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BEFORE THE
SUBCOMMITTEE ON WATER AND POWER
COMMITTEE ON RESOURCES
UNITED STATES HOUSE OF REPRESENTATIVES
FEBRUARY 25, 2004

Mr. Chairman and members of the Subcommittee, I appreciate this opportunity to present the Western Area Power Administration (Western) fiscal year (FY) 2005 budget request and to discuss our programs, goals and achievements.

AGENCY PROFILE

Western's service area covers 1.3 million square miles in 15 states. Western markets and delivers energy to nearly 700 wholesale power customers. These customers, 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 (MW) 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. Using its 17,000-plus circuit-mile Federal transmission system, Western markets and delivers reliable electric power throughout most of the western half of the United States.

The power facilities are associated with 14 multipurpose Federal water resource projects. Western also markets available transmission service from one stand-alone transmission project. The water resource projects 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.

Western employees at 52 duty stations provide power sales, transmission operations and engineering services for Western's system. 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 Management Center in Salt Lake City, Utah.

ACCOMPLISHMENTS

In the wake of the August 14, 2003, blackout in the eastern United States and Canada, Western is more committed than ever to preserving the reliability of the Nation's power grid. The components of this vast electricity network are highly interrelated, both operationally and economically, with transmission facilities as the key element, tying together remote resources with consumers who depend on the instant availability of electricity. To that end, and in support of the Administration's National Energy Policy, Western is maintaining grid reliability with transmission upgrades, technology and enhanced system coordination.

In FY 2003, Western undertook a series of projects to enhance western grid reliability and to facilitate streamlined and non-discriminatory access to regional transmission. In each of these projects, Western formed partnerships with customers, other utilities or private companies and research organizations in efforts that benefit the utility industry:

Path 15 Upgrade Project—To improve the grid, Western is managing a project to build a new 500-kV transmission line under an innovative public-private partnership. Construction is now in progress on the \$306 million privately-financed project, which should be completed late this year. The line will increase transfer capacity along a strategic transmission corridor in central California by 1,500 MW, or enough to power 1.5 million homes, and could easily save Californians \$100 million per year during normal water conditions. The California Independent System Operator, which manages the flow of power across Path 15, predicts that the project will pay for itself in four years.

Common Open Access Same Time Information System—Western is participating in a web-based regional

transmission market to improve the way industry buys and sells power by expanding access to and efficient use of available transmission capacity. This innovation will strengthen the competitiveness of wholesale energy markets by replacing the participating transmission providers' existing, sometimes cumbersome and separately operated OASIS sites with the efficiency of a single site.

Power line technology—State-of-the-art technology and equipment can improve transmission system capability and performance, ensuring reliable operation of the Federal system. Western is entering the second year of a two-year project in North Dakota involving a revolutionary new conductor that can carry three times more electricity than a traditional conductor. Its use may allow Western to achieve efficiencies in existing infrastructure to relieve transmission system constraints. Along this line, Western operates four of the six (direct current) ties connecting the eastern and western grids, including most recently the Rapid City, South Dakota, DC Converter Station, which became operational in October 2003. While the other five ties use a single converter to transfer electrical capacity across grids, the Rapid City tie has two 100-MW converters connected in parallel, providing additional operating flexibility by converting up to 200 megawatts of power, but allowing maintenance crews to work on one converter without cutting off the power flow completely. This further removes obstacles to transmission operations ensuring a continuous 100 MW feed into the load area.

Intelligent grid technology—Through the use of a new technology (still in testing mode), a neural network will constantly monitor and diagnose substation equipment health, tracking information and interpreting it to prevent costly outages and improve system reliability, while eliminating the need for prescheduled maintenance and most equipment testing and inspection. This effort works hand-in-hand with Western's Reliability Centered Maintenance Program for determining the best maintenance practices to preserve equipment function by making Western's maintenance organization "smarter" and more cost effective.

PERFORMANCE MEASURES

Developed under the framework of the Government Performance and Results Act, Western's performance measures support our mission to market and deliver reliable cost-based hydroelectric power to our customers. These measures are targeted at specific outcomes, including rates sufficient to make full and timely repayment to the U.S. Treasury, the health and safety of our employees and the operation of a reliable, low cost, environmentally sound power system. Our performance measures include:

Transmission System Performance: Control criteria compliance measures the operational responsiveness to load changes in maintaining system reliability and equity among interconnected systems. The North American Electric Reliability Council established two control area performance standards—CPS1 and CPS2—to measure the ability of control areas to match generation to load. CPS1 measures area control rate variability and its relationship to frequency error. The minimum level of compliance is 100 percent, the maximum normally 200 percent. CPS2 is a measure designed to limit large unscheduled power flows. The minimum level of compliance is 90 percent and the maximum is 100 percent. Western's annual average compliance ratings in FY 2003 were 184.2 percent for CPS1 and 98.1 percent for CPS2, far exceeding the NERC minimum compliance levels identified above, and also exceeding respective industry averages of 169.1 and 96.5. Beginning in FY 2004, Western will include an additional measure aimed at reducing the frequency of accountable customer and transmission outages to no more than the average number of outages for the past five years.

Safety: Western's safety goal was a 3.3 frequency rate for recordable injuries per 200,000 hours worked, or the Bureau of Labor Statistics industry rate, whichever is lower. Total recordable case (accident) rate measures the recordable accident frequency rate by multiplying the number of recordable injuries by 200,000, then dividing by the total hours worked. Western's FY 2003 rate of 2.5 is well below the latest published (calendar year 2000) industry case rate of 5.0.

Repayment of investment: Our goal is to meet planned annual repayment of principal on power investment. During FY 2002, Western's power generation and transmission activities provided \$57.2 million (up \$3.1 million from FY 2001) for repayment of unpaid investment, \$26.3 million greater than planned.

Western tracks cumulative unpaid investment with allowable unpaid balances as a means of assessing long-term, cumulative repayment performance. Through FY 2002, Western has repaid an estimated \$2.8 billion of the \$9.0 billion cumulative investment in power and non-power facilities assigned to Western for repayment. Approximately 52 percent of Federally-financed power investment assigned to Western has been repaid.

STATUS OF WATER CONDITIONS

The forecast of Western's system wide generation for January through September 2004 is 18,611 gigawatthours, or 83 percent of average. This is the 5th year in a row of below-average generation, with the continuing drought in the Western United States as the primary cause. However, carryover storage, operational criteria and environmental constraints also affect power generation and, in turn, revenues. The quantity and timing of releases affect the amount and value of power sold, resulting in financial impacts. Western participates in the process with other Federal agencies with regard to water releases as we continue to balance the generation of environmentally preferable power with stewardship to protect limited natural resources.

BUDGET HIGHLIGHTS

Western's Construction, Rehabilitation, Operation and Maintenance budget request is \$176.8 million for FY 2005. The budget request consists of \$173.1 million in new budget authority and \$3.7 million in funding from the Colorado River Dam Fund. The request also completes the phase-out of \$186 million in Federal financing for purchase power and wheeling activities and, instead, encourages customers to enter the market to meet more of their purchase power and wheeling needs. The request preserves Western's option to secure these services for customers on the assumption that customers will pay suppliers directly or provide advances for these services. The request also proposes to shift to the Department of the Interior's Bureau of Reclamation authority for our contribution to the Utah Reclamation Mitigation and Conservation Account. Western's FY 2005 budget authority request is \$3.8 million less than the FY 2004 enacted appropriation of \$176.9 million.

Western requests \$2.8 million in FY 2005 for the Falcon and Amistad Operating and Maintenance Fund. The appropriation, derived from revenue in the Fund, provides for the operation and maintenance of the hydroelectric facilities at the Falcon and Amistad Dams on the Rio Grande River between Texas and Mexico. The FY 2005 request reflects an increase of \$0.2 million above the FY 2004 enacted appropriation, reflecting a slight increase attributable to inflation and an increase in travel and training for flood response, dam safety, power house safety, and participation in the international efforts of drought management.

Total operating expense from new authority of \$206.6 million is requested in FY 2005 for the Colorado River Basins Power Marketing Fund, an increase of \$13.1 million, or 6.7 percent above the FY 2004 request level. The increase is primarily due to increased costs for power purchases, increased purchases associated with planned movable capitalized property, replacement of transmission line hardware, replacement of substation equipment and a planned increase in interest payment to the U.S. Treasury. This increase is offset partially by a decrease to associated personnel costs.

As noted above, FY 2005 marks the completion of the phase-out of Federal financing for Western's purchase power and wheeling activities. 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. Energy restructuring and resulting competition now make it attractive for Western's customers to shop for power and transmission services. However, for customers who are unable or unwilling to make other arrangements, Western may continue to assist with these activities, as necessary, through alternative funding mechanisms. Western also retains Emergency-Continuing Fund authority to provide for additional purchase power expenses due to below-normal generation.

The FY 2005 request takes into account the Administration's prior year proposal to fund the Corps of Engineers' operation and maintenance costs in Western's service area allocated to the power function for repayment from the sale of power and related services. In addition, similar financing is proposed for the hydropower-related operation

and maintenance and research and development activities of the Bureau of Reclamation hydropower facilities supporting Western's power marketing programs. Both are proposed in appropriations language.

Specific appropriation or fund amounts requested in FY 2005, compared with the FY 2004 appropriation, are:

BUDGET REQUEST SUMMARY
(Dollars in Thousands)

| <u>Appropriation or Fund/Activity</u> | <u>FY 2003</u> <u>Appropriation</u> | FY 2004 <u>Appropriation</u> | FY 2005 <u>Request</u> | Dollar <u>Change</u> | Percent <u>Change</u> |
|---|--|---------------------------------|---------------------------|-------------------------|--------------------------|
| CONSTRUCTION, REHABILITATION, OPERATION AND MAINTENANCE (CROM) | | | | | |

| | | | | | |
|--|------------------|------------------|------------------|-----------------|---------------|
| Program Direction ¹ | 111,904 | \$125,861 | \$116,756 | -9,105 | -7.2 |
| Operation and Maintenance ¹ | 38,009 | 35,994 | 39,821 | +3,827 | +10.6 |
| Construction and Rehabilitation | 17,669 | 12,874 | 20,191 | +7,317 | +56.8 |
| Purchase Power and Wheeling | 186,124 | 186,100 | 0 | -186,100 | -100.0 |
| Utah Mitigation and Conservation | <u>6,061</u> | <u>6,163</u> | <u>0</u> | <u>-6,163</u> | <u>-100.0</u> |
| TOTAL, CROM Program | \$359,767 | \$366,992 | \$176,768 | -190,224 | -51.8 |
| Planned Use of Prior Year Balances | -1,200 | 0 | 0 | 0 | 0 |
| Offsetting Collections Realized (P. L. 106-377) | -186,124 | -186,100 | 0 | +186,100 | -100.0 |
| Offsetting Collections from Colorado River Dam Fund (P.L. 98-381) | -4,683 | -3,992 | -3,668 | +324 | -8.1 |
| TOTAL, CROM Budget Authority Request | <u>\$167,760</u> | <u>\$176,900</u> | <u>\$173,100</u> | <u>-\$3,800</u> | <u>-2.1</u> |
| FALCON AND AMISTAD OPERATING AND MAINTENANCE FUND | <u>\$2,716</u> | <u>\$2,625</u> | <u>\$2,827</u> | <u>+202</u> | <u>+7.7</u> |
| COLORADO RIVER BASINS POWER MARKETING FUND (OPERATING EXPENSES FROM NEW AUTHORITY) | <u>409,794</u> | <u>\$193,561</u> | <u>\$206,617</u> | <u>+13,056</u> | <u>+6.7</u> |
| OPERATING EXPENSES OFFSETTING, COLLECTIONS REALIZED | <u>-431,794</u> | <u>-215,561</u> | <u>-229,617</u> | <u>-14,056</u> | <u>-6.5</u> |
| TOTAL, COLORADO RIVER BASINS OBLIGATIONS AUTHORITY | <u>-22,000</u> | <u>-22,000</u> | <u>-23,000</u> | <u>-1,000</u> | <u>-4.5</u> |

Program Direction

Western's FY 2005 Program Direction budget request of \$116.8 million provides compensation and related expenses for our workforce. These individuals operate and maintain the high-voltage interconnected transmission system and associated facilities. They also plan, design and supervise construction of replacements, upgrades and additions (capital investments) to transmission facilities; and market power and energy produced to repay annual expenses and capital investment. The request is a decrease of \$9.1 million from the comparable FY 2004 program level, attributable to a decrease in salaries and benefits of \$10.1 million and a decrease in support services of \$0.8 million. This decrease reflects management's emphasis in seeking alternative financing for a part of this activity, pending a decision on whether to make capital investments related to transmission service in California. The decrease is partially offset by an increase of \$0.6 million in travel due to a planned increase of program activity within the

¹ Funding amounts include activities of the Boulder Canyon Project which are funded through Colorado River Dam Fund receipts via a reimbursable agreement with the Department of the Interior as authorized in P. L. 98-381.

Account, and an increase of \$1.2 million in other related expenses, attributable to inflationary costs and increases in transportation, warehouse, and building costs.

Operation and Maintenance

Western's FY 2005 request for the Operation and Maintenance (O&M) Program totals \$39.8 million, an increase of \$3.8 million over FY 2004, including activities funded directly from the Colorado River Dam Fund. The program ensures an adequate supply of reliable electric power in a safe, cost-effective manner, and achieves continuity of service throughout Western's 15-state service territory by maintaining our power system at or above industry maintenance standards.

Regular O&M activities include supplies and materials, such as wood poles, instrument transformers, meters and relays, that Western needs to provide necessary resources to respond to routine and emergency situations in Western's high-voltage interconnected transmission system.

Planned replacement and addition activities are based on an assessment of condition and criticality of equipment, maintenance/frequency of problems for individual items of equipment, availability of replacements parts, safety of the public and Western's personnel, environmental concerns and an orderly work plan. The FY 2005 request of \$23.4 million for this activity reflects a higher level of planned purchases in electrical equipment (\$3.4 million), communications equipment (\$0.3 million) and capitalized movable equipment (\$1.6 million).

Construction and Rehabilitation

For FY 2005, Western is requesting \$20.2 million to fund its Construction and Rehabilitation (C&R) Program.

This funding level will be used for high-priority replacements and upgrades of power system equipment and facilities to sustain reliable power deliveries. As Western's infrastructure ages, timely replacement of system components helps avoid equipment failure and associated power outages, contain annual maintenance costs, retain

the value of our assets and provide for the safety of employees and the public. Maintaining uninterrupted power deliveries is the core of Western's mission and the C&R Program, and as complemented by the O&M Program, provides for safe, efficient and reliable system operation. Western is using available transmission capacity to the maximum extent possible, operating electrical equipment at its upper performance limits for longer periods of time.

Western's FY 2005 budget request for the C&R Program is \$7.3 million above the FY 2004 level. Within the program, transmission line and terminal facility projects increase by \$3.0 million to \$6.8 million. Substation replacement and rehabilitation funding increases by \$6.3 million from the FY 2004 level of \$2.8 million, to \$9.1 million in FY 2005. This increase will allow for the most critical upgrades and replacements to Western's substations. Other projects, including communications, maintenance facilities, power facility development costs and minor jobs, decrease \$2.0 million to \$4.3 million.

Individual projects within the C&R Program budget request are prioritized based on potential system and operational impacts, risk of failure, availability of spare parts, lead time for delivery of replacements, etc. With Western assigning the highest program priority to those projects posing the greatest risk to safety and system reliability, program shifts are common.

Purchase Power and Wheeling

As mentioned earlier, the request completes the policy to shift responsibility for meeting firming generation and transmission needs from Western to the customers. This shift will change the basis for the long-term marketing of the Federal resource that previously had included the delivery of purchase power and transmission wheeling and the Federal hydropower to customers. The shift preserves the option for Western to secure power and wheeling services on behalf of customers, but assumes customers will pay suppliers directly or provide advances. The proposal

eliminates the current provisions authorizing Western to use the receipts it collects from customers for purchase power and wheeling expenses to fund those same expenses. No offsetting collection authority is requested to cover purchase power and wheeling needs in FY 2005. For comparison, \$186.1 million in receipts was authorized for FY 2004 purchase power and wheeling requirements. In FY 2005, Western's customers are expected to increasingly enter the energy markets to arrange directly with suppliers for their energy and related service needs. For customers who are unable or unwilling to enter the markets on their own, Western will continue to provide services using off-budget alternative financing methods, including cash advances, net billing methods and reimbursable authority for Federal customers.

POWER MARKETING UPDATE

Western's power marketing activities continue to provide significant benefits to new customers, including Native Americans. The source of power for new allocations is a lower commitment to existing customers. Western has allocated approximately 65 MW of power from the Pick-Sloan Missouri Basin Program-Eastern Division to tribes under contracts that extend through the year 2020. Western has adopted final procedures for the allocation of power from an additional 20 MW of Eastern Division resource pool power, with allocations from that pool to be available to eligible new customers effective January 1, 2006. Allocations from Western's Loveland Area Projects will provide power to 25 new customers, including a mass transit agency in Colorado and six tribes, with deliveries starting in the fall of 2004. Western's Colorado River Storage Project Management Center is actively negotiating power contracts that would commit about 94 MW of Federal hydropower to more than 50 tribes beginning October 1, 2004. In addition, Western's Desert Southwest Region has reserved up to 17 MW from the Parker-Davis Project for allocation to eligible new customers; allocations from this resource pool would become effective when existing power supply contracts expire on September 30, 2008.

To operate the Central Valley and Washoe Project in 2005 and beyond, Western just published a *Federal Register* notice announcing its decision to pursue a contract-based sub-control area hosted by either the California Independent System Operator or the Sacramento Municipal Utility District. Negotiations with these two parties are underway. The Sierra Nevada Region has executed contracts with four Native American entities, with contracts

becoming effective on January 1, 2005.

Integrated Resource Planning

Western continues to emphasize integrated resource planning by its long-term firm power customers. The use of IRPs, as required under the Energy Policy Act of 1992 and by the terms and conditions of Western's power sales contracts, promote consideration of a full range of alternatives to meet customer resource needs, including generation, conservation, efficiency and renewable resources.

POWER REVENUE AND ENERGY SALES

In FY 2003, Western marketed 35.9 billion kWh of energy and associated services, earning gross operating revenues of \$1,036.3 million. Like the other power marketing administrations, Western markets firm products at cost-based rates providing a level revenue stream increasing the certainty of repayment to Treasury, while significantly reducing the risk of low revenues in drought conditions, or when adverse markets exist for energy.

REPAYMENT AND REVENUE

As of September 2002, the power investment to be repaid by Western totaled about \$5.4 billion. Cumulative gross power revenues totaled \$19.4 billion since the late 1920s, when the projects first began generating electricity. These revenues have provided \$12.3 billion for operation, maintenance and purchase power expenses, \$3.5 billion for interest and \$2.8 billion for repayment of investment in facilities and assistance to irrigation. The following table summarizes repayment status by project.

CUMULATIVE STATUS OF REPAYMENT AS OF SEPTEMBER 2002
(Dollars in Millions)

| Project Power System | Power Revenues | Income Transfer (Net) ¹ | Interest | Expenses ² | Power Investment ³ | Non-Power Investment to be Repaid by Power | (Deferred Expense) Surplus Rev. ⁴ | Investment Repaid to Date | Unpaid Bal. of Investment |
|---------------------------------------|----------------|------------------------------------|----------|-----------------------|-------------------------------|--|--|---------------------------|---------------------------|
| Boulder Canyon ⁵ | \$1,333 | \$6 | \$390 | \$660 | \$548 | \$25 | \$0 | \$285 | \$288 |
| Central Arizona (Navajo) ⁶ | \$1,760 | (\$919) | \$0 | \$841 | \$0 | \$0 | \$1 | \$0 | \$0 |
| Central Valley | \$5,085 | \$0 | \$365 | \$4,346 | \$559 | \$66 | \$0 | \$374 | \$250 |
| Collbran | \$43 | \$0 | \$12 | \$18 | \$15 | \$5 | \$0 | \$12 | \$8 |
| Colorado River Storage | \$3,347 | \$0 | \$716 | \$1,955 | \$1,059 | \$2,686 | \$0 | \$676 | \$3,069 |
| Dolores | \$23 | \$0 | \$18 | \$3 | \$36 | \$0 | \$0 | \$2 | \$34 |
| Falcon-Amistad | \$86 | \$0 | \$48 | \$25 | \$44 | \$0 | \$0 | \$13 | \$31 |
| Fryingpan-Arkansas | \$205 | \$0 | \$95 | \$99 | \$149 | \$0 | \$0 | \$11 | \$138 |
| Pacific NW-Pacific SW | \$188 | \$0 | \$159 | \$78 | \$233 | \$0 | (\$51) | \$2 | \$231 |
| Parker-Davis | \$933 | \$2 | \$183 | \$506 | \$377 | \$33 | \$22 | \$225 | \$185 |
| Pick-Sloan Missouri | \$6,250 | \$3 | \$1,477 | \$3,695 | \$2,392 | \$727 | (\$120) | \$1,201 | \$1,918 |

¹ Transfers out of a project are negative, into a project are positive.

² Expenses include operation, maintenance and purchase power and wheeling.

³ Power investment does not include deferred expense or repayment assistance to non-power investment, primarily irrigation. Non-power investment and deferred expenses are separate columns.

⁴ Negative amounts are cumulative unpaid interest and/or operating expenses. Positive amounts are cumulative surplus revenues in excess of expenses and principal repaid.

⁵ The cumulative balances for the Colorado River Dam Fund and Working Capital Fund are not included in this table.

⁶ Annual income transfers to Reclamation are revenue Western collected for marketing Navajo power.

| | | | | | | | | | |
|--------------------|----------|---------|---------|----------|---------|---------|---------|---------|---------|
| Provo | \$7 | \$0 | \$1 | \$4 | \$2 | \$0 | \$0 | \$1 | \$1 |
| Rio Grande | \$80 | \$0 | \$14 | \$46 | \$14 | \$6 | \$0 | \$20 | \$0 |
| Seedskadee | \$21 | \$0 | \$6 | \$9 | \$8 | \$0 | \$0 | \$6 | \$2 |
| Washoe | \$3 | \$0 | \$4 | \$3 | \$5 | \$0 | (\$4) | \$0 | \$5 |
| Total ¹ | \$19,364 | (\$908) | \$3,488 | \$12,287 | \$5,440 | \$3,548 | (\$151) | \$2,829 | \$6,159 |

Western's budget request in conjunction with those of our generation partners reflects our efforts to operate the Federal hydropower system to effectively deliver a diverse supply of reliable, affordable, and environmentally sound electricity across a well-operated and maintained, high-voltage, integrated power transmission system.

Thank you, Mr. Chairman. I would be pleased to answer any questions that you or the Subcommittee members may have.

¹ Numbers may not total due to rounding.