

# **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, [\$171,938,000] *\$168,788,000*, to remain available until expended, of which [\$166,651,000] *\$164,635,000* shall be derived from the Department of the Interior Reclamation Fund[: *Provided*, That of the amount herein appropriated \$6,000,000 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 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].

## **Explanation of Change**

The language change deletes the prior year reference to FY 2002 purchase power and wheeling activity and eliminates the deposit to the Utah Reclamation Mitigation and Conservation Account.

# **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, [~~\$2,663,000~~] *\$2,734,000*, 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

## Executive Summary

### 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 timeframes established by law and regulations.

### Strategic Objective

ER9: Ensure Federal hydropower is marketed and delivered while passing the North American Electric Reliability Council's Control Compliance Ratings, meeting planned repayment targets, and achieving a recordable accident frequency rate at or below our safety performance standard.

This strategic objective is supported by the Program Strategic Performance Goals that follow:

- ER9-1: Maintain reliability in the evolving electric utility industry.
- ER9-2: Establish and meet planned annual repayment for each Federal power system.
- ER9-3: Ensure everyone at Western is aware of, committed to, and has the tools to work safely.

### Strategy

In order to achieve safety and reliability goals while staying competitive, Western plans to accomplish its FY 2003 mission with 1,290 Federal employees, \$171.5 million of budget authority, \$647.1 million of spending and alternative financing authority. Western accomplishes its mission through five program activities: Program Direction, Operation and Maintenance, Construction and Rehabilitation, Purchase Power and Wheeling, and Utah Reclamation Mitigation and Conservation. These activities are financed through three accounts: the Construction, Rehabilitation, Operation and Maintenance Account, the Falcon and Amistad Operating and Maintenance Fund, and the Colorado River Basins Power Marketing Fund.

To achieve the first goal of reliability, the vast majority of Western's physical, financial and human resources are focused on making improvements and performing maintenance on its transmission, communications, and control systems. Western supports a reliable transmission system in the western

United States through open access to its transmission system, effective operation of its control and security centers, and active participation and leadership in electric reliability organizations.

To achieve the second goal of repayment, Western establishes cost-based rates to recover all costs of providing power service, including principal and interest owed the U. S. Treasury, while providing an efficient, non-polluting, cost-effective source of energy to a sizeable geographic region of the nation.

To achieve the third goal of safety, Western trains its employees on a continuing basis in occupational safety and health regulations, policies, and procedures and conducts safety meetings at employee, supervisory and management levels in order to keep the safety culture strong. Accidents are reviewed to ensure lessons are learned and proper work protocol is in place.

## **Major External Influences**

In May 2001, the National Energy Policy Development Group recommended Western be authorized to explore relieving the “Path 15” bottleneck between northern and southern California through transmission expansion financed by non-Federal contributions. Statements of interest were solicited through a Federal Register notice in early June 2001. Thirteen entities responded and on October 18, 2001, DOE Secretary Abraham announced plans for Western to proceed with the Los Banos-Gates transmission upgrade project in central California. Through a public/private contract, Western will oversee the use of non-Federal funds to alleviate constraints on Path 15. An environmental record of decision was published by Western in the Federal Register on December 20, 2001. Negotiations are ongoing among the project participants on participation, consolidated operations and interconnection agreements.

## **Major Program Changes**

Beginning in FY 2003, the Administration proposes that financing of the U. S. Army Corps of Engineers’ operation and maintenance costs in Western’s service area allocated to the power function for repayment may be funded from the transfer of receipts deposited by Western from the sale of power and related services.

The FY 2003 request continues the phase-out that began in FY 2001 of Western’s financing of its customers’ purchase power and wheeling expenses. The \$30 million in receipt spending authority reduces the Federal financing role in Western’s purchase power and wheeling activities from about 48 percent of the total purchase power and wheeling program in FY 2002 to less than eight percent in FY 2003. The phase-out assumes that customers, acting independently or in partnerships, will increasingly enter energy markets to arrange directly with suppliers for their energy and related services needs. Western may also continue to assist its customers in arranging the funding of these activities through alternative funding mechanisms, such as net billing and bill crediting.

The President’s FY 2003 budget does not include funding for the Utah Reclamation Mitigation and Conservation Account. The purpose of this Account is to fund environmental mitigation expenditures covering fish and wildlife, and recreation resources impacted by the Central Utah and

Colorado River Storage Projects in the State of Utah. Western already separately finances, through its Colorado River Basins Power Marketing Fund, mitigation activities at its two projects in Utah, Flaming Gorge Dam and Lake Powell/Glen Canyon Dam. Western also contributes to mitigation on tributaries that flow into Lake Powell through its funding of the Recovery Implementation Program (P. L. 106-392).

The President's FY 2003 budget includes funding for the Government's share of increased costs associated with pension and annuitant health care benefits. Western's power rates have included and recovered these costs since 1998. The data is presented on a comparable basis.

### Site Funding and Federal Staffing Profiles

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
Construction, Rehabilitation, Operation and Maintenance (CROM) Account			
Program Direction . . . . .	113,941 <sup>a</sup>	115,499 <sup>a</sup>	114,408 <sup>a</sup>
Operation and Maintenance . . . . .	36,014	37,796	37,796
Construction and Rehabilitation . . . . .	23,066	18,764	17,784
Purchase Power and Wheeling . . . . .	65,224	186,124	30,000
Utah Mitigation and Conservation . . . . .	5,950	6,000	0
Total, Operating Expenses . . . . .	244,195 <sup>b</sup>	364,183	199,988
Planned Use of Prior Year Balances . . . . .	-5,983	0	-1,200
Offsetting Collections . . . . .	-65,224	-186,124	-30,000
Total, CROM Account Budget Authority	172,988	178,059	168,788
 Falcon and Amistad Operating and Maintenance Account	 2,663 <sup>c</sup>	 2,663	 2,734

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<sup>a</sup> Reflects funding for the Government's share of increased costs associated with pension and annuitant health care benefits.

<sup>b</sup> Reflects a Congressional rescission of \$365,000 included in P. L. 106-554, and a supplemental appropriation of \$1,578,000 included in P. L. 107-20.

<sup>c</sup> Reflects a Congressional rescission of \$7,000 included in P. L. 106-554.

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
Colorado River Basins Power Marketing Fund (CRBPMF)			
Program Direction .....	32,207 <sup>a</sup>	35,974 <sup>a</sup>	39,386 <sup>a</sup>
Equipment, Contracts and Related Expenses .....	359,735	402,584	371,421
Total, Operating Expenses .....	<u>391,942</u>	<u>438,558</u>	<u>410,807</u>
Offsetting Collections Realized .....	<u>-391,942</u>	<u>-464,558</u>	<u>-432,807</u>
Total, CRBPMF Obligational Authority	<u>0</u>	<u>-26,000</u>	<u>-22,000</u>
Total, Western Area Power Administration, All Accounts	175,651	154,722	149,522
Full Time Equivalents	1,290	1,320	1,290

January 24, 2002

Date

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Michael S. HacsKaylo  
Administrator, Western Area Power Administration

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<sup>a</sup> Reflects funding for the Government's share of increased costs associated with pension and annuitant health care benefits which are offset by collections.

# Western Area Power Administration

## Program Mission

The Western Area Power Administration (Western) markets and delivers reliable, cost-based hydroelectric power and related services giving preference to publicly-owned electric utilities and cooperatives. 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 timeframes established by law and regulations.

## Program Strategic Performance Goals

**ER9-1:** Maintain reliability in the evolving electric utility industry.

### Performance Indicator

Reliability Performance: Receive monthly control compliance ratings that meet or exceed the Control Performance Standards (CPS) 1 and 2 established by the North American Electric Reliability Council (NERC).

### Performance Standards

**Blue/Green:** Achieve “Pass” (CPS 100; CSP2 90) on all 24 monthly standards for the year.

**Yellow:** Achieve “Pass” on 23 monthly ratings during a fiscal year period.

**Red:** Achieve “Pass” on 22 (or less) monthly ratings during a fiscal year period.

## Annual Performance Results and Targets

FY 2001 Results	FY 2002 Targets	FY 2003 Targets
Transmission System Performance: Met Target. Western attained “Pass” ratings for CPS1 and CPS2 for every month of FY 2001. Western’s FY 2001 average for CPS1 rating is 186.93%; the CPS2 average is 98.48%. (ER2-5)	Attain monthly NERC compliance ratings of 100 or higher for Control Performance Standard (CPS)1 and a rating of 90 or above for CPS2. (ER2-5)	Attain monthly NERC compliance ratings of 100 or higher for Control Performance Standard (CPS)1 and a rating of 90 or above for CPS2. (ER9-1)

**ER9-2:** Establish and meet planned annual repayment for each Federal power system.

### Performance Indicator

Principal Repayment: Meet planned annual repayment of principal on Federal power investment.

**Performance Standards**

**Blue:** Achieve >105% or more of planned repayment.

**Green:** Achieve 95-105% of planned repayment.

**Yellow:** Achieve 80-94% of planned repayment.

**Red:** Achieve <80% or less of planned repayment

**Annual Performance Results and Targets**

FY 2001 Results	FY 2002 Targets	FY 2003 Targets
Repayment of Federal Power Investment: Western's repayment target results were below expectations in FY 2001 due to below-normal rainfall over several watersheds in the marketing area. (ER2-5)	Meet planned annual repayment of principal on Federal power investment. (ER2-5).	Meet planned annual repayment of principal on Federal power investment. (ER9-2).

**ER9-3:** Ensure everyone at Western is aware of, committed to, and has the tools to work safely.

**Performance Indicator**

Recordable Accident Frequency Rate: Achieve a safety performance of not greater than a 3.3 recordable accident frequency rate for recordable injuries per 200,000 hours worked or the Bureau of Labor Statistics' industry rate, whichever is lower.

**Performance Standards**

**Blue:** Achieve >10% below the 3.3 rate, or the Bureau of Labor Statistics' industry rate, whichever is lower.

**Green:** Achieve 0-10% below the 3.3 rate, or the Bureau of Labor Statistics' industry rate, whichever is lower.

**Yellow:** Achieve 0-10% above the 3.3 rate, or the Bureau of Labor Statistics' industry rate, whichever is lower.

**Red:** Achieve >10% above the 3.3 rate, or the Bureau of Labor Statistics' industry rate, whichever is lower.



## Annual Performance Results and Targets

FY 2001 Results	FY 2002 Targets	FY 2003 Targets
<p><b>Safety:</b> Met Target. Western's fiscal year 2001 rate is 1.7. (ER2-5).</p>	<p>Achieve a recordable accident frequency rate for recordable injuries per 200,000 hours worked of not greater than 3.3, or the latest published Bureau of Labor Statistics' industry rate, whichever is lower. (ER2-5).</p>	<p>Achieve a recordable accident frequency rate for recordable injuries per 200,000 hours worked of not greater than 3.3, or the latest published Bureau of Labor Statistics' industry rate, whichever is lower. (ER9-3).</p>

### Significant Accomplishments and Program Shifts

Beginning in FY 2003, the Administration proposes that financing of the U. S. Army Corps of Engineers' operation and maintenance costs in Western's service area allocated to the power function for repayment may be funded from the transfer of receipts deposited by Western from the sale of power and related services.

The FY 2003 request resumes the phase-out of Western's purchase power and wheeling activities by eliminating any new authorization for use of receipts in FY 2003 in excess of the \$30 million authorized in FY 2001. The \$30 million in receipt spending authority reduces Western's direct authority for purchase power and wheeling activities from about 48 percent of the total purchase power and wheeling program in FY 2002 to less than eight percent in FY 2003. The phase-out places nearly total financial responsibility on customers to directly finance the purchase power and related activities. Western's ability to fulfill its contractual power delivery obligations rests with the customers.

The President's FY 2003 budget does not include funding for the Utah Reclamation Mitigation and Conservation Account. The purpose of this Account is to fund environmental mitigation expenditures covering fish and wildlife, and recreation resources impacted by the Central Utah and Colorado River Storage Projects in the State of Utah. Western already separately finances, through its Colorado River Basins Power Marketing Fund, mitigation activities at its two projects in Utah, Flaming Gorge Dam and Lake Powell/Glen Canyon Dam. Western also contributes to mitigation on tributaries that flow into Lake Powell through its funding of the Recovery Implementation Program (P. L. 106-392).

On October 18, 2001, DOE Secretary Abraham announced plans for Western to proceed with the Los Banos-Gates transmission upgrade project in central California. Through a public/private contract, Western will oversee the use of non-Federal funds to alleviate constraints on Path 15, a transmission bottleneck between northern and southern California. An environmental record of decision was published in the Federal Register on December 20, 2001. Negotiations are ongoing among the project participants on participation, consolidated operations and interconnection agreements.

In FY 2001, Western sold 40.9 billion kilowatt-hours of energy; and had preliminary gross operating revenues of \$1.167 billion. Audited actual revenues are not yet available.

Western began a three-year initiative in the spring of 2001 to help ensure that Western retains qualified employees well into the future, despite an aging workforce. Many potential retirements, combined with a low number of younger employees, have led to concerns about retaining employees' technical skills in a competitive market for skilled workers. Five areas for action are addressed in Western's plan: performance management; recruitment and retention; diversity; employee development; leadership development and succession planning.

To help the state avert rolling blackouts during FY 2001, Western responded to the California Independent System Operator's emergency requests for energy. Western, in collaboration with the U. S. Bureau of Reclamation, increased generation from Glen Canyon Dam on several occasions, diverting additional power to California.

Western has voluntarily participated in regional transmission organization (RTO) formation efforts since 1996, and continues to be actively engaged as RTOs evolve. Western was an active participant in the working group that developed the tariff and associated documents recently filed with the Federal Energy Regulatory Commission by WestConnect. Western continues to monitor the efforts of the California Independent System Operator (ISO) to attain RTO status, as well as the activities of RTO West and TRANSLink ITC. Discussions with the Midwest ISO, with the potential for Western membership, are ongoing. Western plans to conduct a public process, including an environmental evaluation, prior to joining an RTO. An economic analysis will also take place, to affirm that the benefits of joining an RTO outweigh the costs to Western and our customers.

Western continues its 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 received one sanction in FY 2001 (out of a total of 328 issued to signatory members, or 0.3 percent). Western's sanction equaled 0.087 percent of the total monetary sanctions assessed.

Western's marketing activities continue to provide significant benefits to new customers, including Native Americans. The source of power for the new allocations is a lower commitment to existing customers. Approximately 65 MW of power from the Pick-Sloan Missouri Basin Program-Eastern Division was allocated to tribes for a 20-year contract term, commencing on January 1, 2001. The allocation process for an additional 20 MW of Eastern Division power, available in 2006, will commence in FY 2003. Three Native American entities have signed contracts for 3 MW from Western's Sierra Nevada Region, with contracts becoming effective on January 1, 2005. Allocations from Western's Loveland Area Projects will provide power to 26 new customers, including Yellowstone National Park and six Native American tribes, with deliveries starting in the fall of 2004. Western's Colorado River Storage Project Management Center is in the process of completing allocations of 93.7 MW of Federal hydropower to over 50 tribes upon expiration of existing contracts in September 2004. Finally, Western's Desert Southwest Region has started planning for the marketing of power from the Parker-Davis Project when presently effective contracts terminate in 2008.

In FY 2001, Western operated and maintained 16,867 circuit-miles of high-voltage transmission lines, 260 substations, and associated power system control, communication and electrical facilities located across Western's 15-state service territory; marketed reliable hydroelectric power to approximately 650 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, Western continues to remain on NERC's 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.

DOE's Office of the Inspector General conducted an audit of Western's maintenance of its transmission lines and related infrastructure. The audit was terminated in March 2001 with no findings.

Western continued its effort 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.

In collaboration with DOE, Bonneville Power Administration and Western successfully conducted peer reviews of each other's mission critical systems (i.e. Supervisory Control and Data Acquisition/Automatic Generation Control (SCADA/AGC)) to comply with the Government Information Security Reform Act. DOE's Acting Chief Information Officer endorsed the idea, and the Inspector General agreed to proceed with the in-house review, saving the PMAs about \$225,000. While the team found no major vulnerabilities, it is now working on enhancing existing cyber security tools, plans and procedures. Future peer reviews are planned.

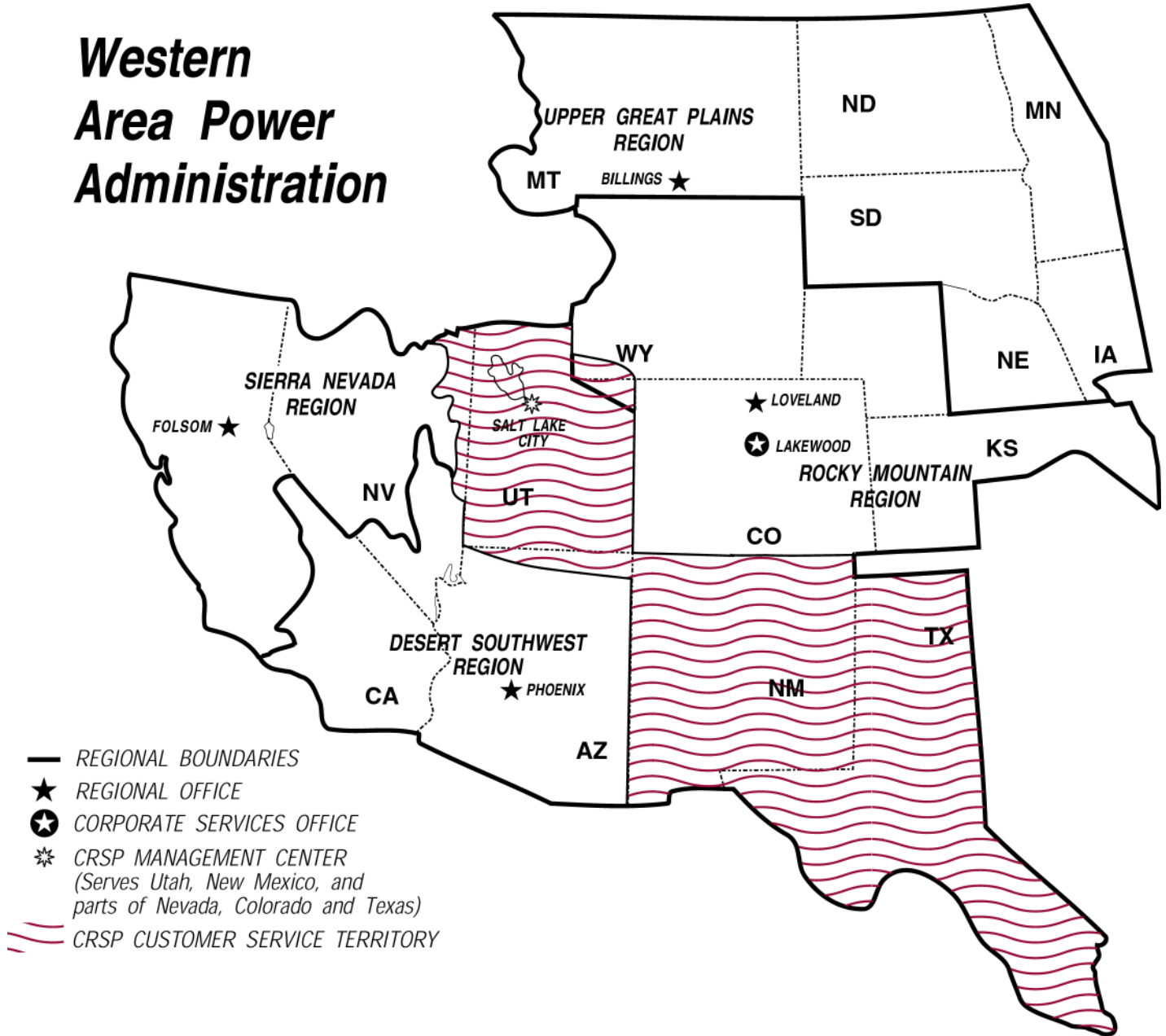
In FY 2001, Western significantly improved the protection of its mission critical SCADA/AGC assets through the implementation of Intrusion Detection Systems at all entry points to its network. Western also implemented multi-layer virus protection across the enterprise. Policies for virus protection and backup/recovery were implemented.

Western joined 30 other agencies of the Denver Federal Executive Board to commit to purchase 10 MW of windpower through Xcel Energy's windsource program. Western's commitment covers approximately 25 percent of the energy requirement for its corporate headquarters facility in Lakewood, Colorado.

Western provided leadership for a Public Power Renewable Energy Action Team (PPREAT) established in May 2001. Western serves on PPREAT's executive committee as an *ex officio* member. The team's goals are to help public power utilities use more renewable energy to help stabilize energy costs. To achieve this goal, the team will identify opportunities for public power joint ownership of renewable energy projects, solidify technical assistance for renewable energy project development and create a model for joint ownership of renewable resources. The team was awarded a \$6 million Public Interest Energy Research grant from the California Energy Commission.

The cost and benefits of Western's operation, maintenance and capitalized work are 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. Western continues to pursue alternative forms of financing for its programs, such as bill crediting and customer advance funding, to reduce its dependence on annual appropriations while maintaining the same level of oversight and control.

# Western Area Power Administration



# Construction, Rehabilitation, Operation and Maintenance

## Funding Profile

(dollars in thousands)

	FY 2001 Comparable Appropriation	FY 2002 Original Appropriation	FY 2002 Adjustments	FY 2002 Comparable Appropriation	FY 2003 Request
Construction, Rehabilitation, Operation and Maintenance Account					
Program Direction . . . . .	113,941 <sup>a</sup>	109,378	6,121 <sup>a</sup>	115,499	114,408 <sup>a</sup>
Operation and Maintenance . . . . .	36,014	37,796		37,796	37,796
Construction and Rehabilitation . . . . .	23,066	18,764		18,764	17,784
Purchase Power and Wheeling . . . . .	65,224	186,124		186,124	30,000
Utah Mitigation and Conservation . . . . .	5,950	6,000		6,000	0
<b>Total Program, Operating Expenses . . . . .</b>	<b>244,195<sup>b</sup></b>	<b>358,062</b>	<b>6,121</b>	<b>364,183</b>	<b>199,988</b>
Use of Prior Year Balances . . . . .	-5,983	0		0	-1,200
Offsetting Collections . . . . .	0	-152,624		-152,624	0
Offsetting Collections (P. L. 106-377) . . . . .	-65,224	-33,500		-33,500	-30,000
<b>Total Budget Authority Request . . . . .</b>	<b>172,988</b>	<b>171,938</b>	<b>6,121</b>	<b>178,059</b>	<b>168,788</b>
Total Budget Authority Request Excluding Full Funding for Federal Retirements . . . . .	167,043	171,938	0	171,938	162,758

### 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 (41 stat. 613)
- "Interior Department Appropriation Act of 1928" (44 stat. 957)

<sup>a</sup> The FY 2001 and FY 2002 columns of the FY 2003 Congressional Request include funding in the amount of \$5,945,000 and \$6,121,000, respectively, for the Government's share of increased costs associated with pension and annuitant health care benefits. These funds are comparable to FY 2003 funding of \$6,030,000. (Note: The data is presented on a comparable basis as if the legislation had been enacted and implemented in FY 2001.)

<sup>b</sup> Reflects a Congressional rescission of \$365,000 included in P. L. 106-554, and a supplemental appropriation of \$1,578,000 included in P. L. 107-20.

## Funding by Site

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	\$ Change	% Change
Western Area Power Administration . . . . .	244,195	364,183	199,988	-164,195	-45.1%
Use of Prior Year Balances . . . . .	-5,983	0	-1,200	-1,200	+100.0%
Offsetting Collections . . . . .	-65,224	-186,124	-30,000	+156,124	+83.9%
<b>Total, Construction, Rehabilitation, Operation and Maintenance Account . . . . .</b>	<b>172,988</b>	<b>178,059</b>	<b>168,788</b>	<b>-9,271</b>	<b>-5.2%</b>

## Site Description

Western’s service area covers 1.3-million square miles in 15 states. Preliminary FY 2001 results indicate Western sold energy to 650 wholesale customers including 262 municipalities, 62 cooperatives, 18 public utility and 42 irrigation districts, 50 Federal and 55 State facilities, 28 investor-owned utilities, 42 marketers, 21 Native American services, and 70 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 about 10,000 megawatts of power from 55 hydropower plants and sells 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 2003, 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 Western’s system are accomplished by its employees at 51 duty stations located throughout its service area. These include the 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.

The Program Direction activity supports all of Western's performance goals. Dispatchers respond to minute-by-minute changes to meet or exceed performance levels established by NERC, supporting Western's Transmission System Performance Goal. Western's maintenance of the interconnected system at or above industry standards also supports the Transmission System Performance Goal. Energy schedulers maximize revenues from non-firm energy sales, thereby supporting the Repayment of Federal Power Investment Performance Goal. Additionally, in support of the Safety Performance Goal, Western trains its employees on a continuing basis in occupational safety and health regulations, policies and procedures, and conducts safety meetings at employee, supervisory and management levels to keep the safety culture strong. Accidents are reviewed to ensure lessons are learned and proper work protocol is in place.

Western operates and maintains a 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 WSCC'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 avoid redundant facilities.





(dollars in thousands)

FY 2001	FY 2002	FY 2003
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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 2003 include 999 for Western’s Construction, Rehabilitation, Operation and Maintenance (CROM) Account activities and 23 for Boulder Canyon Project (BCP) activities accomplished under a reimbursable agreement with the Bureau of Reclamation. FTE included in the CROM Account total 1,001 and 1,023 for FY 2001 and 2002, respectively. FTE associated with BCP activities for those fiscal years total 30 and 29, respectively.

The increased funding request reflects anticipated salary and within-grade increases. As authorized in P.L. 99-141, Western annually establishes pay rates and compensation policy for some employees (power system dispatchers, schedulers, marketers) based on prevailing rates in the electric power industry. Due to recruitment/retention issues for those occupations across the Nation, Western experienced a 7.28-8.72 percent salary increase in those categories beginning in October 2001. That increase is first reflected in the budgeted amounts in FY 2003. The salary increases for CROM activities are partially offset by a reduction of 24 FTE budgeted in this account due to budget constraints and implementation of efficiencies across all programs.

The FY 2001 and FY 2002 columns of the FY 2003 Congressional Request include funding in the amount of \$5,945,000 and \$6,121,000 respectively, for the Government’s share of increased costs associated with pension and annuitant health care benefits. These funds are comparable to FY 2003 funding of \$6,030,000.

**Travel** ..... **7,734**      **8,245**      **6,728**

Estimates include 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 decrease reflects a reduction in planned activity resulting in fewer employees traveling.

(dollars in thousands)

FY 2001	FY 2002	FY 2003
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**Support Services** ..... **11,523**      **11,906**      **10,045**

Support services funded in this activity include information processing, warehousing, computer-aided drafting, engineering, and general administrative support. Technical support services associated with the construction program and management studies will be performed by Federal staff, resulting in a decrease of \$1.7 million. In addition, management studies support (\$0.2 million) is eliminated. The decreases reflect implementation of efficiencies.

**Other Related Expenses** ..... **13,853**      **12,624**      **11,474**

Other related expenses include rental space, utilities, supplies and materials, telecommunications, personal computers, printing and reproduction, training tuition, and DOE's working capital fund distribution. 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 is attributed to reductions in software and computer replacements/upgrades (-\$0.7 million), miscellaneous supplies and intermittent services (-\$0.3 million), and training and printing/reproduction (-\$0.1 million each). The decreases are offset slightly by an increase of \$69,000 in rental space.

**Total, Program Direction** ..... **113,941**      **115,499**      **114,408**

### Explanation of Funding Changes

FY 2003 vs FY 2002 (\$000)
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**Salaries and Benefits**

The increase in salaries and benefits is primarily attributed to salary and within-grade increases, including salaries determined by prevailing rates in the electric utility industry, partially offset by a reduction of 24 FTE funded in this account and a slightly lower level of costs associated with full funding for Federal retirements.. ..... +3,437

**Travel**

Decrease in travel is attributed to a decrease in planned activity resulting in fewer employees traveling. .... -1,517

FY 2003 vs FY 2002 (\$000)
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**Support Services**

Decrease in support services is primarily attributed to Federal staff performing the technical support services and management studies previously contracted. The changes reflect implementation of efficiencies. . . . . -1,861

**Other Related Expenses**

The decrease is attributed to software and computer replacements/upgrades (\$-0.7 million), miscellaneous supplies and intermittent services (\$-0.3 million), and printing/reproduction and training (-\$0.1 million each). The decreases are offset by a slight increase of \$69,000 in rental space. . . . . -1,150

**Total Funding Change, Program Direction** . . . . . **-1,091**

**Support Services**

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	\$ Change	% Change
<b>Technical Support Services</b>					
Economic and Environmental Analysis . .	1,228	1,711	0	-1,711	-100.0%
Test and Evaluation Studies . . . . .	250	0	0	0	0.0%
<b>Total, Technical Support Services</b> . . . . .	<b>1,478</b>	<b>1,711</b>	<b>0</b>	<b>-1,711</b>	<b>-100.0%</b>
<b>Management Support Services</b>					
Management Studies . . . . .	153	150	0	-150	-100.0%
Training and Education . . . . .	85	0	0	0	0.0%
ADP Support . . . . .	4,728	5,062	5,062	0	0.0%
Administrative Support Services . . . . .	5,079	4,983	4,983	0	0.0%
<b>Total, Management Support Services</b> . . . . .	<b>10,045</b>	<b>10,195</b>	<b>10,045</b>	<b>-150</b>	<b>-1.5%</b>
<b>Total, Support Services</b> . . . . .	<b>11,523</b>	<b>11,906</b>	<b>10,045</b>	<b>-1,861</b>	<b>-15.6%</b>

## Other Related Expenses

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	\$ Change	% Change
Training .....	1,000	900	800	-100	-11.1%
Working Capital Fund .....	452	853	853	0	0.0%
Printing and Reproduction .....	300	275	150	-125	-45.5%
Rental Space .....	2,726	2,354	2,423	+69	+2.9%
Software Procurement/Maintenance Activities/Capital Acquisitions .....	3,760	3,482	2,748	-734	-21.1%
Other .....	5,615	4,760	4,500	-260	-5.5%
<b>Total, Other Related Expenses .....</b>	<b>13,853</b>	<b>12,624</b>	<b>11,474</b>	<b>-1,150</b>	<b>-9.1%</b>

# 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 for 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 IT 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 2001	FY 2002	FY 2003	\$ Change	% Change
Operation and Maintenance					
Regular Operation and Maintenance . . .	19,800	20,280	18,629	-1,651	-8.1%
Replacements and Additions . . . . .	16,214	17,516	19,167	+1,651	+9.4%
Total, Operation and Maintenance . . . . .	36,014	37,796	37,796	0	0.0%
Use of Prior Year Balances . . . . .	-4,000	0	-600	-600	-100.0%
Total, O&M Budget Authority . . . . .	32,014	37,796	37,196	-600	-1.6%

## Detailed Program Justification

(dollars in thousands)

FY 2001	FY 2002	FY 2003
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**Regular Operation and Maintenance . . . . . 19,800 20,280 18,629**

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 Goal by preventing sudden failure, unplanned outages, and possible regional power system disruptions. Daily discussions of safe working procedures before work is commenced support the Safety Performance Goal. 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 reflects a slightly lower level of activity.

**Replacements and Additions . . . . . 16,214 17,516 19,167**

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 Goal 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 Goal. Planned activity is detailed by category below:

(dollars in thousands)

FY 2001	FY 2002	FY 2003
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**Electrical Equipment** ..... **7,198**      **7,052**      **7,609**

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. Additionally, existing transmission system easements for the Parker-Davis Project (Arizona), originally purchased 50 years ago, must be renegotiated. 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. The increase reflects the purchase of transmission system easements (\$1,000,000) partially offset by reductions in other purchases.

**Communications Equipment** ..... **3,600**      **4,082**      **4,481**

Western is replacing/upgrading microwave, supervisory control and data acquisition, and other communication and control equipment. The staged movement to narrow communications band spectrums as directed by the Federal Communications Commission (FCC) and National Telecommunications and Information Administration (NTIA) continues. Funds are also requested for Western’s portion of a co-shared arrangement to install fiber optics in the Sacramento (California) area (+\$250,000), avoiding duplicate fiber networks and meeting WSCC reliability requirements for the communication path. 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 is primarily attributed to the fiber optics project.

**Capitalized Movable Equipment** ..... **5,416**      **6,382**      **7,077**

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 upgrades/replacements of software associated with the energy scheduling system in the Sierra Nevada Region (SNR) (+\$500,000) and Western’s integrated business information system (+\$1,400,000) which is made up of its financial management system, plant management system, and relational interactive time and attendance system. The SNR energy scheduling software must be upgraded to implement the 2004 power marketing plan, to meet the changing market requirements, and to comply with industry standard scheduling protocols. The business information system must be upgraded to correct system inefficiencies and to increase the credibility and usefulness of its output. The increases are partially offset by reductions in other capitalized movable equipment purchases.

**Total, Operations and Maintenance** ..... **36,014**      **37,796**      **37,796**



## Explanation of Funding Changes

FY 2003 vs FY 2002 (\$000)
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**Regular Operation and Maintenance**

Decrease in regular O&M reflects a lower level of maintenance activity. . . . . -1,651

**Replacements and Additions**

Increase in replacements and additions is primarily attributed to the renegotiation/repurchase of transmission system easement in the Parker-Davis Project (+\$1,000,000), installation of fiber optics in the Sacramento (California) area (+\$250,000), upgrade/replacements to software associated with the Sierra Nevada Region's energy scheduling system (+\$500,000), and Western's integrated business information system (+\$1,400,000). These increases are partially offset by reductions in other capitalized movable equipment purchases (-\$1,499,000). . . . . +1,651

**Total Funding Change, Operation and Maintenance** . . . . .           0

# **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 2003, Western's transmission system will have 16,883 circuit-miles of line and 264 substations. In FY 2003, 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 increase, and system reliability declines. Western will have 96 transformers and 59 breakers over 41 years old in FY 2003. 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.

Western has aggressively reduced its capital investment program from levels around \$110 million annually in the early 1990s to a base of about \$40 million (about \$25 million excluding program direction). This base level supports a program that emphasizes replacement and upgrading of existing infrastructure to sustain reliable power delivery to our customers while maintaining competitive rates. Western's planned program level for FY 2003 is \$17.8 million, \$1 million less than the FY 2002 program. 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 and decrease in new construction projects, 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. 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 delays replacement costs for as long as reasonably possible while managing the risk of sudden failure and emergency replacement. Further postponement 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.

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 O&M activity and are reflected in the Program Direction section of Western's budget request.

### Funding Schedule

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	\$ Change	% Change
Construction and Rehabilitation					
Transmission Lines and Terminal Facilities	4,009	4,827	3,355	-1,472	-30.5%
Substations	12,884	8,333	6,194	-2,139	-25.7%
Other <sup>a</sup>	6,173	5,604	8,235	+2,631	+46.9%
Total, Construction & Rehabilitation	23,066	18,764	17,784	-980	-5.2%
Use of Prior Year Balances	-1,983	0	-600	-600	-100.0%
Total, C&R Budget Authority	21,083	18,764	17,184	-1,580	-8.4%

<sup>a</sup> 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 2001	FY 2002	FY 2003
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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. This program supports the performance goals 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 operations. Both contribute to attaining the Performance Goal of meeting or exceeding monthly control compliance ratings established by NERC by reducing the risk of equipment failure, unplanned outages, and possible local and regional power system disruptions. The Safety Performance Goal 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 Federal Power Investment Performance Goal by promoting a well-planned C&R program with a relatively stable budget over the long term, 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:

<b>Transmission Lines and Terminal Facilities .....</b>	<b>4,009</b>	<b>4,827</b>	<b>3,355</b>
<b>Transmission Lines and Terminal Facilities, Continuing Work .....</b>	<b>4,009</b>	<b>2,300</b>	<b>1,234</b>

Complete minor modifications and rehabilitation of transmission lines (TL) in FY 2003 to ensure power system reliability and stability:

Reroute a 5-mile portion of Curecanti-Lost Canyon 230-kV TL (Colorado) located on active landslides which have moved and damaged existing structures;

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 2001	FY 2002	FY 2003
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Rebuild the Cheyenne-Nunn 115-kV TL (Wyoming and Colorado) due to its age (constructed in 1939) and deterioration. Line may 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; and

Continue Pick-Sloan Missouri Basin Program and Colorado River Storage Project wood pole testing and replacement programs. These programs maintain wood pole transmission lines, maximizing their effective service lives and delaying the need for expensive total rebuild projects. Without funding, wood pole lines will further deteriorate, increasing the risk of pole and crossarm failures. Line outages caused by these failures could trigger major regional outages given the high loadings now experienced on the interconnected power system.

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,**

<b>Rehabilitation Starts .....</b>	<b>0</b>	<b>2,527</b>	<b>2,121</b>
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Five TL and terminal facility rehabilitation starts are planned in FY 2003:

Repair/relocate structures in a section of the Curecanti-Rifle 230-kV TL (Colorado) that are located on unstable soils and are moving in a slow but sustained landslide. The earth movement will eventually take the section of the line down if not mitigated;

Relocate 3.6 miles of the existing Parker-Gila 161-kV TL which runs through the town of Quartzite (Arizona). The existing segment has a very narrow right-of-way and has extensive encroachment problems, including buildings and propane tanks, that present serious safety and maintenance issues;

(dollars in thousands)

FY 2001	FY 2002	FY 2003
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Repair or replace several short distribution lines formerly the responsibility of the Bureau of Reclamation. These lines normally run from a powerplant to a power generation facility, such as a gate control. The lines are old, most dating to the original installation of the facilities. The majority of these lines are in Wyoming;

Rebuild the Cheyenne-Richard Lake section of the Cheyenne-Miracle Mile 115-kV TL (Colorado and Wyoming). This 31-mile section was constructed in 1939 on wood poles with copper conductor. The wood poles are deteriorated and copper conductor has not been used for many years. Hardware and specialized equipment for splicing and maintaining the copper conductor are no longer available. The poor condition of the line requires excessive maintenance, is subject to outages, and requires replacement to maintain reliability in the area;

Install motor-operated, SCADA-controlled line switches to reduce outage times from several hours to several minutes. Many of these lines, located in remote locations, provide the only source of power to rural communities through the use of taps to the transmission line. These loads are typically small but very important to these rural communities. When these taps were installed on the transmission system, remote control of the power system was not possible. The remoteness of these taps require many hours of drive time to get to the site. Upgrades will be done in a staged manner, with facilities being prioritized based on remoteness, frequency of line operation, and problems with the existing sectionalizing switches.

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.

**Transmission Lines and Terminal Facilities,**

**Reimbursable Work for Others . . . . . 0 0 0**

Transmission line and terminal work for others in FY 2003 includes planning, design or construction of:

Interconnection facilities for Caithness Energy’s Big Sandy energy project (Arizona);

Interconnection facilities for the City of Lodi, Modesto Irrigation District, the Transmission Agency of Northern California, Calpine Corporation’s Tracy East 230-kV project, and Florida Power and Light’s Rio Linda Powerplant (California);

Interconnection facilities and substations for Rushmore Electric at Elk Creek Substation, Basin Electric at New Underwood Substation, East River Electric at Tea Substation, and Northwestern Public Service at Yankton East Substation (South Dakota);

Los Banos-Gates 500-kV TL project, also known as Path 15, an extension of the California-

(dollars in thousands)

FY 2001	FY 2002	FY 2003
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Oregon Transmission Project (California);

Miles City DC Tie project for Basin Electric (Montana);

Boulder City and Hoover TL Bypasses (Nevada) for Nevada Department of Transportation and U. S. Department of Transportation, respectively;

Belfield-Hettinger 345-kV TL project for Basin Electric (North Dakota);

345-kV interconnection facility (300 MW of wind capacity) on Basin Electric’s Leland Olds-Watertown TL (near North Dakota-South Dakota borders);

161-kV interconnection facility (50-500 MW wind capacity for Fort Peck Indian tribes) at Fort Peck Substation (Montana);

Interconnection facility with 50 MW combustion turbines as a network resource for Missouri River Energy Services at Western’s Watertown (South Dakota), Denison (Iowa), and Moorhead (Minnesota) Substations.

Western’s work for others has increased significantly under the open access transmission tariff adopted in response to FERC Order No. 888. The tariff requires Western to provide interconnection to its transmission system. New generation 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.

<b>Substations .....</b>	<b>12,884</b>	<b>8,333</b>	<b>6,194</b>
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**Construction, Rehabilitation, Operation and Maintenance/  
Western Area Power Administration/  
Construction and Rehabilitation**

**FY 2003 Congressional Budget**

(dollars in thousands)

FY 2001	FY 2002	FY 2003
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**Substations, Continuing Work** ..... **12,884**      **810**      **1**

Complete the replacement of high-voltage equipment such as circuit breakers, transformers, reactors, disconnect switches, and fuses at: Davis and Parker (Arizona); Hayden and Salida (Colorado); Denison (Iowa); Glendive and Yellowtail (Montana); Grand Island (Nebraska); Flandreau, Ft. Thompson, Groton, Philip, Summit, and Watertown (South Dakota); and Alcova, Archer, Lusk and Raderville (Wyoming). This equipment requires replacement primarily due to reliability factors, 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. 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**      **7,523**      **6,193**

Substation rehabilitation starts planned in FY 2003 include:

Replace 161-kV interrupter switches, ground switches, instrument transformers and station batteries at Bouse Tap (Arizona). The equipment dates to 1955, is worn out, is a demonstrated reliability risk, and spare parts are no longer available. Both the interrupter and ground switches are poorly located high above grade in the bus structure steel, making maintenance difficult and more dangerous;

Replace four 69-kV circuit breakers and associated disconnect switches, circuit and potential transformers, and modify lattice steel structures as necessary at Davis Switchyard (California). The equipment dates to 1951, has exceeded its expected service life, and poses an unacceptable risk to system reliability. Replacement parts are not available, and the new configuration would reduce safety hazards. This project was originally planned as a FY 2001 start, but was delayed;

Replace two 69-kV circuit breakers and related equipment, and add a 115-kV bypass bay and a 69-kV transfer/transformer breaker at Forman Substation (North Dakota). The breakers have required excessive maintenance for many years, and the bay addition will enhance reliability and increase flexibility in the operation and maintenance of the entire substation;



(dollars in thousands)

FY 2001	FY 2002	FY 2003
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Replace a reactor, five 161-kV circuit breakers, 16 161-kV disconnect switches, six potential transformers of varying voltages, two 161-kV coupling capacity voltage transformers, three 69-kV current transformers, and related equipment at Creston Substation (Iowa). The substation was placed in service in 1963, and similar equipment at the substation has already been replaced. Manufacturers are dropping support of this obsolete equipment;

Replace two 230-kV circuit breakers, four 115-kV circuit breakers, six 230-kV disconnect switches, 12 115-kV disconnect switches, and related equipment at New Underwood Substation (South Dakota). The equipment was manufactured in the 1950s and has exceeded its normal life span; spare parts are no longer available;

Replace 115-kV/12.5-kV main power transformer KY1B at Wall Substation (South Dakota). The transformer entered service in 1963 and is no longer supported by the manufacturer. It is experiencing operational problems and needs to be replaced before it fails completely;

Addition of two 230/69-kV transformers, two 230-kV interrupters, a 230-kV transformer circuit breaker, and a 230-kV bypass circuit breaker at Denison Substation (Iowa) to relieve overloading on the existing 230-kV transformer, and backstop the two existing 69-kV transformers. The additional transformers will also alleviate the transfer capacity bottleneck on the Sioux City-Denison-Creston-Maryville (Iowa and Missouri) TL. Due to the system configuration and line loadings in this area, any outage at Denison can trigger additional outages. This project has been delayed by the emergency replacement of a failing transformer at Granite Falls Substation (Minnesota);

Replacement of the 110/34.5-kV transformer at Woonsocket Substation (South Dakota). This transformer was placed in service in early 1954, and is no longer supported by its manufacturer. Spare parts are not obtainable, and the transformer has reached the end of its useful service life. In order to maintain system reliability and avoid the increased costs of an emergency replacement, this transformer should be replaced as soon as possible;

Replacement of disconnecting switches at Bureau of Reclamation powerplants, mainly in Wyoming. Western is taking over ownership and maintenance responsibility for this equipment from the Bureau. Much of this equipment dates to the original construction of the facilities and has been poorly maintained over the years. Failure of this equipment may cause generation to be dropped with serious impacts on the interconnected power system. This project is related to the replacement of distribution lines and line switches, described earlier;

(dollars in thousands)

FY 2001	FY 2002	FY 2003
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In addition to the substation rehabilitation starts, substation projects in the preconstruction stage during FY 2003 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 and increasing, making it impossible to procure equipment in the same fiscal year as contract award. Substation projects that require equipment purchases for FY 2003 contract awards include: Rainbow Substation 161-kV transformer replacement (Montana); Jamestown Substation 230/115-kV transformer replacement (North Dakota); and Whiterock Substation 115/69/34.5-kV transformer and five breaker ring bus (Wyoming). The Whiterock Substation project is a joint participation effort with other utilities.

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.

**Substations, Reimbursable Work for Others** ..... 0 0 0

Substation work for others in FY 2003 includes:

Empire and Signal Substations for Electric Districts 4 and 2, respectively (Arizona);

Tracy Substation 69-kV bays for Modesto Irrigation District (California);

Watertown Substation capacitor additions for Basin Electric (South Dakota).

**Other** ..... 6,173 5,604 8,235  
**Other, Communications Systems** ..... 3,594 2,875 5,177

Continue to replace/modernize/expand communication systems (supervisory control and data acquisition equipment, microwave, fiber optic, global information system, and telecommunication) in the Colorado River Storage Project, the Central Valley Project, and the Pick-Sloan Missouri Basin Program to operate and control the transmission system. Replacement parts for the existing obsolete 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.

(dollars in thousands)

FY 2001	FY 2002	FY 2003
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**Other, Miscellaneous** ..... **2,579**      **2,729**      **3,058**

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); Devils Lake (North Dakota); and Huron (South Dakota);

Complete an alternate control building at Cheyenne Substation (Wyoming), and construct an alternate power source for the Rocky Mountain Region’s Operations Center (Colorado);

Upgrade Mead Substation Water and Fire Protection systems (Nevada) consisting of replacing a leaking 25+ year-old potable water line and upgrading both systems to bring them into compliance with local, state and federal regulations;

Construct Jamestown Maintenance Center building additions (North Dakota) consisting of adding a 32x60-foot garage and office space addition onto the existing warehouse and crew quarters building, adding a 40x60-foot garage space onto the existing line crew garage building, demolishing the old control building, and miscellaneous repainting, fence/gate work, and a vestibule between the two buildings;

Install optical fiber overhead groundwire in North Dakota and South Dakota. These projects are replacing the existing analog microwave radio systems with more efficient fiber optics and digital microwave radios. The existing system is in need of replacement due to age and lack of spare parts and manufacturer support. The existing system is not capable of handling the increased communications, control, data gathering, and remote monitoring load;

Annual power facility development costs and miscellaneous minor construction jobs that are not normally scheduled in advance or anticipated as part of larger projects.

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.

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

The following projects will have active preconstruction activities during FY 2003: Parker-Blythe 161-kV TL realignment and Parker-Gila 161-kV TL realignment, both at Parker (Arizona); Pinnacle Peak-Peacock 230-kV TL clearance distance upgrade (Arizona); Tucson Substation equipment replacement (Arizona); Platte Valley voltage upgrade project (Nebraska and Wyoming); Armour Substation crew quarters, vehicle storage and shop; and Sioux Falls Substation breaker replacement Stage 12 (South Dakota). Funding for these activities are included in the Program Direction section of Western’s request.

**Total, Construction and Rehabilitation** ..... **23,066**      **18,764**      **17,784**

## Explanation of Funding Changes

FY 2003 vs FY 2002 (\$000)
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**Transmission Lines and Terminal Facilities**

Transmission Lines and Terminal Facilities work is projected to be almost \$1.5 million less than the FY 2002 level. The decrease in the funding request for these facilities results from deferring planned upgrades due to budget constraints. The requested funding for FY 2003 will allow Western to repair, rebuild, or relocate structures that have been identified as having potential reliability, safety, and maintenance problems. It also funds the replacement of old Bureau of Reclamation distribution lines and line switches that pose significant risks to keeping generation resources on line. It will allow Western to continue its wood pole testing, treatment, and replacement programs to maximize service life and postpone costs. ....

-1,472

**Substations**

Western's Substation program will be approximately \$2.1 million less than the FY 2002 level. The decrease is a result of additional funds appropriated by Congress in FY 2002 for the high-priority portion of the South of Phoenix section of the Parker-Davis Project transmission system and the associated substation upgrades. The requested funding for FY 2003 is for additions that have been determined to be essential to maintaining a stable system.. ....

-2,139

**Other**

This increase represents funding of ongoing North and South Dakota fiber optic communications projects. These projects are replacing overloaded and obsolete analog microwave communications with digital and fiber optic systems that can handle the load from increasing communication, control, data gathering, and remote monitoring needs. In addition, the increase will provide telecommunication upgrades of existing analog equipment in the Rocky Mountain Region to more efficient fiber optics and digital microwave radios (+\$2,302,000). The increase also provides for a number of smaller but significant projects such as roof repairs, concrete foundations, and other minor construction work (+\$329,000). ....

+2,631

**Total Funding Change, Construction and Rehabilitation** .....

-980

## **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 are 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 contracts with customers of the Central Valley Project (CVP), the Pick-Sloan Missouri Basin Program, as well as other projects, for the delivery of firm power based on the average amount of power available from each of its systems. By its nature, hydropower is a variable resource. Thus, when variations occur as a result of drought or other unforeseen conditions, Western buys power and related transmission services to support its firm power levels. 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. The FY 2003 request continues the policy approved by Congress in FY 2001 of phasing-out Western's financing of its customers' purchase power and wheeling expenses. The phase-out assumes that customers, acting independently or in partnerships, will increasingly enter energy markets to arrange directly with suppliers for their energy and related service needs. Western may also continue to assist its customers in arranging the funding of these activities through alternative funding mechanisms, such as net billing and bill crediting.

The CVP, like most hydropower projects, purchases power from other sources during periods of low water flow associated with either drought or reduced water delivery requirements in order to supply its firm power levels 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 CVP 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 meets Western's CVP contract provisions which place special responsibilities on Western to provide power. This contract expires in FY 2005. For CVP, the FY 2003 purchase power and wheeling (PPW) need has decreased from \$189.1 million in FY 2002 to \$184.2 million assuming a return to more normal market conditions.

For FY 2003, the request seeks direct financing of \$30.0 million through authority to use offsetting collections from customer receipts. 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.

Western will encourage greater customer and supplier participation in power markets and alternative financing methods. Customer advances and participation in energy markets and traditional alternative

financing programs, including bill crediting, net billing, and reimbursable activities, will expand to meet customer needs.

## 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. A third table displays Western’s power purchases for FY 2000 through FY 2003.

### Budget Program Requirement

(dollars in thousands)					
	FY 2001	FY 2002	FY 2003	\$ Change	% Change
Central Valley Project . . . . .	59,424	92,324	25,945	-66,379	-71.9%
Pick-Sloan Missouri Basin and Other Programs	5,800	93,800	4,055	-89,745	-95.7%
<b>Total, PPW . . . . .</b>	<b>65,224</b>	<b>186,124</b>	<b>30,000</b>	<b>-156,124</b>	<b>-83.9%</b>
Offsetting Collections Realized . . . . .	-65,224	-186,124	-30,000	+156,124	+83.9%
<b>Total, PPW Budget Authority . . . . .</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>N/A</b>

### Program Activity (Gross)

(dollars in thousands)					
	FY 2001	FY 2002	FY 2003	\$ Change	% Change
Central Valley Project . . . . .	148,562	189,053	184,182	-4,871	-2.6%
Pick-Sloan Missouri Basin and Other Programs	40,808	196,451	192,188	-4,263	-2.2%
<b>Total, PPW (gross) . . . . .</b>	<b>189,370</b>	<b>385,504</b>	<b>376,370</b>	<b>-9,134</b>	<b>-2.4%</b>
Use of Alternative Financing					
Net Billing and Bill Crediting . . . . .	-85,646	-97,751	-140,065	-42,314	-43.3%
Reimbursable, Federal Contract Loads . . . . .	-18,500	-19,400	-22,500	-3,100	-16.0%
Subtotal, Alternative Financing . . . . .	-104,146	-117,151	-162,565	-45,414	-38.8%
Additional Off-budget Customer Financing	-20,000	-82,229	-183,805	-101,576	-123.5%
<b>Total, PPW . . . . .</b>	<b>65,224</b>	<b>186,124</b>	<b>30,000</b>	<b>-156,124</b>	<b>-83.9%</b>
Offsetting Collections Realized . . . . .	-65,224	-186,124	-30,000	+156,124	+83.9%
<b>Total, PPW Budget Authority . . . . .</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>N/A</b>

## Power Purchases Summary

	(in gigawatthours) <sup>a</sup>			
	FY 2000	FY 2001	FY 2002	FY 2003
Program Activity (Gross)				
Central Valley Project .....	5,120	5,344	5,167	5,187
Pick-Sloan Missouri Basin and Other Programs <sup>b</sup> .....	1,373	1,875	3,297	2,686
<b>Total, Purchases .....</b>	<b>6,493</b>	<b>7,219</b>	<b>8,464</b>	<b>7,873</b>

## Detailed Program Justification

(dollars in thousands)		
FY 2001	FY 2002	FY 2003

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 contractual power allocations based on average generation levels. The marketability gained by firming the hydro resource aids Western’s effort to provide a long-term dependable revenue stream and timely repayment of operating and maintenance costs and the taxpayer investment in the projects (Repayment of Federal Power Investment Performance Goal).

<b>Central Valley Project .....</b>	<b>59,424</b>	<b>92,324</b>	<b>25,945</b>
<b>Central Valley Project, Program Requirement .....</b>	<b>148,562</b>	<b>189,053</b>	<b>184,182</b>

In FY 2003, Western continues 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 to supplement the use of Federal revenues. 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 (PG&E), and to a lesser extent on market estimates for non-firm purchases. PG&E is CVP’s primary supplier of energy and transmission services. This contractual arrangement with PG&E expires in 2005.

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<sup>a</sup> One gigawatthour (GWH) equals one million kilowatt-hours (kWh).

<sup>b</sup> For Pick-Sloan, the purchased power need in FY 2003 is less than FY 2002 based on the assumption that water storage and precipitation levels will begin a return to normal from the drought conditions experienced over the past few years. The FY 2003 levels still remain higher than long term averages due to generation restrictions caused by the drought and continued dam safety work at the Bureau of Reclamation’s Horsetooth Reservoir in Colorado.

(dollars in thousands)

FY 2001	FY 2002	FY 2003
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**Central Valley Project, Alternative/Customer Financing**      **-89,138**      **-96,729**      **-158,237**

Alternative financing methods offsetting CVP’s requirements stated above are expected to increase from \$96.7 million in FY 2002 to \$158.2 million in FY 2003. The planned offsets significantly increase reliance on customers acting independently of Western and/or advance payments from non-Federal customers; approximately \$139.7 million. The Federal reimbursable program continues at \$18.5 million. Authority for use of offsetting collections is requested to finance the remaining \$25.9 million portion of the \$184.2 million CVP PPW program. Achieving this level of off-budget financing depends on high level customer support and entry into the energy market to arrange for their power needs.

**Pick-Sloan Missouri Basin and Other Programs** .....      **5,800**      **93,800**      **4,055**

**Pick-Sloan Missouri Basin and Other Programs,  
Program Requirement** .....      **40,808**      **196,451**      **192,188**

In FY 2003, the request continues to support long-term firm power commitments to customers of the Eastern and Western Divisions of the Pick-Sloan Missouri Basin Program and the Fryingpan-Arkansas Project commensurate with the levels of average firm hydropower marketed by Western. However, financial responsibility will take a significant shift from the Federal Government to Pick-Sloan customers, who will provide significant alternative financing support, or act independently of Western to meet their power and related service needs. 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. Although down from FY 2002, the FY 2003 program continues to reflect temporary increases that result from generation restrictions caused by below-normal storage levels, poor precipitation, and dam safety work at the Bureau of Reclamation’s Horsetooth Reservoir in Colorado. More normal funding, similar to FY 2001 levels, will be restored in the future.

**Pick-Sloan Missouri Basin and Other Programs,  
Alternative/Customer Financing** .....      **-35,008**      **-102,651**      **-188,133**

In FY 2003, alternative financing methods which offset the Pick-Sloan budget are expected to nearly double from \$102.7 million in FY 2002 to \$188.1 million in FY 2003. Pick-Sloan will need to increase its reimbursable financing from Federal and non-Federal customers by \$43.2 million in FY 2003, and will increase its reliance on net-billing and bill-crediting activities by an additional \$42.3 million.

**Total, Purchase Power and Wheeling** .....      **65,224**      **186,124**      **30,000**



## Explanation of Funding Changes

FY 2003 vs FY 2002 (\$000)
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### Central Valley Project

The gross PPW requirement of \$184,182,000 in FY 2003 is decreasing by \$4,871,000 from the \$189,053,000 level in FY 2002. The decrease is due to stabilizing market conditions in California. Western will continue the shift in financial responsibility for PPW activities to CVP customers by encouraging them to act on their own behalf in the energy markets in arranging to meet their power needs. Use of Federal receipts to cover PPW costs will decrease by \$66,379,000, from \$92,324,000 to \$25,945,000 in FY 2003, increasing alternative financing by \$61,508,000 from \$96,729,000 to \$158,237,000. The increased alternative financing raises Western's reliance on third-party financing arrangements and relies on customers' independent actions to arrange for their power needs. No new budget authority or appropriations are requested. . . . .

-66,379

### Pick-Sloan Missouri Basin and Other Programs

The gross PPW requirement of \$192,188,000 in FY 2003 is decreasing by \$4,263,000 from the \$196,451,000 level in FY 2002. The FY 2003 program decrease reflects a reduction in the amount of purchase power as the Pick-Sloan Eastern Division is anticipated to return to more normal reservoir conditions. Purchases for the Western Division however, remain at a temporarily increased level reflecting generation constraints due to multi-year dam safety work at the Bureau of Reclamation's Horsetooth Reservoir. Western will continue the shift in financial responsibility for PPW to the Pick-Sloan customers by reducing its use of Federal receipts from \$93,800,000 to \$4,055,000 in FY 2003 and increasing non-Federal support from \$102,651,000 to \$188,133,000, an increase of \$85,482,000. The increase in alternative financing allows Western's customers to act on their own behalf, entering energy markets to arrange for their power needs independently of Western. No new budget authority or appropriations are requested. . . . .

-89,745

**Total Funding Change, Purchase Power and Wheeling Budget Authority . . . . .** **-156,124**

# Utah Mitigation and Conservation

## Mission Supporting 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 2001	FY 2002	FY 2003	\$ Change	% Change
Total, Utah Mitigation and Conservation Budget Authority .....	5,950	6,000	0	-6,000	-100.0%

### Detailed Program Justification

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
<b>Utah Mitigation and Conservation .....</b>	<b>5,950</b>	<b>6,000</b>	<b>0</b>

No deposit will be made into the Account in FY 2003. Western already separately finances, through its Colorado River Basins Power Marketing Fund, mitigation activities at its two projects in Utah, Flaming Gorge and Lake Powell/Glen Canyon Dam. Western also contributes to mitigation on tributaries that flow into Lake Powell through its funding of the Recovery Implementation Program (RIP) (P. L. 106-392). Western's RIP contribution, funded through power revenues, will be equal to contributions from Upper Division states and may not exceed \$17 million. Additionally, the Utah Reclamation Mitigation and Conservation Account has a cash balance exceeding \$100 million.

<b>Total, Utah Mitigation and Conservation .....</b>	<b>5,950</b>	<b>6,000</b>	<b>0</b>
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## Explanation of Funding Changes

FY 2003 vs FY 2002 (\$000)
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**Utah Mitigation and Conservation**

Due to Western separately financing mitigation activities at its projects in the State of Utah, its contributions from power revenues of up to \$17 million under the Recovery Implementation Program, and significant cash balances exceeding \$100 million in the Account, no deposit will be made. .... -6,000

**Total Funding Change, Utah Mitigation and Conservation** ..... **-6,000**

# Falcon and Amistad Operating and Maintenance Fund

## Funding Profile

(dollars in thousands)

	FY 2001 Comparable Appropriation	FY 2002 Original Appropriation	FY 2002 Adjustments	FY 2002 Comparable Appropriation	FY 2003 Request
Falcon and Amistad Operating and Maintenance Fund .....	2,663	2,663	0	2,663	2,734
<b>Total, Falcon and Amistad Budget Authority</b>	<b>2,663<sup>a</sup></b>	<b>2,663</b>	<b>0</b>	<b>2,663</b>	<b>2,734</b>

### Public Law Authorization:

Public Law 103-236, "Foreign Relations Authorization Act, Fiscal Years 1994 and 1995"  
The Act of June 18, 1954 (68 Stat. 255)

## Funding by Site

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	\$ Change	% Change
Western Area Power Administration .....	2,663	2,663	2,734	+71	+2.7%
<b>Total, Falcon and Amistad Operating and Maintenance Fund .....</b>	<b>2,663</b>	<b>2,663</b>	<b>2,734</b>	<b>+71</b>	<b>+2.7%</b>

## 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 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.

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

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<sup>a</sup> Reflects a Congressional rescission of \$7,000 included in P. L. 106-554.

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 rural electric cooperatives 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, thus supporting Western’s Repayment of Federal Power Investment Performance Goal.

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 2001	FY 2002	FY 2003	\$ Change	% Change
Falcon and Amistad Operating and Maintenance Fund					
Salaries and Benefits .....	1,249	1,433	1,663	+230	+16.1%
Routine Services .....	1,268	1,098	868	-230	-20.9%
Miscellaneous Expenses .....	121	114	115	+1	+0.9%
Marketing, Contracts, Repayment Studies .....	25	18	18	0	0.0%
Emergency Contingency .....	0	0	70	+70	+100.0%
<b>Total, Falcon and Amistad Operating and Maintenance Fund .....</b>	<b>2,663</b>	<b>2,663</b>	<b>2,734</b>	<b>+71</b>	<b>+2.7%</b>

## Detailed Program Justification

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
<b>Salaries and Benefits</b> .....	<b>1,249</b>	<b>1,433</b>	<b>1,663</b>
<p>Salaries and benefits are provided for 29 Federal 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, required safety services, and emergency response to flood operations and/or equipment failure. FY 2003 includes funding for two additional employees, a high voltage electrician and a machinist mechanic to improve maintenance of aging equipment.</p>			
<b>Routine Services</b> .....	<b>1,268</b>	<b>1,098</b>	<b>868</b>
<p>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, pneumatic and grease systems, and an elevator will occur. FY 2003 is the final year of a three-year project to sandblast and recoat penstocks at Falcon Dam and Powerplant. Additionally, the water system and HVAC control system at Amistad Dam and Powerplant will be upgraded. The decrease reflects lower-priced equipment replacements planned in FY 2003.</p>			
<b>Miscellaneous Expenses</b> .....	<b>121</b>	<b>114</b>	<b>115</b>
<p>Estimates include miscellaneous expenses for IBWC employees and technical advisors, including travel, training, communications, utilities and printing.</p>			
<b>Marketing, Contracts, Repayment Studies</b> .....	<b>25</b>	<b>18</b>	<b>18</b>
<p>Costs for marketing power, administration of power contracts, and preparation of rate and repayment studies are included. Based on accurate studies, staff ensure that power revenues are set at an appropriate level to recover annual expenses and meet repayment schedules, thus supporting the Repayment of Power Investment Performance Goal.</p>			
<b>Emergency Contingency</b> .....	<b>0</b>	<b>0</b>	<b>70</b>
<p>Restoration of the emergency contingency to the \$200,000 level originally appropriated is necessary to cover unanticipated equipment breakage that could result in disruption of power. Any usage of the contingency amount is individually justified by IBWC and approved by Western's Administrator.</p>			
<b>Total, Falcon and Amistad Operating and Maintenance Fund</b>			
<b>Budget Authority</b> .....	<b>2,663</b>	<b>2,663</b>	<b>2,734</b>

## Explanation of Funding Changes

FY 2003 vs FY 2002 (\$000)
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**Salaries and Benefits**

The increase in salaries and benefits is due to two additional IBWC personnel to more adequately maintain aging equipment, and routine salary increases. . . . . +230

**Routine Services**

The reduction in routine services reflects a slight reduction in estimated costs of upgrades, replacements or rehabilitation of equipment. . . . . -230

**Miscellaneous Expenses**

The slight increase in miscellaneous expenses is attributed to inflation. . . . . +1

**Emergency Contingency**

Funds are required to restore the contingency to its original level to be used for unanticipated equipment breakdowns. . . . . +70

**Total Funding Change, Falcon and Amistad Operating and Maintenance Fund . . . . .**           +71

# Colorado River Basins Power Marketing Fund

## Funding Profile

(dollars in thousands)

	FY 2001 Comparable Appropriation	FY 2002 Original Appropriation	FY 2002 Adjustments	FY 2002 Comparable Appropriation	FY 2003 Request
Colorado River Basins Power Marketing Fund					
Program Direction .....	32,207 <sup>a</sup>	34,981	993 <sup>a</sup>	35,974	39,386 <sup>a</sup>
Equipment, Contracts and Related Expenses .....	359,735	240,584	162,000 <sup>b</sup>	402,584	371,421
Total, Operating Expenses from new authority .....	391,942	275,565	+162,993	438,558	410,807
Offsetting Collections Realized .....	-391,942	-301,565	-162,993	-464,558	-432,807
Total, Obligational Authority .....	0	-26,000	0	-26,000	-22,000
Total Obligational Authority Request Excluding Full Funding for Federal Retirements .....	0	-26,000	0	-26,000	-22,000

### 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 2001	FY 2002	FY 2003	\$ Change	% Change
Western Area Power Administration .....	391,942	438,558	410,807	-27,751	-6.3%
Offsetting Collections Realized .....	-391,942	-464,558	-432,807	+31,751	+6.8%
Total, Colorado River Basins Power Marketing Fund .....	0	-26,000	-22,000	+4,000	+15.4%

<sup>a</sup> The FY 2001 and FY 2002 columns of the FY 2003 Congressional Request include funding in the amount of \$852,000 and \$993,000, respectively, for the Government's share of increased costs associated with pension and annuitant health care benefits which are offset by collections. These funds are comparable to FY 2003 funding of \$1,013,000. (Note: The data is presented on a comparable basis as if the legislation had been enacted and implemented in FY 2001.)

<sup>b</sup> Includes additional \$162 million obligational authority apportioned in December 2001 to meet purchase power costs not included in the President's FY 2002 budget.



## 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.

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 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 the 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.

The Program Direction activity supports all of Western's performance goals. Dispatchers respond to minute-by-minute changes to meet or exceed performance levels established by NERC, supporting Western's Transmission System Performance Goal. The maintenance of the interconnected system at or above industry standards also supports the Transmission System Performance Goal. Energy schedulers maximize revenues from non-firm energy sales, thereby supporting the Repayment of Federal Power Investment Performance Goal. Additionally, in support of the Safety Performance Goal, Western trains its employees on a continuing basis in occupational safety and health regulations, policies and procedures, and conducts safety meetings at employee, supervisory and management levels in order to keep the safety culture strong. Accidents are reviewed to ensure lessons are learned and proper work protocol is in place.



(dollars in thousands)

FY 2001	FY 2002	FY 2003
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Staff evaluate general power resources, collaborating and planning with customers and members of the interconnected transmission system to identify the most effective transmission system improvements to maximize benefits to all participants.

The 268 FTE supported in this account reflects both direct and indirect (portions of administrative and general expense (A&GE) employees) hours funded in this account. The increase reflects anticipated salary, within-grade increases and increased costs associated with full funding for pension and health care benefits. As authorized in P. L. 99-141, Western annually establishes pay rates and compensation policy for some employees (power system dispatchers, schedulers, marketers) based on prevailing rates in the electric power industry. Because of recruitment/retention issues for those occupations across the Nation, Western experienced a 7.28-8.72 percent salary increase in those categories beginning in October 2001. That increase is first reflected in the budgeted amounts in FY 2003.

The FY 2001 and FY 2002 columns include funding in the amount of \$852,000 and \$993,000, respectively, for the Government's share of increased costs associated with pension and annuitant health care benefits. These funds are comparable to the FY 2003 funding of \$1,013,000.

<b>Travel</b> .....	<b>1,400</b>	<b>2,132</b>	<b>2,106</b>
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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.

<b>Support Services</b> .....	<b>2,579</b>	<b>3,126</b>	<b>3,551</b>
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Support services funded in this activity include IT support, warehousing, computer-aided drafting/engineering, and general administrative support. The increase, primarily in the categories of administrative and IT support services, is primarily attributed to a higher skill mix in contract staff and to rebid of contracts in the Rocky Mountain Region.

(dollars in thousands)

FY 2001	FY 2002	FY 2003
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**Other Related Expenses** ..... **10,824**      **6,068**      **7,165**

Other related expenses include, but are not limited to, space, utilities and miscellaneous charges, printing and reproduction, training tuition, maintenance of office equipment, supplies and materials, telecommunications, personal computers, and multi-project costs. Intermittent specialized services, not included in on-going support service contracts, are also included. Rental space costs assume the GSA inflation factor and renegotiation of the occupancy agreement at Western’s Corporate Services Office. Other costs are based on historical usage and actual cost of similar items. The request reflects increases in intermittent services, utility charges, including telecommunications, maintenance costs of equipment, and a slightly higher level of supply purchases. Replacement of computer hardware and software also increases slightly.

**Total, Program Direction** ..... **32,207**      **35,974**      **39,386**

### Explanation of Funding Changes

FY 2003 vs FY 2002 (\$000)
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**Salaries and Benefits**

Increase in salaries and benefits is attributed to salary and within grade increases, including salaries determined by prevailing rates in the electric utility industry. Also included are costs associated with full funding for pension and health care benefits.. . . +1,916

**Travel**

The decrease in travel reflects a slightly lower level of planned activity. . . . . -26

**Support Services**

Increase in support services costs is primarily attributed to a higher skill mix of contract staff and a re-bid of contracts in the Rocky Mountain Region. A portion of those contracts are funded in this Account. . . . . +425

**Other Related Expenses**

The increase includes funding for intermittent specialized services not included on continuing support service contracts, higher utility charges, operation and maintenance costs of equipment and a slightly increased level of supply purchases. Replacement of computer hardware and software also increases slightly. . . . . +1,097

**Total Funding Change, Program Direction** ..... **+3,412**

## Support Services

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	\$ Change	% Change
<b>Technical Support Services</b>					
Economic and Environmental Analysis . . .	0	0	0	0	N/A
Test and Evaluation Studies . . . . .	0	0	0	0	N/A
<b>Total, Technical Support Services . . . . .</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>N/A</b>
<b>Management Support Services</b>					
Management Studies . . . . .	42	52	54	+2	+3.8%
Training and Education . . . . .	46	0	0	0	0.0%
ADP Support . . . . .	1,521	1,724	1,983	+259	+15.0%
Administrative Support Services . . . . .	970	1,350	1,514	+164	+12.1%
<b>Total, Management Support Services . . . . .</b>	<b>2,579</b>	<b>3,126</b>	<b>3,551</b>	<b>+425</b>	<b>+13.6%</b>
<b>Total, Support Services . . . . .</b>	<b>2,579</b>	<b>3,126</b>	<b>3,551</b>	<b>+425</b>	<b>+13.6%</b>

## Other Related Expenses

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	\$ Change	% Change
Training . . . . .	128	200	200	0	0.0%
Working Capital Fund . . . . .	78	224	228	+4	+1.8%
Printing and Reproduction . . . . .	12	13	13	0	0.0%
Rental Space . . . . .	471	877	930	+53	+6.0%
Software Procurement/Maintenance Activities/Capital Acquisitions . . . . .	905	904	1,000	+96	+10.6%
Other . . . . .	9,230	3,850	4,794	+944	+24.5%
<b>Total, Other Related Expenses . . . . .</b>	<b>10,824</b>	<b>6,068</b>	<b>7,165</b>	<b>+1,097</b>	<b>+18.1%</b>

# **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 previously described in the Site Description section. 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, IT 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 2001	FY 2002	FY 2003	\$ Change	% Change
Equipment, Contracts and Related Expenses					
Supplies and Materials .....	9,134	8,186	9,382	+1,196	+14.6%
Purchase Power Costs .....	344,489	377,676	346,998	-30,678	-8.1%
Capitalized Equipment .....	6,112	5,440	6,579	+1,139	+20.9%
Interest .....	0	11,282	8,462	-2,820	-25.0%
<b>Total, Equipment, Contracts and Related Expenses .....</b>	<b>359,735</b>	<b>402,584</b>	<b>371,421</b>	<b>-31,163</b>	<b>-7.7%</b>

### Detailed Program Justification

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
<b>Supplies and Materials .....</b>	<b>9,134</b>	<b>8,186</b>	<b>9,382</b>

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 Goal 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 Federal Power Investment Performance Goal. Daily discussion of safe working procedures before work commences supports the Safety Performance Goal. 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 is attributed to a slightly higher level of activity.



(dollars in thousands)

FY 2001	FY 2002	FY 2003
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**Purchase Power Costs** ..... **344,489**    **377,676**    **346,998**

Electrical resources, transmission capability and wheeling services will be purchased. The request anticipates continuing high market prices for firming energy, and the continuance of low-steady-flow tests conducted at Glen Canyon Dam, as required by the Glen Canyon Dam EIS Record of Decision. Additionally, amounts include obligational authority to accommodate replacement power purchases for customers served by the Colorado River Storage Project. The replacement power purchases, a provision of the Salt Lake City Area Integrated Projects electric power contracts, are made at the request of power customers at times Western lacks sufficient generation to meet its full contract commitment. The funds for the replacement power purchases are advanced by the requestors prior to the purchase. The revenues received from power purchases provide for timely repayment of the taxpayer investment in the projects' power facilities, thus supporting the Repayment of Federal Investment Performance Goal.

**Capitalized Equipment** ..... **6,112**    **5,440**    **6,579**

Capitalized equipment, including circuit breakers, transformers, relays, switches, transmission line equipment, microwave, supervisory control and data acquisition, and other communication and control equipment, will be acquired to assure reliable service to Western's customers. Staged replacement of radio equipment to move to narrow communications band spectrums as required by the Federal Communications Commission (FCC) and National Telecommunications and Information Administration (NTIA) continues. Thyristor valve modules for the Miles City (Montana) Converter Station will be replaced, and poles, crossarms and hardware will be purchased to rebuild three transmission lines in Montana. A communications building in the Desert Southwest Region will be replaced. Replacement and upgrade of aged power system components are crucial to system reliability, contributing to the Transmission System Performance Goal. Removing environmental hazards and replacing equipment that may create a safety hazard for the public and Western's personnel, supports the Safety Performance Goal. 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. The increase is primarily attributed to the movement to narrow communications bands and planned rebuild of three transmission lines.

**Interest** ..... **0**    **11,282**    **8,462**

**Colorado River Basins Power Marketing Fund/  
Western Area Power Administration/  
Equipment, Contracts and Related Expenses**

**FY 2003 Congressional Budget**

(dollars in thousands)

FY 2001	FY 2002	FY 2003
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Interest payments to the U.S. Treasury will occur. Estimates are based on Power Repayment Studies for the Projects funded in this account. The projected payment is decreasing because project principal payments are current.

<b>Total, Equipment, Contracts and Related Expenses . . . . .</b>	<b>359,735</b>	<b>402,584</b>	<b>371,421</b>
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### Explanation of Funding Changes

FY 2003 vs FY 2002 (\$000)
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#### Supplies and Materials

The increase is attributed to increased maintenance activity. . . . . +1,196

#### Purchase Power Costs

The decrease for power purchases is primarily attributed to a lower level of replacement power purchases as provided in Salt Lake City Area Integrated Projects electric power contracts. Such purchases are fully covered, in advance, by the power customers. . . . . -30,678

#### Capitalized Equipment

The increase in capitalized equipment purchases is primarily due to staged radio replacements and planned rebuild of three transmission lines. . . . . +1,139

#### Interest

Planned interest payment to the U.S. Treasury in FY 2003 is less than FY 2002 because project principal payments are current. No deficit payment is included. . . . -2,820

<b>Total Funding Change, Equipment, Contracts and Related Expenses . . . . .</b>	<b>-31,163</b>
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## System Statistics

	FY 2001	FY 2002	FY 2003
Generating Plants (Number) .....	56	56	56
Generating Capacity:			
Installed Capability (kW) .....	10,605,000	10,605,000	10,605,000
Substations:			
Number <sup>a</sup> .....	260	263	264
Capacity (kVa) .....	26,820,182	26,820,182	26,820,182
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 <sup>b</sup> .....	6,936.07	6,936.07	7,063.27
161-kV <sup>c</sup> .....	869.26	869.26	766.26
138-kV .....	327.42	327.42	327.42
115-kV <sup>d</sup> .....	5,723.03	5,743.03	5,743.03
69-kV and below <sup>e</sup> .....	963.71	935.71	935.71
Total circuit-miles .....	<u>16,866.56</u>	<u>16,858.56</u>	<u>16,882.76</u>

<sup>a</sup> FY 2001 includes addition of Peacock (Arizona) and Obanion (California) Substations. FY 2002 includes addition of Sundance (Arizona), Buck Boulevard (California) and Canon City West (Colorado) Substations. FY 2003 include addition of Big Sandy (Arizona) Substation.

<sup>b</sup> FY 2001 includes addition of 48.4 miles (Peacock-Griffith TL, Topock 1&2 TL and reroute of Curecanti-Lost Canyon TL, (all in Arizona) and Obanion-Sutter TL in California). FY 2003 includes addition of 24.2 miles in Arizona (Sundance-Coolidge 1&2 TL, and Liberty-Sundance TL) and upgrade of 103 miles of 161-kV to 230-kV operation (Rainbow-Havre TL) in Montana.

<sup>c</sup> FY 2003 reflects removal of 103 miles of 161-kV line due to upgrade of the Rainbow-Havre TL in Montana.

<sup>d</sup> FY 2001 reflects a decrease of 0.6 miles due to various line reroutes in the Upper Great Plains Region. FY 2002 includes removal of 8 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).

<sup>e</sup> 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 <sup>a</sup>

(dollars in thousands)

	FY 2001 <sup>b</sup>	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Boulder Canyon Project . . . . .	47,858	61,095	66,251	64,681	63,201	63,931	64,299
Central Valley Project	180,924	244,791	248,741	249,816	138,343	103,061	103,061
Central Arizona Project (Navajo) <sup>c</sup>	99,763	95,461	95,461	95,461	95,461	95,461	95,461
Falcon-Amistad Project . . . . .	5,006	5,222	5,282	5,278	5,276	5,171	5,168
Fryingpan-Arkansas Project . . . . .	12,498	13,615	13,615	13,615	13,615	13,615	13,615
Pacific Northwest-Southwest Intertie Project . . . . .	29,790	21,790	23,513	25,236	26,959	28,682	30,405
Parker-Davis Project . . . . .	42,003	44,500	44,642	44,664	44,379	44,981	44,981
Pick-Sloan Missouri Basin Program . . . . .	407,959	266,239	271,898	276,386	276,748	276,779	280,343
Provo River Project . . . . .	336	334	335	255	256	256	256
Washoe Project . . . . .	671	627	627	627	627	627	627
Salt Lake City Area Integrated Projects <sup>d</sup> . . . . .	340,296	431,652	407,063	407,063	407,063	407,063	407,063
Subtotal . . . . .	1,167,104	1,185,326	1,177,428	1,183,082	1,071,928	1,039,627	1,045,279
Less anticipated expenditures not provided for in the budget request . . . . .	0	-8,257	-27,491	-27,491	-27,491	-27,491	-27,491
Total . . . . .	1,167,104	1,177,069	1,149,937	1,155,591	1,044,437	1,012,136	1,017,788

<sup>a</sup>For FY 2002 through 2007, project amounts in this table and the following sales table are based on FY 2000 Final or preliminary FY 2001 Power Repayment Studies (PRS), as adjusted (see footnotes below). The Central Arizona Project (CAP) does not have a PRS because it has no power repayment obligation; amounts shown are based on estimated projections.

<sup>b</sup> FY 2001 amounts are preliminary reflecting Western revenues only. They do not include any applicable generating agency revenues.

<sup>c</sup> 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 to cover annual expenses.

<sup>d</sup> Adjustments have been made for the Salt Lake City Area Integrated Projects for increases in the purchase power program costs reflected in the budget request for FY 2002 and the outyears.

<sup>e</sup>Revenues adjusted for anticipated expenditures in the Construction, Rehabilitation, Operation and Maintenance Account that would normally be recoverable, but are not funded in the FY 2003 request.

## Estimate of Energy Sales

(in gigawatthours)<sup>a</sup>

	FY 2001 <sup>b</sup>	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Boulder Canyon Project . . . . .	4,901	4,759	4,744	4,681	4,501	4,501	4,501
Central Valley Project . . . . .	9,705	9,729	9,749	9,749	6,614	5,058	5,058
Central Arizona Project (Navajo)	4,296	3,995	3,995	3,995	3,995	3,995	3,995
Falcon-Amistad Project . . . . .	111	225	225	225	225	225	225
Loveland Area Projects <sup>c</sup> . . . . .	1,988	2,051	2,051	2,051	2,051	2,051	2,051
Pacific Northwest-Southwest Intertie Project <sup>d</sup> . . . . .	0	0	0	0	0	0	0
Parker-Davis Project . . . . .	1,570	1,346	1,346	1,346	1,346	1,346	1,346
Pick-Sloan Missouri Basin Program (Eastern Division) . . . . .	11,360	9,755	9,983	10,187	10,658	10,231	10,393
Provo River Project . . . . .	9	24	24	24	24	24	24
Washoe Project . . . . .	7	11	11	11	11	11	11
Salt Lake City Area Integrated Projects <sup>e</sup> . . . . .	6,904	6,008	6,008	6,008	6,008	6,008	6,008
Total . . . . .	40,851	37,903	38,136	38,277	35,433	33,450	33,612

<sup>a</sup> One gigawatthour (GWH) equals one million kilowatt-hours (kWh).

<sup>b</sup> Amounts shown in FY 2001 are preliminary actual figures. Pick-Sloan Missouri Basin Program includes Joint Marketing Program sales in FY 2001.

<sup>c</sup> Loveland Area Projects include Fryingpan-Arkansas Project and Pick-Sloan Missouri Basin Program (Western Division).

<sup>d</sup> 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.

<sup>e</sup> 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 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Falcon Amistad Maintenance Fund, 895178 .....	2,364	2,663	2,734	2,734	2,734	2,734	2,734
Sale and transmission of electric power, Falcon and Amistad Dams, 892245 .....	2,617	1,647	2,064	2,064	2,064	2,064	2,064
Sale of Power and Other Utilities Not Otherwise Classified, 892249 <sup>a</sup> .....	33,923	42,500	42,500	42,500	42,500	42,500	42,500
Less Transfers to U. S. Army Corps of Engineers .....	<u>0</u>	<u>0</u>	<u>-27,800</u>	<u>-27,800</u>	<u>-27,800</u>	<u>-27,800</u>	<u>-27,800</u>
Subtotal, 892249	33,923	42,500	14,700	14,700	14,700	14,700	14,700
Sale of Power - Western Area Power Administration - Reclamation Fund, 895000.27 <sup>b</sup>	223,056	242,008	219,210	231,277	228,409	243,902	245,641
<b>Total, Proprietary Receipts ..</b>	<b>261,960</b>	<b>288,818</b>	<b>156,716</b>	<b>162,316</b>	<b>169,528</b>	<b>181,809</b>	<b>190,372</b>

<sup>a</sup>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. Beginning in FY 2003, the request proposes that Corps' operating and maintenance costs will be funded from a transfer of receipts deposited by Western, from the sale of power and related services, and transferred to the Corps'.

<sup>b</sup> Western's Reclamation Fund receipts in FY 2002 through FY 2007 assume increased financing of the PPW program through a combination of existing off-budget authorities, as well as authority providing "use of revenue." The FY 2002 through FY 2007 amounts also reflect reductions in expenditures as a result of funding constraints in the Construction, Rehabilitation, Operation and Maintenance Account. The revenue estimates have not been adjusted to reflect power system reliability impacts as a result of the funding constraints.

## Pending Litigation

Pending litigation that may impact Western's FY 2003 Congressional Budget request includes:

*In re Pacific Gas & Electric Company, Debtor*, Case No. 01-20923 SFM11, Northern District of California. PG&E filed for Chapter 11 bankruptcy protection on April 6, 2001. PG&E had previously indicated its willingness to re-open negotiations on the pass through of costs under Contract No. 14-06-200-2948A. It is too early in the bankruptcy to evaluate Western's current standing in relationship to other debtors. PG&E listed debts totaling \$18.4 billion and assets of \$24 billion. PG&E did not list Western as one of its top 20 unsecured creditors. Western is currently evaluating its position in relation to the other unsecured creditors. The potential increased costs are estimated to be approximately \$41 million. Recently, PG&E has indicated they intend to continue to honor their contracts with Western and that they intend to make all payments that are owed. PG&E has also taken legal actions before the Federal Energy Regulatory Commission which are directly related to the bankruptcy filing (see discussion below).

### Federal Energy Regulatory Commission Litigation

*Pacific Gas and Electric Company*, FERC Docket No. ER00-2360-000. On April 28, 2000 Pacific Gas and Electric Company (PG&E) tendered for filing a new Reliability Services (RS) Tariff and corresponding amendments to PG&E's Transmission Owner Tariff on file with the Commission. PG&E alleges this filing establishes wholesale and retail rates for the recovery of reliability charges that the California Independent System Operator Corporation imposes on PG&E. PG&E requested an effective date of June 20, 2000. As part of this filing PG&E is seeking permission to pass through Federal Power Act Sections 205 or 206 rights in those existing contracts. Western intervened and protested arguing the RS Service is not a new service for existing contracts. The existing contract delineates the reliability responsibility between the parties. Western also argued that it is improper for PG&E to modify its existing contracts. A three week trial was held from February 21, 2001 through March 13, 2001. The initial decision, dated July 14, 2001, denied PG&E's recovery of the RS charges. PG&E subsequently submitted a brief on exceptions to the initial decision, asserting amongst other errors that the initial brief did not take exception to the initial decision holding that PG&E failed to fulfill its article 32 obligations under Contract 2948A and therefore lacked Section 205 rights to pass RS costs on to Western. Noting this as well as responding to PG&E's brief on exceptions, Western filed a brief opposing PG&E's exceptions with the Commission. We now await a Commission decision.

*Pacific Gas and Electric Company*, FERC Docket ER01-1639-000. On March 28, 2001, Pacific Gas and Electric Company (PG&E) tendered for filing, proposed amendments to Contract No. 14-06-200-2948A (Contract 2948A), Contract No. DE-AC65-80WP59000 (Delta Contract) and Contract No. DE-MS65-83WP59055 (Cities Contract) between PG&E and Western as filed under PG&E Rate Schedule FERC Nos. 79, 63, and 81. PG&E proposes numerous changes to the contracts' terms, conditions, rates and charges, including unilaterally changing the existing methodology for calculating the energy rates from average thermal production cost to market. This would result in an increase in energy costs from approximately 22 mills/kWh to 100-300 mills/kWh.

On April 21, 2001, Western submitted a timely motion to intervene, reject or in the alternative, protest and request for suspension. Arguments Western raised include: (1) PG&E's filing is prohibited under the Mobile-Sierra Doctrine; (2) PG&E has no right to make unilateral changes to the terms and conditions of a Federal contract; and (3) PG&E's filing violates Federal appropriations and Reclamation laws.

On May 25, 2001, the Commission accepted PG&E's filing but suspended the rates for five months while the parties litigate the issue. The Commission stated that it could not determine, on the record before it, whether PG&E has the contractual authority to make the filing. As a result, the Commission set the matter for evidentiary hearing and suspended the rates.

After conducting a hearing the Presiding Judge issued her initial decision finding, largely, in favor of Western, further recommending that PG&E re-file in accordance with her decision. The Federal Energy Regulatory Commission affirmed the Presiding Judge's decision in October 2001. PG&E filed a request for rehearing in November 2001.

*San Diego Gas and Electric Company Investigation of Practices of the California Independent System Operator and California Power Exchange*, California Electricity Oversight Board, Docket EL 00-95-000. In the fall of 2000 the Commission began an investigation under Section 206 of the Federal Power Act into the dysfunctional California markets. The Commission has issued a series of orders addressing both price mitigation and potential refunds. In June 2001, the Commission ordered "hard" price caps in the California and WSCC spot markets. The Commission also made a finding that prices charged in the California markets were unjust and unreasonable. The case was set for hearing; however, a series of delays have considerably set back the hearing schedule. Recently, the Commission vacated the procedural schedule in order to issue orders regarding rehearing requests. FERC issued the rehearing orders in December 2001, largely upholding their earlier orders. The Commission has authorized the presiding judge to move forward and establish a procedural schedule, which is set for January 2002.