002 vs FY 2001 ($000)
Central Valley Project	
# The overall gross PPW requirement of $189,053,000 in FY 2002 is increasing by $40,491,000 from the $148,562,000 level in FY 2001. The overall increase is due to the depletion in FY 2001 of the energy credits banked with PG&E. Depletion of the credits increases the cost of energy services provided by PG&E. PG&E is CVP's largest supplier and prefers not to fully participate in Western's bill-crediting program. The portion funded through alternative financing methods is increasing from FY 2001 estimates by $7,591,000, resulting in a net increase in the FY 2002 PPW program of $32,900,000. The increased alternative financing raises Western's reliance on third-party financing arrangements and places the CVP power marketing program at high risk since Western has a contractual obligation to deliver a firm power product. Default on the power sale contracts or power purchase contracts could lead to significant loss of contract values in the case of PG&E, or extensive litigation. Western requests to finance $32,900,000 of the net increase in program through use of offsetting collections from the recovery of PPW expenditures. No new budget authority is requested.	+32,900
Pick-Sloan Missouri Basin and Other Programs	
# The gross PPW requirement of $196,451,000 in FY 2002 is increasing by $155,643,000 from the $40,808,000 level in FY 2001. The overall increase is due to two factors. First, the average purchase power price has soared beyond levels budgeted in prior years. The FY 2002 estimate at 51.6 mills is nearly double the 26.6 mills estimated in FY 2001. Second, increased support purchases are anticipated over the next three to five years as the Pick-Sloan program generation is constrained due to below-normal reservoir levels, poor hydro conditions, and dam safety work at the Colorado-Big Thompson project. A large portion of these increases ($67,643,000) will be financed through greater reliance on alternative financing methods, resulting in a net increase of $88,000,000 in the program level. New budget authority is not needed as Western requests to finance the net program increase through use of offsetting collections from the recovery of PPW expenditures.	+88,000
Total Funding Change, Purchase Power and Wheeling Budget Authority	+120,900

Utah Mitigation and Conservation

Mission Support Goals and Objectives

The Reclamation Projects Authorization and Adjustment Act of 1992, Title IV, established the Utah Reclamation Mitigation and Conservation Account (Account) in the Treasury of the United States. The purpose of this Account is to ensure that the level of environmental protection, mitigation, and enhancement achieved in connection with projects identified in the Act and elsewhere in the Colorado River Storage Project in the State of Utah is preserved and maintained. The Administrator of Western is authorized to deposit funds into the Account. Such expenditures are to be considered nonreimbursable and nonreturnable. The Utah Reclamation Mitigation and Conservation Commission, established under Title III of the Act, is authorized to administer all funds deposited into the Account.

Funding Schedule

(dollars in thousands)

	FY 2000	FY 2001	FY 2002	$ Change	% Change
Total, Utah Mitigation and Conservation Budget Authority	5,036	5,950	1,227	-4,723	-79.4%

Detailed Program Justification

(dollars in thousands)

	FY 2000	FY 2001	FY 2002
Utah Mitigation and Conservation	**5,036**	**5,950**	**1,227**

A deposit will be made into the Utah Reclamation Mitigation and Conservation Account to cover administrative expenses of the Commission. Sufficient balances are available in the Account to cover construction activities.

Explanation of Funding Changes from FY 2001 to FY 2002

	FY 2002 vs FY 2001 ($000)
Utah Mitigation and Conservation	
# Due to significant cash balances exceeding $100 million in the Utah Reclamation Mitigation and Conservation Account, a deposit will be made to cover only anticipated administrative costs.	-4,723
Total Funding Change, Utah Mitigation and Conservation	-4,723

Falcon and Amistad Operating and Maintenance Fund

Funding Profile

(dollars in thousands)

	FY 2000 Comparable Appropriation	FY 2001 Original Appropriation	FY 2001 Adjustments	FY 2001 Comparable Appropriation	FY 2002 Request
Falcon and Amistad Operating and Maintenance Fund	1,309	2,670	-7	2,663	2,663
Total, Falcon and Amistad Budget Authority	1,309	2,670	-7 [1]	2,663	2,663

Funding by Site

(dollars in thousands)

	FY 2000	FY 2001	FY 2002	$ Change	% Change
Western Area Power Administration	1,309	2,663	2,663	0	N/A
Total, Falcon and Amistad Operating and Maintenance Fund	1,309	2,663	2,663	0	N/A

Site Description

The Falcon-Amistad Project consists of two international storage projects located on the Rio Grande River between Texas and Mexico. The United States and Mexico share and operate separate powerplants on each side of the Rio Grande River. The power output is divided evenly between the two nations. The State Department's International Boundary and Water Commission (IBWC) owns and operates the U.S. portion of the projects.

Falcon Dam is located about 130 miles upstream from Brownsville, Texas. The United States' portion of construction, operation and maintenance was authorized by Congress in 1950. Construction was started in that year and completed in 1954. The United States' share of Falcon Powerplant capacity is 31.5 megawatts (MW). The powerplant came on line in 1954.

Amistad Dam is located about 300 miles upstream from Falcon Dam. The Amistad Powerplant was constructed by the U.S. Army Corps of Engineers, as agent for the IBWC. The United States' portion of construction, operation and maintenance was authorized by the Mexican-American Treaty Act of 1950. Amistad Dam was completed in 1969. Its two generating units, with a generation capacity of 66.0 MW, came on line in 1983.

[1] Rescission included in Public Law 106-554, "The Consolidated Appropriations Act of Fiscal Year 2001."

Project power is marketed to two cooperatives in south Texas via Central Power and Light Company's transmission system. There is no Federal transmission associated with these two projects.

Repayment is made through annual installments. These installments are established in advance by Western and the customers on or before August 31 of the year preceding the appropriate fiscal year. Each annual installment pays the amortized portion of the U.S. investment in the Falcon and Amistad hydroelectric facilities with interest, and associated operation, maintenance and administrative costs. This repayment schedule does not depend upon the amount of power and energy delivered or the amount of generation each year.

Mission Supporting Goals and Objectives

The Falcon and Amistad Operating and Maintenance Fund (Maintenance Fund) was established in the Treasury of the United States as directed by the Foreign Relations Authorization Act, Fiscal Years 1994 and 1995. The Maintenance Fund is administered by the Administrator of Western for use by the Commissioner of the U. S. Section of the IBWC to defray administrative, O&M, replacements, and emergency costs for the hydroelectric facilities at the Falcon and Amistad Dams.

The Falcon/Amistad Dams hydroelectric power generation plants sell generated power to public utilities through Western. The two powerplants have a combined generating capacity of 97.5 MW.

All revenues collected in connection with the disposition of electric power generated at the Falcon and Amistad Dams, except monies received from the Government of Mexico, are credited to the Maintenance Fund. Any monies received from the Government of Mexico are credited to the General Fund of the U. S. Treasury. Revenues collected in excess of expenses are used to repay, with interest, the cost of replacements and original investments.

Full funding will support 24-hour/day operation and maintenance of the two powerplants to ensure response to ever-changing water conditions, customer demand, and continual coordination with operating personnel of the Government of Mexico. In addition, power will be marketed, repayment studies will be completed, and revenues collected. The Federal staff funded under this program continue to be allocated to the U. S. Section of the IBWC by the Department of State.

Funding Schedule

(dollars in thousands)

	FY 2000	FY 2001	FY 2002	$ Change	% Change
Salaries and Benefits	1,154	1,249	1,433	+184	+14.7%
Routine Services	114	1,268	1,098	-170	-13.4%
Miscellaneous Expenses	16	121	114	-7	-5.8%
Marketing, Contracts, Repayment Studies	25	25	18	-7	-28.0%
Total, Falcon and Amistad Operating and Maintenance Fund	1,309	2,663	2,663	0	0.0%

Detailed Program Justification

(dollars in thousands)

	FY 2000	FY 2001	FY 2002
Salaries and Benefits	**1,154**	**1,249**	**1,433**

Salaries and benefits are provided for employees of the U.S. Section of the IBWC who operate and maintain the two powerplants on a 24-hour/day basis, including planned maintenance activities and required safety services. FY 2002 includes funding for two additional employees (bringing the total to 24) to improve maintenance of aging equipment and more fully provide supervisory and plant operator coverage.

Routine Services	**114**	**1,268**	**1,098**

Routine services such as inspection and service of the CO2 and HVAC systems, elevators, self-contained breathing apparatus, calibration of test equipment, rewinding of motors, and repair of obsolete equipment when replacement parts are no longer available will be provided. Additionally, upgrades, replacement or rehabilitation of equipment such as control room recorders, station service batteries, and AC-DC inverters will occur. In FY 2002, extensive rehabilitation continues to protect steel structures essential to turbine operation at the Falcon Dam and Powerplant. Trash racks (metal dam structures) will be sandblasted and painted, and penstocks will be sandblasted and recoated. This is the second year of a three-year project. Additionally, the governor electronics of Unit No. 2 at Amistad will be upgraded. These critical powerhouse structures must be protected to ensure the integrity of the project and to assure continued safe operation.

Miscellaneous Expenses	**16**	**121**	**114**

Miscellaneous expenses for IBWC employees and technical advisors, including travel, training, communications, utilities and printing.

Marketing, Contracts, Repayment Studies	**25**	**25**	**18**

Costs for marketing power, administration of power contracts, and preparation of rate and repayment studies. Based on accurate studies, staff ensure that power rates are set at an appropriate level to recover annual expenses and meet repayment schedules, thus supporting the Repayment of Power Investment Performance Measure.

Total, Falcon and Amistad Operating and Maintenance Fund	**1,309**	**2,663**	**2,663**

Explanation of Funding Changes from FY 2001 to FY 2002

	FY 2002 vs FY 2001 ($000)
Salaries and Benefits	
# The increase in salaries and benefits is due to two additional IBWC personnel to more adequately maintain aging equipment and more fully provide supervisory and plant operator coverage and routine salary increases.	+184
Routine Services	
# The reduction in routine services reflects a slight reduction in upgrades, replacements or rehabilitation of equipment.	-170
Miscellaneous Expenses	
# Miscellaneous expenses decrease slightly to reflect aggressive cost reduction practices to stay within budget constraints.	-7
Marketing, Contracts, Repayment Studies	
# The decrease in this category reflects a very slight reduction in level of effort for contract administration.	-7
Total Funding Change, Falcon and Amistad Operating and Maintenance Fund	0

Colorado River Basins Power Marketing Fund

Funding Profile

(dollars in thousands)

	FY 2000 Comparable Appropriation	FY 2001 Original Appropriation	FY 2001 Adjustments	FY 2001 Comparable Appropriation	FY 2002 Request
Colorado River Basins Power Marketing Fund					
Program Direction	29,298	31,355	0	31,355	34,981
Equipment, Contracts and Related Expenses	118,964	83,354	+108,000	191,354	240,584
Total, Operating Expenses from new authority	148,262	114,709	+108,000 [1]	222,709	275,565
Offsetting Collections Realized	-148,262	-135,709	-108,000	-243,709	-301,565
Total, Obligational Authority	0	-21,000	0	-21,000	-26,000

Public Law Authorizations:
Public Law 75-529, "The Fort Peck Project Act of 1938"
Public Law 84-484, "The Colorado River Storage Project Act of 1956"
Public Law 90-537, "The Colorado River Basin Project Act of 1968"
Public Law 95-91, "Department of Energy Organization Act" (1977)

Funding by Site

(dollars in thousands)

	FY 2000	FY 2001	FY 2002	$ Change	% Change
Western Area Power Administration	148,262	222,709	275,565	+52,856	+23.7%
Offsetting Collections Realized	-148,262	-243,709	-301,565	-57,856	+23.7%
Total, Colorado River Basins Power Marketing Fund	0	-21,000	-26,000	-5,000	+23.8%

Site Description

The Colorado River Basins Power Marketing Program is comprised of three power systems: the Colorado River Storage Project, including the Dolores and Seedskadee Projects; the Fort Peck Project; and the Colorado River Basin Project, including the Central Arizona Project. Western Area Power Administration is responsible for construction, maintenance, and operation of facilities for transmitting and marketing the electrical energy generated in these power systems. A brief description of each follows.

[1] Additional obligational authority apportioned February 2001 to meet escalating purchase power costs. Due to timing, this additional authority is not in the President's budget.

The **Colorado River Storage Project** (CRSP) was authorized in 1956. It consists of four major storage units: Glen Canyon, on the Colorado River in Arizona near the Utah border; Flaming Gorge on the Green River in Utah near the Wyoming border; Navajo on the San Juan River in northwestern New Mexico near the Colorado border; and the Wayne N. Aspinall unit on the Gunnison River in west-central Colorado.

CRSP has a combined storage capacity that exceeds 33.5 million acre-feet. Five Federal powerplants associated with the project, with 16 generating units, have an operating capacity of 1,710 MW. CRSP provides for the electrical needs of more than a million people spread across Colorado, Utah, New Mexico and Arizona. Portions of southern California, Nevada and Wyoming are also served by CRSP power.

The **Dolores Project**, located in Montezuma and Dolores counties in southwestern Colorado, and the **Seedskadee Project**, located in southwestern Wyoming, were authorized as participating projects of CRSP. Dolores, a multipurpose project, provides 12.8 MW of installed power generating capacity along with municipal and industrial water, irrigation water, and recreation and fish and wildlife enhancement. The Dolores Project powerplants at McPhee Dam and the Towaoc Canal produce 1.3 and 11.5 MW, respectively. Seedskadee's power facilities, associated with the project's Fontenelle Dam, include an 11.5-MW powerplant, switchyard and necessary transmission lines to interconnect with the CRSP transmission system at Flaming Gorge Powerplant.

The **Central Arizona Project** (CAP), one of three related water development projects that make up the Colorado River Basin Project, was authorized to furnish irrigation and municipal water supplies to Arizona and New Mexico, and for other purposes. The Navajo Generating Station, located near Lake Powell at Page, Arizona, has three coal-fired steam electric generating units for a combined capacity of approximately 2,250 MW. The Federal share of the capacity (24.3 percent) is used to power the pumps that move Colorado River water through CAP canals. Surplus generation is marketed by Salt River Project pursuant to an agreement with Western.

The **Fort Peck Project**, located on the Missouri River in northeastern Montana, was begun under an Executive Order in October 1933 as part of the Public Works Administration. The Fort Peck Project Act of 1938 authorized the completion, maintenance and operation of the project, and the Flood Control Act of 1944 authorized integration of operation of the project with the Pick-Sloan Missouri Basin Program to serve a common market area. Installed generating capacity of the 5 units is 218 MW, which is delivered primarily to customers in eastern Montana and western North Dakota.

Colorado River Basins Power Marketing Fund
Program Direction

Mission Supporting Goals and Objectives

The Colorado River Basins Power Marketing Program (Program) is comprised of the three power systems described earlier. This program is funded through Western's business-type revolving fund (Federal Enterprise Fund), the Colorado River Basins Power Marketing Fund.

Revenues from the sale of electric energy and capacity replenish the fund and are available for expenditure for operation, maintenance, power billing and collection, program direction, purchase power and wheeling, interest, emergencies, and other power marketing expenses. Power sales and other revenues, which are collected in excess of expenses, are used for repayment of investments to the U.S. Treasury. This request represents Western's estimate of obligations to finance these business-type operations.

Western operates and maintains the transmission system for the Projects funded in this account to ensure an adequate supply of reliable electric power in a clean and environmentally-safe, cost-effective manner. Western achieves continuity of service by maintaining its power systems at or above industry standards, rapidly restoring service following any system disturbance, mitigating adverse environmental impacts, performing clean-up activities, and maximizing the revenues gained from non-firm energy sales. In concert with its customers, Western reviews required replacements to its existing infrastructure to sustain reliable power delivery to its customers and to contain annual maintenance expenses.

Funding Schedule

(dollars in thousands, whole FTEs)

	FY 2000	FY 2001	FY 2002	$ Change	% Change
Salaries & Benefits	16,260	16,552	23,655	+7,103	+42.9%
Travel	1,388	1,400	2,132	+732	+52.3%
Support Services	2,138	2,579	3,126	+547	+21.2%
Other Related Expenses	9,512	10,824	6,068	-4,756	-43.9%
Total, Program Direction	29,298	31,355	34,981	+3,626	+11.6%
Full-Time Equivalents	246	259	268	+9	+3.5%

Detailed Program Justification

(dollars in thousands)

FY 2000	FY 2001	FY 2002

Salaries and Benefits 16,260 16,552 23,655

Salaries and benefits will be provided for Federal employees that operate and maintain the Program's high-voltage integrated transmission system and associated facilities, those that plan, design, and supervise the replacements (capital investments) to the transmission facilities; and those that market the power and energy produced to repay annual expenses and capital investment. Craft workers rapidly restore the transmission system, comprised of approximately 4,000 circuit-miles of transmission lines and associated substations, switchyards, communication, control and general plant facilities, following any disturbance, and routinely maintain and/or replace equipment to assure capability for reliable delivery of power. Dispatchers respond to minute-by-minute changes to meet or exceed North American Electric Reliability Council and industry average for Transmission System Performance, a Western Performance Measure. Energy schedulers maximize revenues from non-firm energy sales, thereby supporting the Repayment of Power Investment Performance Measure. Staff provide continuing services such as system operations, power billing and collection, power marketing, energy services, technology transfer, environmental, safety, security and emergency management activities. Due to the extreme hazards associated with a high-voltage electrical system, staff support the Safety Performance Measure by continually making safety a priority in each and every task. Staff evaluate general power resources, collaborating and planning with customers and other members of the interconnected transmission system to identify the most effective transmission system improvements to maximize benefits to all participants.

The 268 FTE number displayed in this Account reflects both direct hours and that portion of administrative and general expense (A&GE) employees funded in this Account. The $7.1 million increase reflects application of a four percent inflation factor, funding for an additional nine FTEs, and realignment of the salary/benefit costs for A&GE employees that were previously included in the Other Related Expenses section.

Travel 1,388 1,400 2,132

Transportation/per diem allowance for day-to-day performance of duties of Federal staff, including crews maintaining the transmission facilities will continue. Rental/lease of GSA vehicles and transportation of things are also included. Estimates are based on historical travel costs, adjusted for inflation and planned activity. The increase reflects GSA vehicle leases which were inadvertently omitted from the category previously, and Western's effort to include distributed expenses in appropriate categories rather than in an aggregate number identified only as distributed management costs.

	(dollars in thousands)		
	FY 2000	FY 2001	FY 2002
Support Services	**2,138**	**2,579**	**3,126**

Support services funded in this activity include IS support, warehousing, computer-aided drafting/engineering, and general administrative support. The increase is primarily in the categories of administrative and IS support services. The administrative increase is due to full staffing of the contract in the Upper Great Plains Region and re-bid of a landscaping/janitorial contract in the Desert Southwest Region. The IS increase is attributed to an increase of scope in the Rocky Mountain Region for e-tagging and OASIS needs of the power dispatchers and a re-bid of the contract in the Desert Southwest Region. A portion of those contracts is funded in this Account.

Other Related Expenses	**9,512**	**10,824**	**6,068**

Other related expenses, including but not limited to, space, utilities and miscellaneous charges, printing and reproduction, training tuition, maintenance of office equipment, supplies and materials, telecommunications, personal computers, multi-project costs, and a portion of the costs received from National Archive and Records Administration (NARA) will continue. Rental space costs assume the GSA inflation factor. Other costs are based on historical usage and actual cost of similar items. The decrease is primarily attributed to movement of GSA vehicle lease costs and the aggregate amount for Western's general management costs to appropriate categories (salaries/benefits, travel) described above. The decrease is partially offset by increases in service facility repair costs in the Desert Southwest Region, Working Capital Fund assessment attributed to the inclusion of operation costs for the payroll/personnel system and DOENet, increased rental and training costs due to increased FTE funded in this Account, and inflationary increases for miscellaneous costs including utilities and supplies.

Total, Program Direction	**29,298**	**31,355**	**34,981**

Explanation of Funding Changes from FY 2001 to FY 2002

	FY 2002 vs FY 2001 ($000)
Salaries and Benefits	
# Increase in salaries and benefits reflects the application of a four percent inflation factor, and an increase of nine FTEs. Additionally, the increase reflects the inclusion of the salary/benefit portion of A&GE employees funded in this Account rather than aggregating those costs as part of management distribution costs previously included under Other Related Expenses. The work plans for Western's workforce are prioritized based on criticality and cross all funding accounts. Therefore, fluctuations may occur from year to year in the number of FTE required to perform the work in any given Account	+7,103
Travel	
# Increase in travel reflects anticipated inflation, the inclusion of GSA vehicle leases which were inadvertently omitted from this category previously, and the inclusion of the portion of A&GE travel expenses funded through this Account.	+732
Support Services	
# Increase in IS support services is primarily attributed to re-bid of a contract in the Desert Southwest Region and an increase of scope in the Rocky Mountain Region for e-tagging and OASIS needs of the power dispatchers. The increase in administrative support services is due to full staffing of the contract in the Upper Great Plains Region and re-bid of a landscaping/janitorial contract in the Desert Southwest Region. A portion of those contracts are funded in this Account.	+547
Other Related Expenses	
# The decrease in other related expenses is primarily attributed to movement of GSA vehicle lease costs and the aggregate amount for Western's general management costs to appropriate categories as described above. The decrease is partially offset by increases in service facility repair costs in the Desert Southwest Region, Working Capital Fund assessment attributed to the inclusion of operation costs for the payroll/personnel system, increased rental costs and training costs due to increased FTEs funded in this Account, and inflationary increases for miscellaneous costs including utilities and supplies.	-4,756
Total Funding Change, Program Direction	+3,626

Support Services

(dollars in thousands)

	FY 2000	FY 2001	FY 2002	$ Change	% Change
Technical Support Services					
Economic and Environmental Analysis	0	0	0	0	N/A
Test and Evaluation Studies	0	0	0	0	N/A
Total, Technical Support Services	0	0	0	0	N/A
Management Support Services					
Management Studies	35	42	52	+10	+23.8%
Training and Education	20	46	0	-46	-100.0%
ADP Support	1,053	1,521	1,724	+203	+13.3%
Administrative Support Services	1,030	970	1,350	+380	+39.2%
Total, Management Support Services	2,138	2,579	3,126	+547	+21.2%
Total, Support Services	2,138	2,579	3,126	+547	+21.2%

Other Related Expenses

(dollars in thousands)

	FY 2000	FY 2001	FY 2002	$ Change	% Change
Training	126	128	200	+72	+56.3%
Working Capital Fund	61	78	265	+187	+239.7%
Printing and Reproduction	11	12	13	+1	+8.3%
Rental Space	510	471	877	+406	+86.2%
Software Procurement/Maintenance Activities/Capital Acquisitions	786	905	904	-1	-0.1%
Other	8,018	9,230	3,809	-5,421	-58.7%
Total, Other Related Expenses	9,512	10,824	6,068	-4,756	-43.9%

Equipment, Contracts and Related Expenses

Mission Supporting Goals and Objectives

Western's equipment, contracts and related expenses are necessary for operation and maintenance activity. This program supports the Department of Energy's Strategic Plan to promote secure, competitive, and environmentally-responsible energy systems that serve the needs of the public. Western ensures an adequate supply of reliable electric power in a safe, cost-effective manner, and achieves continuity of service throughout its service territory by maintaining its power system at or above industry standards, rapidly restoring service following any system disturbance, mitigating adverse environmental impacts, performing clean-up activities, and maximizing the revenues gained from ancillary services and non-firm energy sales.

The Colorado River Basins Power Marketing Program is comprised of power marketing, operation, and maintenance of transmission facilities of three power systems described in the Site Description section earlier. These activities are funded in Western's business-type revolving fund (Federal Enterprise Fund), the Colorado River Basins Power Marketing Fund.

Revenues from the sale of electric energy and capacity replenish the fund and are available for expenditure for operation, maintenance, power billing and collection, program direction, purchase power and wheeling, interest, emergencies, and other power marketing expenses.

Supplies and materials, such as wood poles, instrument transformers, meters and relays, must be procured to provide necessary resources to respond to routine and emergency situations in the high-voltage interconnected transmission system. Technical services, such as waste management disposal and pest/weed control, are used as needed.

Western's planned replacement and addition activity is based on an assessment of age and the maintenance frequency/problems of individual items of equipment, availability of replacement parts, safety of the public and Western's personnel, environmental concerns, and an orderly work plan. The work plans, coordinated with Western's power customers who ultimately bear the burden of all Western expenses, reflect an overall sustainable level of effort, with shifts in emphasis between categories (i.e. electrical versus communication equipment) in any given year.

Electrical equipment replacements, such as circuit breakers, transformers, insulators, revenue meters, switches, control boards, relays and oscillographs, must be acquired to assure reliable service to Western's customers. System age and environmental concerns necessitate orderly replacement before significant problems develop.

Replacement and upgrade of microwave, supervisory control and data acquisition, and other communication and control equipment continues to provide increased system reliability, and reduce maintenance and equipment costs.

Capitalized movable equipment such as special purpose vehicles (e.g., cranes, auger trucks, manlifts), special purpose equipment (e.g., pole trailers, industrial tractors, brush chippers), specialized test

equipment (e.g., motion analyzers and relay test equipment), computer-aided engineering equipment, office equipment, IS equipment and software must be upgraded and replaced.

Electrical resources and transmission capability to firm up the Federal hydropower supplies needed to meet Western's contractual obligations will continue to be obtained. Transmission wheeling services are also purchased when a third party's transmission lines are needed to deliver Federal power to Western's customers.

Reimbursements to the U.S. Army Corps of Engineers for operation and maintenance of the Fort Peck Powerplant and planned interest payments to the U.S. Treasury are also included in this section.

Funding Schedule

(dollars in thousands)

	FY 2000	FY 2001	FY 2002	$ Change	% Change
Supplies and Materials	8,439	10,634	8,186	-2,448	-23.0%
Purchase Power Costs	84,671	159,360	215,676	+56,316	+35.3%
Capitalized Equipment	7,165	6,112	5,440	-672	-11.0%
Interest	18,689	15,248	11,282	-3,996	-26.0%
Total, Equipment, Contracts and Related Expenses	118,964	191,354	240,584	+49,230	+25.7%

Detailed Program Justification

(dollars in thousands)

FY 2000	FY 2001	FY 2002

Supplies and Materials 8,439 10,634 8,186

Supplies and materials necessary to respond to routine and emergency situations in the high-voltage interconnected transmission system will be procured, and reimbursements to the U. S. Army Corps of Engineers for operation and maintenance of the Fort Peck Powerplant will continue. A well-maintained transmission system supports Western's Transmission System Performance Measure by preventing sudden failure, unplanned outages, and possible regional power system disruptions. By providing 24-hour/day reliable electric power delivery to its customers, Western secures revenues for repayment, thus supporting the Repayment of Power Investment Performance Measure. Daily discussion of safe working procedures before work commences supports the Safety Performance Measure. The request is based on projected work plans for activities funded from this Account. Estimates are based on historical data of actual supplies needed to maintain the transmission system reliably, including emergency situations such as ice storms and tornadoes. Costs are based on recent procurement of similar items. The decrease is

(dollars in thousands)

FY 2000	FY 2001	FY 2002

attributed to removal of anticipated costs associated with a recovery implementation program for endangered fish species in the Upper Colorado River Basin, originally scheduled for completion in 2005. Legislation associated with this activity has moved the responsibility for funding to the Bureau of Reclamation.

Purchase Power Costs 84,671 159,360 215,676

Electrical resources, transmission capability and wheeling services will be purchased. Western has amended the Salt Lake City Area Integrated Projects (SLCAIP) Firm Electric Service Contracts which implement the decision in the Electric Power Marketing Environmental Impact Statement to return customers' power allocations to those established in the Post-1989 Marketing Plan. The action increases Western's firm annual contract commitments and is reflected beginning in FY 2000. The increase in FY 2002 anticipates continuing high market prices for firming energy and increased purchases of energy caused by low-steady-flow test conducted at Glen Canyon Dam, as required by the Glen Canyon Dam EIS Record of Decision. The strong marketability gained by firming the extremely variable hydro resource provides a long-term dependable revenue stream and timely repayment of the taxpayer investment in the projects' power facilities, thus supporting the Repayment of Investment Performance Measure.

Capitalized Equipment 7,165 6,112 5,440

Capitalized equipment will be acquired to assure reliable service to Western's customers. Replacement and upgrade of aged power system components are crucial to system reliability, contributing to the Transmission System Performance Measure. Removing environmental hazards and replacing equipment that may create a safety hazard for the public and Western's personnel supports the Safety Performance Measure. Costs are based on analysis of system O&M requirements/concerns, customer-coordinated work plans, actual costs of recent similar projects, and bottom-up budgeting techniques.

Interest 18,689 15,248 11,282

Interest payments to the U.S. Treasury will occur. Estimates are based on Power Repayment Studies for the Projects funded in this account.

Total, Equipment, Contracts and Related Expenses 118,964 191,354 240,584

Explanation of Funding Changes from FY 2001 to FY 2002

	FY 2002 vs FY 2001 ($000)
Supplies and Materials	
# A decrease of $2,600,000 is attributed to costs associated with a recovery implementation program for endangered fish species in the Upper Colorado River Basin. Legislation has been enacted that moves the funding responsibility to the Bureau of Reclamation. The decrease is offset by an increase of approximately $152,000 in purchases of supplies and materials, which is attributed to inflation.	-2,448
Purchase Power Costs	
# The increase for power purchases anticipates continuing high market prices for firming energy and increased purchases of energy caused by low-steady-flow test conducted at Glen Canyon Dam as a result of the Glen Canyon Dam EIS Record of Decision.	+56,316
Capitalized Equipment	
# The decrease in capitalized equipment purchases is due to a reduced level of replacements planned for FY 2002.	-672
Interest	
# Planned interest payment to the U.S. Treasury in FY 2002 is less than FY 2001 because project principal payments are current. No deficit payment is included.	-3,966
Total Funding Change, Equipment, Contracts and Related Expenses	+49,230

System Statistics

	FY 2000	FY 2001	FY 2002
Generating Plants (Number)	56	56	56
Generating Capacity:			
Installed Capability (kW)	10,605,000	10,605,000	10,605,000
Substations:			
Number [1]	258	261	261
Capacity (kVa)	26,553,512	26,553,512	26,553,512
Transmission Lines (Circuit-miles):			
500-kV	448.27	448.27	448.27
345-kV	1,598.80	1,598.80	1,598.80
230-kV	6,887.47	6,887.47	6,887.47
161-kV	869.26	869.26	869.26
138-kV	327.42	327.42	327.42
115-kV [2]	5,723.63	5,723.63	5,743.63
69-kV and below [3]	963.71	963.71	935.71
Total circuit-miles	16,818.56	16,818.56	16,810.56

[1] FY 2001 includes addition of South Point (Arizona), Obanion and Sutter (California) substations.

[2] FY 2002 includes removal of 8 additional miles (Blue River-Summit 115-kV TL in Colorado) and conversion of 28 miles of 69-kV to 115-kV operation (Big George-Carter Mountain TL in Wyoming).

[3] FY 2002 reflects removal of 28 miles of 69-kV line due to conversion to 115-kV of the Big George-Carter Mountain TL in Wyoming.

Estimate of Revenues [1]

(dollars in thousands)

	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006
Boulder Canyon Project	59,158	59,818	59,217	58,434	57,622	57,340	57,982
Central Valley Project [2]	185,641	233,704	256,633	254,754	255,920	95,020	91,635
Central Arizona Project (Navajo) [3]	96,408	92,057	92,057	92,057	92,057	92,057	92,057
Falcon-Amistad Project [4]	3,918	4,312	4,310	4,307	4,305	4,303	4,303
Fryingpan-Arkansas Project	14,158	13,467	13,467	13,467	13,467	13,467	13,467
Pacific Northwest-Southwest Intertie Project	16,104	18,213	19,623	21,033	22,443	23,853	25,263
Parker-Davis Project	41,089	39,210	38,513	38,507	39,066	40,812	41,050
Pick-Sloan Missouri Basin Program [5]	324,143	269,375	403,773	256,604	251,368	251,508	251,702
Provo River Project	342	247	234	233	232	232	232
Washoe Project	221	508	508	508	508	508	508
Salt Lake City Area Integrated Projects [5]	178,147	223,779	268,659	268,566	270,104	270,104	270,104
Subtotal	919,329	954,690	1,156,994	1,008,470	1,007,092	849,204	848,303
Less appropriated expenditures not provided for [6]	0	0	-8,257	-8,937	-10,315	-10,720	-11,750
Total	919,329	954,690	1,148,737	999,533	996,777	838,484	836,553

[1]For FY 2001 through FY 2006, project amounts in this table and the following sales table are based on FY 1998 Final Power Repayment Studies (PRS) except for Central Arizona Project (CAP) revenues which are based on estimated projections. No PRS is prepared for CAP because it has no power repayment obligation. FY 2000 amounts are preliminary actual figures.

[2]FY 2005 and FY 2006 revenues for Central Valley Project assume marketing of CVP hydro-power resource only, with minimal purchases of power. Amounts for FY 2001 through FY 2004 have been adjusted to reflect increasing purchase power and wheeling cost recovery requirements.

[3] Western has contractually agreed for the Salt River Project (SRP) to act as the scheduling entity and operating agent for CAP's portion of the Navajo Generating Station's output (547 MW). In return, as Western retains marketing responsibility, SRP agreed to pay a monthly fixed and variable cost. This revenue meets CAP repayment requirements.

[4]Falcon and Amistad revenues for FY 2001 through 2006 have been adjusted by $0.9 million annually to reflect increase in budget for operation and maintenance of the powerplants beginning in FY 2001.

[5]Adjustments have been made to reflect increased purchase power requirements due to below-normal hydro constraints and escalating market costs for the Pick-Sloan Missouri Basin Program in FYs 2001 and 2002, and for the Salt Lake City Area Integrated Projects in FY 2001 through FY 2006.

[6]Revenues adjusted for anticipated expenditures in construction and rehabilitation that would normally be recoverable, but are not funded due to budget constraints.

Estimate of Energy Sales [1]

(in gigawatthours) [2]

	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006
Boulder Canyon Project	5,193	5,283	5,135	4,501	4,501	4,501	4,501
Central Valley Project [3]	9,337	9,110	9,159	9,208	9,258	5,508	4,985
Central Arizona Project (Navajo)	4,474	3,565	3,565	3,565	3,565	3,565	3,565
Falcon-Amistad Project	124	165	165	165	165	165	165
Loveland Area Projects [4]	2,274	2,051	2,051	2,051	2,051	2,051	2,051
Pacific Northwest-Southwest Intertie Project [5]	0	0	0	0	0	0	0
Parker-Davis Project	1,348	1,346	1,346	1,346	1,346	1,346	1,346
Pick-Sloan Missouri Basin Program (Eastern Division)	12,918	10,534	10,532	10,435	9,961	10,071	10,092
Provo River Project	14	27	27	27	27	27	27
Washoe Project	12	10	10	10	10	10	10
Salt Lake City Area Integrated Projects [6]	7,627	6,140	6,170	6,165	6,180	6,180	6,180
Total	43,321	38,231	38,160	37,473	37,064	33,424	32,922

[1] Unless otherwise noted in the previous table (Estimate of Revenues), all FY 2001 through FY 2006 amounts in this table are based on FY 1998 Final Power Repayment Studies (PRS). FY 2000 amounts are actual firm and non-firm sales excluding project use of 1,811 GWhs and interproject sales of 211 GWhs.

[2] One gigawatthour (GWH) equals one million kilowatt-hours (kWh).

[3] FY 2005 and FY 2006 sales for Central Valley Project assume marketing of CVP hydro-power resource only, with minimal purchases of power.

[4] Loveland Area Projects include Fryingpan-Arkansas Project and Pick-Sloan Missouri Basin Program (Western Division).

[5] Pacific Northwest-Southwest Intertie shows no energy sales, but reflects revenues from the transmission of energy (refer to the Estimate of Revenue table). The Intertie Project is for transmission of energy only.

[6] Salt Lake City Area Integrated Projects include the Colorado River Storage Project, Collbran Project, Rio Grande Project, Seedskadee Project, and Dolores Project.

Estimate of Proprietary Receipts

(dollars in thousands)

	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006
Falcon Amistad Maintenance Fund, 895178	4,121	2,663	2,663	2,795	2,795	2,795	2,795
Sale and transmission of electric power, Falcon and Amistad Dams, 892245	0	1,649	1,647	1,512	1,510	1,508	1,508
Sale of Power and Other Utilities Not Otherwise Classified, 892249 [1]	60,556	42,500	42,500	42,500	42,500	42,500	42,500
Sale of Power - Western Area Power Administration - Reclamation Fund, 895000.27 [2] . .	356,204	293,262	242,008	255,492	251,909	231,691	258,307
Total, Proprietary Receipts . .	420,881	340,074	288,818	302,299	298,714	278,494	305,110

[1]The 892249 account provides for revenue transfers from the Reclamation Fund (895000.27) to the General Fund covering U. S. Army Corps of Engineers' expenditures for several dams on the Missouri River.

[2]Western's Reclamation Fund receipts in FY 2001 through 2006 assume reductions based on financing the PPW program through a combination of existing off-budget authorities, as well as authority providing "use of revenue." The FY 2002 through FY 2006 amounts also reflect reductions in expenditures as a result of funding constraints in construction and rehabilitation. The revenue estimates have not been adjusted to reflect power system reliability impacts as a result of the funding constraints.

Pending Litigation

Western has no pending litigation that would impact its FY 2002 Congressional Budget Request.