STATEMENT OF MICHAEL S. HACSKAYLO
ADMINISTRATOR
WESTERN AREA POWER ADMINISTRATION
UNITED STATES DEPARTMENT OF ENERGY

TESTIMONY
BEFORE THE
SUBCOMMITTEE ON WATER AND POWER
COMMITTEE ON RESOURCES
UNITED STATES HOUSE OF REPRESENTATIVES

THE POWER MARKETING ADMINISTRATIONS' ROLE IN BRINGING OUR NATIONWIDE ELECTRICITY TRANSMISSION SYSTEM INTO THE 21ST CENTURY

MARCH 15, 2005

Mr. Chairman and members of the Subcommittee, I am pleased to submit to you the Western Area Power Administration FY 2006 budget request, and to highlight our efforts in keeping the nation's power grid reliable.

PROFILE

Transmission facilities are a key element of our Nation's vast electricity network, tying power plants to distant consumers who depend on electricity. In delivering power, Western is the one of the largest owners of high-voltage transmission lines in the country. We own, operate and maintain over 17,000 circuit-miles of Federal transmission system in a 1.3-million-square-mile service area, spanning 15 western states.

MODERNIZATION NEEDED

Utility industry deregulation, load growth, open access and interconnections of merchant power plants are placing unprecedented demands on the interconnected power system. Clearly, the national grid is being operated much closer to the margin than in the past, and therefore is significantly more sensitive to disruptions. Reliability, always critical, is now a crucial issue with the impacts of outages becoming much broader.

So how do we make sure the grid continues to provide reliable electric power? Much of the answer lies in modernizing, through carefully shaping and molding the grid with smarter technologies, transmission upgrades and enhanced system coordination.

Improving Reliability Standards

Western's service territory is located within the footprint of two of the North American Electric Reliability Council's (NERC) regional councils, the Midwest Reliability Organization (MRO) and Western Electricity Coordinating Council (WECC). We are actively involved at both the national and regional levels in various forums to operate and maintain a reliable grid, serving on committees to establish and enforce reliability standards. Western also helped develop criteria for WECC's Reliability Management System, the country's first enforceable compliance system. We are also involved in transmission system planning, operations and compliance, using our experience to help others develop or enforce reliability-based programs.

Although mandatory national reliability standards have not yet been legislated, Western has demonstrated commitment to the importance of reliability rules through its contractual agreement to comply with the WECC's Reliability Management System. Western consistently exceeds performance targets established in NERC standards for control area performance (CPS1 & 2), maintaining a position on the NERC Honor Roll.

Technology

State of the art technology and equipment improve transmission system capability and performance, helping to ensure reliable operation of the Federal system. To this end, we

are currently testing a system that continuously monitors and diagnoses substation equipment to prevent costly outages resulting from equipment failure. This system will limit and possibly eliminate most prescheduled maintenance and equipment testing, greatly extending inspection intervals, while reducing costs. Also, we continue field testing high-capacity composite conductors designed to significantly increase the transfer capacity of existing lines as we look for efficiencies in infrastructure to relieve transmission system constraints. This program has shown very promising results. Western will be upgrading a constrained path with a composite conductor in western Arizona (Topock-Davis-Mead 230-kV Transmission Line) later this year.

Western has also established a Technology Coordination Committee to steer the implementation of new technology. This group will evaluate and test new technologies for protection, control and intelligent monitoring of the grid, recommending technologies that best fit Western's power system performance and operational practices required by regulatory agencies. Evaluation has been completed at several critical sites. Western continues to expand the use of microprocessor-based devices to enhance protection and reliability of the power system. These devices also speed the diagnosis of power system disturbances and the restoration of services.

Transmission Upgrades

Western has partnered with other entities in constructing new transmission facilities to relieve transmission constraints. Our construction management and oversight expertise were demonstrated most recently with the success of the Path 15 Upgrade Project, commissioned in December of 2004. Through a public/private partnership among Western, Trans-Elect and Pacific Gas & Electric Company, approximately $260.0 million of non-Federal funds were invested to construct an 84-mile, 500-kV transmission line to eliminate a transmission bottleneck between northern and southern California. The project was completed ahead of schedule and about 18 percent under budget. Western will continue to explore non-Federal financing opportunities to resolve constrained transmission paths in other areas.

Support for Renewable Resources

Another possibility for the future is to enhance the transmission grid to accommodate the delivery of renewable energy resources to consumers. As renewable resources such as wind continue to grow in importance in Western's service territory, improvements to the grid must also grow to keep pace. Renewable resource developers are increasingly requesting interconnection and transmission service on Western's high voltage lines. Western currently has 156 MW of wind generation interconnected with our transmission network, with 22 requests for 3,258 MW of additional wind generator interconnection to our system. Reinforcement and upgrade of the grid will likely be necessary to meet these requests. Additional insight into the potential placement of 500 MW of wind energy in North and South Dakota will be gained once Western completes the Dakotas Wind Transmission Study (results to be published in December 2005), pursuant to the Energy and Water Development Appropriations Act for FY 2004. An additional $0.5 million

was directed by Congress in the FY 2005 appropriations act for a transmission study on the placement of another 500 MW of wind energy in the Dakotas.

System Coordination

Many non-structural steps are being taken by Western to facilitate the existing use and future expansion of the regional transmission network. Western continues to comply with WECC and MRO planning criteria, and is supporting improvements to the planning process. As a participant in the Public Power Initiative of the West, Western was one of the first to commit to a common Open Access Same-Time Information System (OASIS) in the West. This common OASIS makes it easier for available transmission to be reserved and used to support the sale and purchase of electricity.

Western continues to be actively engaged in the development of regional transmission organizations (RTOs), as encouraged by the Federal Energy Regulatory Commission's (FERC) Order No. 2000. RTOs are envisioned to have a variety of transmission management functions, including planning for modernization of regional transmission. Western's staff continues to participate on Mid-Continent Area Power Pool committees to address seams and other transmission issues as the Midwest Independent System Operator prepares to implement its new market this spring. Western became a member of the WestConnect Regional Transmission Entity steering committee in December of 2004. WestConnect is a potential RTO in the Desert Southwest that serves as a forum to investigate, develop and implement wholesale market enhancements where the benefits can be demonstrated to exceed the costs. Western continues to coordinate its operations with the California Independent System Operator, and is monitoring the efforts of GridWest, a potential RTO in the Pacific Northwest and Canada.

Former Secretary of Energy Spencer Abraham set the tone and direction for PMA participation in RTOs in his letter of May 31, 2002 to the Pacific Northwest congressional delegation: "[E]ach PMA's participation in an RTO must take proper account of its legal authorities and obligations, as well as the costs and benefits. . . . [W]hile the National Transmission Grid Study directed the PMAs to participate in the formation of RTOs, it did not intend to prejudge their ultimate participation in the RTOs themselves."

Transmission grid modernization is one of the important goals associated with other FERC initiatives. Although Western is not subject to FERC jurisdiction for most purposes, Western observes FERC precedent to the extent it is consistent with our mission and permitted by law and regulation. Consistent with Order No. 888, Western filed its Open Access Transmission Tariff with the FERC in January of 1998. Western recently complied with Order No. 2003, adopting the principal provisions of the Commission's Large Generator Interconnection Agreement and Procedures.

Research and Development

Western will continue its participation and involvement in utility industry research and development (R&D) through the Electric Power Research Institute for substation and transmission reliability improvements and enhanced environmental technology.

Western participates in a consortium of utilities and universities specializing in power systems, applied mathematics, power electronics, control theory, operations research, and economics. The Power System Engineering Research Center, with support from member utilities and the National Science Foundation, finds innovative solutions to power system challenges.

Western is participating on an interagency hydropower R&D team with the U.S. Bureau of Reclamation and the Bonneville Power Administration to identify needed research, encourage R&D collaboration, share information, and transfer technology and experiences in hydropower generation and transmission of power, with the goal of enhancing system reliability and stability through improved efficiency and capacity.

Regional Cooperation

A key to success in transmission grid improvements is regional cooperation, one example being Western's participation in electricity restructuring dialogue sponsored by the Western Governor's Association (WGA). The WGA has taken steps to improve the regional transmission line siting process and streamline regulatory permitting procedures. In addition, the WGA encouraged the pursuit of the Rocky Mountain Area Transmission Study (RMATS) to address the lack of new transmission infrastructure in the region. Western participated in the RMATS effort, which identified recommended transmission projects within the Rocky Mountain footprint and for export of lower cost coal and wind energy outside of the region. Through cooperative efforts such as the RMATS initiative, Western will help modernize the regional transmission network to assure the delivery of reliable and cost-effective power.

Funding Stability

Securing a stable funding source for the Federal Hydropower Program is critical to the efficient, reliable and safe power delivery to program beneficiaries. In the past, we have upgraded the system through construction where needed using appropriated funds. These costs are fully recovered from users of the transmission system through the rates they pay for firm power and transmission services. But, government-wide budget constraints and the increasing age of our infrastructure, much of which was built in the 1940s and 1950s, raise concerns as to the continued reliability of Western's power transmission and will require a shift toward more Western funds being spent on capital expenditures.

Federal funding for construction of capital improvements is limited due to competing budgetary priorities. Western has the ability under existing law to partner with others in developing joint participation projects funded with non-Federal dollars, and will continue

to emphasize the need for diverse sources of funding in modernizing the transmission grid.

New legislation, proposed again this year in the President's FY 2006 budget, that would provide offsetting collection authorities to fully finance annual non-capital operating expenses, offers the best long-term means of ensuring that operating requirements of the Federal Hydropower Program are met. In the near-term, Western will continue to expand alternative non-appropriated funding within existing authorities to ensure adequate financing of operation, maintenance and construction needs.

FY 2006 BUDGET OVERVIEW

Western's FY 2006 Construction, Rehabilitation, Operation and Maintenance program funding requirement totals $451.6 million, of which $54.0 million is appropriated dollars. The total funding requirement decreased $57.1 million from the FY 2005 enacted program of $508.6 million and the net appropriated request decreased $117.8 million from the FY 2005 level of $171.7 million. In addition to the $54.0 million net appropriated funds requested, the request assumes: $186.8 million in offsetting collections for Program Direction and Operation and Maintenance (O&M), $148.5 million in offsetting collections for Purchase Power and Wheeling (PPW), $4.2 million in receipts from the Colorado River Dam Fund for Boulder Canyon Project activities and $58.1 million from alternative customer financing for drought-related, purchase power and wheeling needs.

The FY 2006 budget request proposes to finance several programs directly from offsetting collections, a few of which will include an initial appropriation to be offset as receipts are collected. The proposals for use of offsetting collections are expected to improve funding certainty for the annual hydropower-related operation and maintenance activities of the PMAs, the U.S. Army Corps of Engineers, the U.S. Bureau of Reclamation and the International Boundary and Water Commission. Western's request continues to seek appropriations for infrastructure expenditures within Western's Construction and Rehabilitation (C&R) Program.

The request proposes to allow Western to use offsetting collections from the recovery of Program Direction and O&M Program expenses to offset the appropriation requirement, resulting in a net zero appropriation for these two programs.
The request also continues to support using offsetting collections to finance the Purchase Power and Wheeling Program at levels consistent with long-term average water conditions. For above average purchase power and wheeling needs, customers are encouraged to enter markets on their own. For those unwilling or unable, Western will continue to provide services using alternative financing methods, including cash advances from customers.

The request proposes to authorize Western to use offsetting collections from the recovery of Falcon and Amistad Dams operating and maintenance expenses to offset the $2.7 million appropriation requirement for these activities; resulting in a net zero

appropriation for this program. The proposed net-zero 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 request proposes to fund the Utah Reclamation Mitigation and Conservation Account annual deposit from Colorado River Storage Project customer receipts on a reimbursable basis. The FY 2006 deposit requested is estimated at $6.7 million.
Including the Utah deposit, a total of $171.3 million in obligation authority is requested in FY 2006 for the Colorado River Basins Power Marketing Fund, a decrease of $35.4 million, or 17.1 percent below the FY 2005 request.

Specific appropriation or fund amounts requested in FY 2006, compared with the FY 2005 appropriation, are:

BUDGET REQUEST SUMMARY
(Dollars in Thousands)

Appropriation or Fund/Activity	FY 2005 Comparable Appropriation	FY 2006 Request	Dollar Change	Percent Change
CONSTRUCTION, REHABILITATION, OPERATION AND MAINTENANCE (CROM)				
Program Direction	$141,334	$143,667	+$2,333	+1.7%
Operation and Maintenance	45,743	47,295	+1,552	+3.4%
Construction and Rehabilitation	44,179	53,957	+9,778	+22.1%
Purchase Power and Wheeling	271,208	206,635	-64,573	-23.8%
Utah Mitigation and Conservation	6,150	0	-6,150	-100.0%
Subtotal, CROM Program	$508,614	$451,554	-$57,060	-11.2%
Use of Alternative Financing	-105,631	-58,135	+47,496	+45.0%
Planned Use of Prior Year Balances	0	0	0	0%
Offsetting Collections Realized (P. L. 108-447)	-227,600	-148,500	+79,100	+34.8%
Offsetting Collections from Colorado River Dam Fund (P.L. 98-381)	-3,668	-4,162	-494	-13.5%
Offsetting Collections - Program Direction and Operation and Maintenance	0	-186,800	+186,800	-100.0%
TOTAL, CROM Budget Authority (BA) Request	$171,715	$53,957	-$117,758	-68.6%
FALCON AND AMISTAD OPERATING AND MAINTENANCE FUND	$2,804	$2,692	-$112	-4.0%
Offsetting Collections, Falcon and Amistad	0	-2,692	-2,692	NA
TOTAL, Falcon and Amistad BA Request	$2,804	$0	-$2,804	-100.0%
COLORADO RIVER BASINS POWER MARKETING FUND (CRBPMF)	$206,617	$171,268	-$35,349	-17.1%
Offsetting Collections Realized	-229,617	-194,268	+35,349	+15.4%
TOTAL, CRBPMF BA request	-$23,000	-$23,000	$0	0.0%
TOTAL, Western Area Power Administration BA	$151,519	$30,957	-$120,562	-79.6%

Program Direction

Western's FY 2006 Program Direction (PD) Program of $143.7 million provides compensation and related expenses for our workforce to 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. Beginning in FY 2006, Western proposes to offset its PD appropriation with collections from the sale of power and related services. These collections will directly offset the appropriation, resulting in a net zero appropriation for PD by fiscal year end.

The program increased $2.3 million from the comparable FY 2005 appropriation level, due to increases in salaries and benefits of $1.7 million and support services of $1.5 million. The increase to salaries and benefits reflect pay increases for our Federal employees, including those salaries determined through negotiations. These increases are offset by slight decreases to travel and other related services totaling $0.9 million primarily attributable to Western's emphasis on continually conserving costs within its indirect activities.

Operation and Maintenance

Western's FY 2006 request for the Operation and Maintenance (O&M) Program totals $47.3 million, including activities funded directly from the Colorado River Dam Fund and advanced customer funding. The 3.4 percent increase in this 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 standards. Beginning with FY 2006, Western proposes to offset its O&M appropriation with collections recovered from the sale of power and related services, resulting in a net appropriation of zero by fiscal year end.

Regular O&M activities include supplies and materials, such as wood poles, instrument transformers, meters and relays, that must be procured to provide necessary resources to respond to routine and emergency situations in Western's high-voltage interconnected transmission system. The request for these activities increases $0.9 million, or 4.0 percent, over the FY 2005 comparable appropriation to accommodate inflation and increased maintenance on Western's aging infrastructure.

Planned replacement and addition activities are based on an assessment of the 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 2006 request of $23.7 million for this activity is an increase of $0.6 million, or 2.8 percent, above the FY 2005 comparable appropriation. Capitalized movable property increased due to the need to replace one of Western's helicopters, while the increase in electrical equipment ($0.7 million) is due primarily to inflation. Both of these categories are nearly offset by the reduction in communications equipment ($1.3 million).

Construction and Rehabilitation

For FY 2006, Western is requesting $54.0 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's FY 2006 budget request for the C&R Program is $9.8 million above the comparable FY 2005 level. This 22.1 percent increase is well above the estimated annual base need of $30.0 million identified for this program, mainly due to past budget restraints and Congressional mandates. Western's FY 2005 C&R Budget authority was reduced by $6.2 million to fund the Utah Reclamation Mitigation and Conservation Account pursuant to title IV of the Reclamation Projects Authorization and Adjustment Act of 1992. In addition, the C&R activity breakdown reflects changes to support Congressionally-directed projects contained in the FY 2005 Appropriations Act to design, construct, operate and maintain transmission facilities for the Animas-LaPlata Project (P.L. 106-554) and to upgrade the Topock-Davis-Mead Transmission Line. The projects delayed due to this action will move forward to FY 2006. Along with other priorities, these changes result in transmission line and terminal facility projects increasing by $8.1 million, or 37.6 percent; substation replacement and rehabilitation projects decreasing by $4.2 million, or 20.9 percent; and "Other" projects including communications, maintenance facilities, power facility development and minor jobs increase $5.8 million, or 209.1 percent.

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. Western assigns the highest program priority to those projects posing the greatest risk to safety and system reliability, so program shifts are common.

Purchase Power and Wheeling

The FY 2006 request provides for the continued use of offsetting collections to fund purchase power and wheeling activities to the extent necessary to meet long-term average purchase needs corresponding to normal hydro conditions. The requirement, estimated at $148.5 million, was estimated conservatively based on the long-term average of the actual purchases over 20 years. The concept is similar to the approach Western uses for determining the amount of hydropower generation available for sale. For above average purchase power requirements, estimated at $58.1 million in FY 2006, customers are encouraged to enter the markets on their own. For those unable or unwilling, Emergency/Continuing Fund authorities and existing alternative financing methods are anticipated to be available.

Market Rate Proposal

Also included in the FY 2006 budget request is the Administration's proposal to change the PMAs' rate structures from cost-based to market-based. This proposal is intended to level the playing field among power companies by gradually increasing the PMAs' wholesale power rates to the levels other companies charge for wholesale power. To limit economic disruption, the PMAs' electricity rates will increase over time at no more than 20 percent per year until market-based rates are reached.

In closing, Western is well positioned to play a key role in the modernization of the transmission grid in our service territory. Construction expertise and technology are important tools for meeting the challenge of enhancing the national transmission grid. Building on our record of achievement, Western will continue to pursue opportunities to reinforce and upgrade our high voltage infrastructure in the West.

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