# STATEMENT OF MR. MARK A. GABRIEL ADMINISTRATOR WESTERN AREA POWER ADMINISTRATION U.S. DEPARTMENT OF ENERGY BEFORE THE SUBCOMMITTEE ON WATER, POWER AND OCEANS COMMITTEE ON NATURAL RESOURCES U.S. HOUSE OF REPRESENTATIVES

EXAMINING SPENDING PRIORITIES AND MISSIONS OF THE BUREAU OF RECLAMATION, THE POWER MARKETING ADMINISTRATIONS AND THE USGS

WATER DIVISION IN THE PRESIDENT'S FY 2017 BUDGET PROPOSAL

MARCH 22, 2016

Thank you, Mr. Chairman and Members of the Committee. My name is Mark Gabriel. I am the Administrator of the Western Area Power Administration (Western). I am pleased to represent Western today as we discuss the agency's portion of the President's Fiscal Year (FY) 2017 Budget.

Western is one of four Power Marketing Administrations (PMAs) within the U.S. Department of Energy (DOE). Our role is to fulfill the three lines of business outlined by Western's mission: to market and transmit wholesale electric power from 14 multi-use water projects, to provide a backbone transmission system for delivering that power, and to manage the Transmission Infrastructure Program (TIP), all to the benefit of the American public.

In this testimony I present Western's continuing commitment to its Federal mission through business, technology and organizational excellence, mutually beneficial partnerships and evolution of services. This work is highlighted by Western's spending priorities, best practices, and accomplishments and supported by our program and financing accounts and FY 2017 appropriations request. My testimony concludes with Western's promise to customers to continue fulfilling our Federal mission of providing low-cost power consistent with sound business principles.

# **Delivering on its Mission**

At Western, our highest goal is to deliver safely and securely on our mission. We market and deliver clean, carbon free, renewable, cost-based Federal hydroelectric power and related services across a backbone transmission system, while at the same time reducing risk to American taxpayers by using economically and environmentally responsible business practices.

Western markets and delivers reliable cost-based hydro power and related services from 56 Federal hydroelectric power plants owned and operated by the Bureau of Reclamation, the Army Corps of Engineers, and the International Boundary and Water Commission (IBWC) as well as a portion of the Navajo Generating Station. Together, these plants have an installed capacity of

10,504 megawatts delivered to customers over Western's vast transmission system with combined physical assets representing just more than four percent of the U.S. transmission system.

In addition to marketing Federal hydropower, Western also operates as an open access transmission provider. Our advanced and complex grid has fueled rural electrification throughout the West, a grid made possible through management of a substantial communications network. The continuous operation of four balancing areas and one sub-balancing area with multiple control centers requires system balancing and resilience 24 hours a day, seven days a week, 365 days a year. By providing constant vigilance over these systems and controls, Western maintains power flow across large tracks of the Western U.S., all the while coordinating with multiple states and neighboring utilities.

To fulfill these essential parts of our Federal mission, Western's more than 1,400 employees manage over 17,000 circuit-miles of transmission, 320 substations and 177,000 structures that cover a footprint of more than 1.3 million square miles. Such an encompassing system makes Western one of the 10 largest transmission providers in the Nation.

Western serves nearly 700 customers across 15 states including rural electric cooperatives, municipal entities, 21 U.S. military bases, 92 Native American Tribes and a host of irrigation districts and public power entities. Our customers, in turn, provide Western's hydropower to more than 40 million Americans every year.

Western seeks to engage stakeholders at all levels, including building collaborative relationships with non-profit customer representative groups ranging from the Mid-West Electric Consumers Association for customers across Colorado, Wyoming, Montana, the Dakotas, Nebraska, Kansas, Iowa and Minnesota to Colorado River Energy Distributers Association for Colorado River Storage Project customers in Arizona, Colorado, Nevada, New Mexico, Utah and Wyoming to the Northern California Power Agency for customers in California.

Transparency and collaboration are important to Western. In line with our promise of transparency, we are posting financial information and presentations to a new website, *The Source*. Delivering on our promise of collaboration, Western's four regions and Colorado River Storage Project Management Center held more than 400 face-to-face meetings with preference customers during 2015.

# **Spending Priorities and Best Practices**

Evolution of the Nation's power mix, continuous flux in energy market prices, reduction and destruction in energy supply and demand, the continuing advances in renewable energy and technology, and increased cyber and physical security threats require flexibility. Each of these challenges brings with it a series of technical and policy considerations that drive costs and the need for additional staff, *i.e.*, full time equivalency requirements (FTEs). We are constantly looking at our infrastructure and processes and working with customers to address the needs these changes create.

#### Solutions and Challenges

Western is not as it was five years ago. External factors carve our path and drive changes to our aging operating model. Across the industry, we all must work together to operate and maintain the system in new and different ways for our continued shared success. Whether it is new North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection standards adding roughly 40,000 work-person hours to our schedule for implementation of improved physical and cyber security compliance measures, replacement of Western's core financial system (now 18 years old), increasing asset investments, or operating challenges due to renewable integration increases, Western must adapt so we can continue to be one of the lowest-cost providers of hydroelectric power and transmission in the Nation. This requires creativity and innovation in our thinking and operating as well as agility in our planning.

Recent investments in technology and security, and how they are budgeted, are major drivers in increased Headquarters costs. For example, Western's 18-year-old legacy core-financial system is being upgraded to ensure continued servicing and eliminate risk of failure and data loss. To address this issue, the modules were upgraded in a consolidated and cost-effective manner.

As regulations and requirements change so too must Western's operations. The Federal Information and Technology Acquisition and Reform Act (FITARA) requires new and robust development of review, modernizing and standardizing processes to be compliant with transparency initiatives from Congress and the Administration. In several areas, it is similar to the proactive process improvements Western already had in development.

Western, like all utilities, is facing an increasing challenge in cyber and physical security. We continue to evaluate and improve our cyber security capabilities through better operational monitoring and awareness using a comprehensive Cyber Security Program that protects Western from the ever-evolving threats and attacks to the energy sector, our perimeter, public systems, and communications. The focus is to continually enhance our security while maintaining compliance with DOE and NERC standards. We prepare for adversaries ranging from sophisticated nation states to individuals stealing copper from our substations.

On the cyber side, Western has bolstered defenses, moving beyond an "identify and patch" approach to a coordinated, focused and pro-active enclave protection scheme. For Western's physical security, this has meant an ongoing review of our more than 320 substations and 500 communications sites, then integrating the findings with design planning and capital budgets. In both cyber and physical security we have added significant financial and personnel resources and realigned the organization to meet escalating threats to the system in the most effective manner possible.

To address ongoing operational challenges in a changing environment, we reformulated and refined our asset management and capital planning through the Transmission Asset Management Program, or TAM. TAM develops a more mature, data-driven asset planning and investment strategy. Formally established as a program in 2015, TAM calculates, analyzes and tracks risks to its core fleet of transmission equipment assets, system wide. This includes providing trending analyses on equipment assets to inform maintenance planning and replacement and to assist with 10-year capital funding plan development.

At Western we continue to engage our customers in operational choices and capital planning efforts. TAM and the Ten Year Capital Plans highlight some of the most recent results and achievements in customer involvement and collaboration. Western completed more than \$230 million in capital projects during FY 2015 year. Going forward in FY 2016, nearly \$160 million in capital work is anticipated. Over the next 10 years, Western's capital programs will range from \$1.5 to \$2.1 billion. These include Western's own projects as well as projects with our customer groups. Furthermore, TAM, in cooperation with preference customers, is developing a Strategic Asset Management Plan to guide even more long-term activity.

#### Cost Containment

At Western, we are committed to keeping both direct and indirect costs low. Costs rising in one part of Western have to be balanced by decreases in another. We are focusing on cost containment efforts to slow or avoid increasing costs and provide headroom for other required activities. Employing continuous process improvements and reorganizing certain programs allowed Western to avoid \$6.9 million in cost in FY 2015.

One of the most significant cost avoidances and reorganization programs was the "IT Evolution." In this reorganization (*Exhibit 1*), Western's Information Technology (IT) staff consolidated functions and processes to streamline operations for total process improvement cost avoidance of \$5 million.

Western's new Budget Formulation Schedule applied to the FY 2017 planning process produced \$1.7 million in cost avoidance.

#### Overheads and Rates

We are cognizant of how industry changes and corresponding expenses affect our customers and their ability to serve American homes and businesses. It is necessary Western continues to focus on costs of its entire enterprise. Overhead expenses represent approximately 10 percent of the costs included in customer rates.

Rates are Western's scorecard. After safety and reliability, we are judged on the rate impacts for those things within our control. We sell hydropower to our preference customers at very comparable rates. For example, Western's Arizona customers benefit from competitive power rates, less than 2 cents per kilowatt hour. That is 60 percent less than comparable wholesale rates and 80 percent less than comparable retail rates. Market wholesale rates are around 5 cents per kilowatt hour. Retail rates are around 9 to 11 cents per kilowatt hour (*Exhibit 2*). In another example, the Colorado River Storage Project Salt Lake City Area Integrated Projects composite firm power rate is 2.962 cents/kwh and has remained flat for the last six years.

# Strategic Planning

Through strategic planning and working collaboratively with customers, Western is well positioned to actively pursue key opportunities to be effective stewards of its Federal appropriation, customer dollars and the Nation's assets. Employees, stakeholders and customers work together to design and implement tactics resulting from Western's cooperatively developed Strategic Roadmap 2024, published in May 2014.

Contained within the Roadmap are four foundational goals called Critical Pathways defining Western's journey in meeting its mission and evolving as a leader and important partner in the new energy frontier. The first three Critical Pathways are:

- Business, Technology and Organizational Excellence
- Mutually Beneficial Partnerships
- Evolution of Services

These three goals culminate into the final Critical Pathway that sets Western's desired role in the industry: fulfilling our promise to customers to continue delivering on our mission by remaining an active participant in Powering the Energy Frontier.

# **Summary of Accomplishments**

Western's business decisions as a steward of public resources and Federal property serve customers as diverse as Missouri River Energy Services, the Northern Iowa Electric Power Cooperative, Wyoming Municipal Power Agency and the NASA Ames Research Center. Recent accomplishments reflect Western's leadership in energy initiatives around the country and how we continue to build and sustain strong communities throughout the western United States by employing responsible business models, financial management and stewardship of Federal assets.

On October 1 Western "went live" in the Southwest Power Pool (SPP), becoming the first Federal agency to become a full member of a regional transmission organization. Western entered into agreements with SPP to place transmission facilities in our Pick Sloan-Missouri Basin Eastern Division project, served by our Upper Great Plains regional office, into SPP. This move demonstrated our adaptability and how we can come together to resolve challenges. Together with our partners, Western met the challenge of operating next to two organized energy markets while at the same time maximizing benefits to all of its customers.

Through TIP Western leverages our depth of transmission project development experience and expertise with our statutory borrowing authority to advance projects aimed at expanding and modernizing the grid.

The Electrical District 5-to-Palo Verde Hub transmission project began commercial operation January, 10, 2015, after energization of the final transformer at the Electrical District 5 substation. The project directly helps 18 communities and tribes. It also increases transmission capacity to deliver renewable energy to consumers in Arizona, southern Nevada and southern California, adding enough capacity to power 30,000 homes. It is the second project to be successfully completed under TIP. During FY 2016, TIP is working with advanced funding agreements for three projects under development: Centennial West Clean Line; Southline; and TransWest Express. Both TransWest Express and Southline saw completion of Final Environmental Impact Statements as part of the Federal National Environmental Policy Act component for the proposed transmission lines. TIP anticipates its active schedule to continue through FY 2017 and into the future.

We have been very busy with remarketing efforts. Last year, Western's Rocky Mountain Region completed the Loveland Area Projects 2025 Power Marketing Initiative, a program benefitting 125 preference power customers across a four-state area of Nebraska, Kansas, Wyoming and Colorado. In FY 2016, the organization, through its Rocky Mountain Region, began executing the new firm power contracts based on that marketing initiative. Current contracts expire September 30, 2024, and the new firm power contracts will expire on September 30, 2054, giving customers 40 more years of low-cost, clean reliable Federal hydropower.

Also in 2015, Western published the final allocations for the post-2017 remarketing of the Boulder Canyon Project, providing for marketing and delivery of the electric generation at Hoover Dam. The remarket will provide low-cost, renewable, reliable Federal hydropower to Native American tribes and other preference customers in Arizona, California and Nevada. As a result of this effort, 59 new customers will receive power generated at Hoover Dam, including 23 allocations to tribal entities. The Desert Southwest Region is in the midst of the process developing its new electric service contracts and conducting a series of customer meetings, including meetings specifically for tribal customers.

On August 20, 2015, Western together with the Department of the Navy and Sempra U.S. Gas & Power recognized a purchase power agreement Western facilitated for off-base renewable energy generation to power a portion of 14 California Navy installations. All of the energy produced by Mesquite Solar 3—about 150 MW—will be used to support the Navy's energy needs, renewable requirements, and goals for the next 25 years. This power purchase agreement is projected to save the Navy approximately \$90M over the life of the project. Mesquite Solar 3 is anticipated to be operational by December 2016.

The number one concern at Western, as it is around the industry, is the safety of our employees. Since 1992, we have proactively embraced and incorporated OSHA's new fall protection standards into safety processes across its 17,000 miles of transmission lines, highlighting a continued drive toward business, technology and operational excellence. Adding to its achievements in safety, in December 2015, Western's Desert Southwest Region celebrated its five-year safety anniversary of no lost work days, setting a record for the organization.

#### **Program and Financing Accounts**

Western's accomplishments and operations are primarily supported through management of three program and financing accounts: Construction, Rehabilitation, Operation and Maintenance (CROM), Falcon and Amistad Operating and Maintenance Fund, and the Colorado River Basins Power Marketing Fund. Only the CROM and Falcon and Amistad program and financing accounts request funds from Appropriations.

CROM is Western's largest account and includes four components: Construction and Rehabilitation (C&R); Operation and Maintenance (O&M); Purchase Power and Wheeling (PPW); and Program Direction. The C&R supports Western's mission to deliver reliable, clean, Federal hydroelectric power by emphasizing the replacement, upgrade and modernization of the electrical system infrastructure to bring continued reliability, improved connectivity and increased flexibility and adaptability to the power grid. The O&M program ensures continued reliability of the Federal power system by operating and maintaining Western's transmission

system at or above industry standards, including replacement of aging equipment and removal of constraints that would impede power flows. The Purchase Power and Wheeling program continues to support Western's marketing efforts and delivery capacity. Program Direction provides compensation and all related expenses for Western's workforce, including those employees who operate and maintain Western's high-voltage interconnected transmission system and associated facilities.

The Falcon and Amistad Operating and Maintenance Fund was established in the Treasury of the United States as directed by the Foreign Relations Authorization Act for Fiscal Years 1994 and 1995. It is administered by Western's Administrator for use by the Commissioner of the U.S. Section of the International Boundary and Water Commission to defray administrative, O&M, replacement and emergency costs for the hydroelectric facilities at the Falcon and Amistad dams, the U.S. portions of which IBWC owns and operates.

Colorado River Basins Power Marketing Fund is used to operate and maintain the transmission system for the Colorado River Basins projects to ensure an adequate supply of reliable electric power in a clean and environmentally safe and cost effective manner.

#### FY 2017 Budget Request

In its budget request tendered to Congress on February 9, 2016, Western Area Power Administration asked for authorization to spend a total of \$1.2 billion during FY 2017. Only 6 percent of the \$1.2 billion comes from appropriated dollars; the remainder comes from offsetting collections and alternative financing. The FY 2017 net appropriation requirement for Western is \$72.8 million. Details are outlined in Exhibit 3.

Although the FY 2017 Budget Request reflects an increase of 52 FTEs, the FY16 budget request held FTE levels flat at FY 2015 levels. The additional 52 FTE is a 3.5 percent increase over the FY 2016 FTE level, increasing FTE count from 1,469 to 1,521 to meet critical mission related activities. Of the 52, an increase of 51 is requested for Western's CROM account and one is requested for Western's Colorado River Basins Power Marketing Fund. However, despite the FY 2017 FTE level, total Program Direction for salaries, benefits, travel, support services, and other related expenses decreased by \$9.9M.

# Offsetting Collections and Alternative Financing

For FY 2017, Western anticipates \$1.1 billion in offsetting funding sources, financing nearly 94 percent of the organization's total budget. Offsetting collections and alternative financing are used instead of annually appropriated funds for a variety of Western activities including annual expenses, purchase power and wheeling and construction. These financing efforts are pursued proactively and collaboratively with our customers to address funding needs and are reflected in all of our accounts. We continue to pursue and use various financing methods to meet our power delivery obligations.

Purchase Power and Wheeling requires no appropriations. Congress permanently authorized the use of receipt authority for PPW expenses in 2000. This receipt authority, combined with alternative customer financing methods has provided flexible and sustainable sources of funding for the PPW program. One hundred percent of the costs of the \$581.6 million program will be

funded by customers through offsetting collections and alternative financing methods. The PPW program is a vital part of Western's mission, firming the highly variable hydropower product that Western markets, leading to revenues in excess of \$1 billion annually.

The Operations and Maintenance Annual Expense Fund source, sometimes referred to as Net Zero, is a budget-neutral financing tool that begins the year with an appropriation, which is then offset once our collections are received.

Western's FY 2017 budget request for the Colorado River Basins Power Marketing Fund account is estimated at \$213.5 million with no request from appropriations, funded instead through offsetting collections.

#### Returns to Treasury

Western's sources of funding ensure we are able to meet our contractual power sale commitments to customers and able to secure the revenue stream necessary to meet our Federal repayment obligations, making it possible to repay appropriated funds invested for power related purposes. For the past five years, Western has returned more than \$1.4 billion to the US Treasury. All appropriations being requested for FY17 will be repaid to Treasury with interest.

# **Closing Statement**

Western has grown much over its 38-year history. We must remain true to our promises as we adjust to meet changing industry demands. We also must remain organizationally excellent, open to the benefits of partnership, and willing to evolve to meet the dynamic times. This is accomplished by continued and dedicated work with our preference customers.

As a power marketing administration, we simply cannot afford to cut back on needed or required investments or to artificially keep costs low. Instead, Western needs to be ready for the future so the Nation and our customers can continue receiving the benefits of our Federal mission. We are dedicated to fulfilling our promise to customers: to continue delivering reliable, low cost Federal hydroelectric power and related services at the lowest possible cost consistent with sound business principles.

We need to make sure Western is robust in this era of change, working to keep costs low while strategically managing our spending priorities.

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

**Exhibit 1: IT Evolution** 

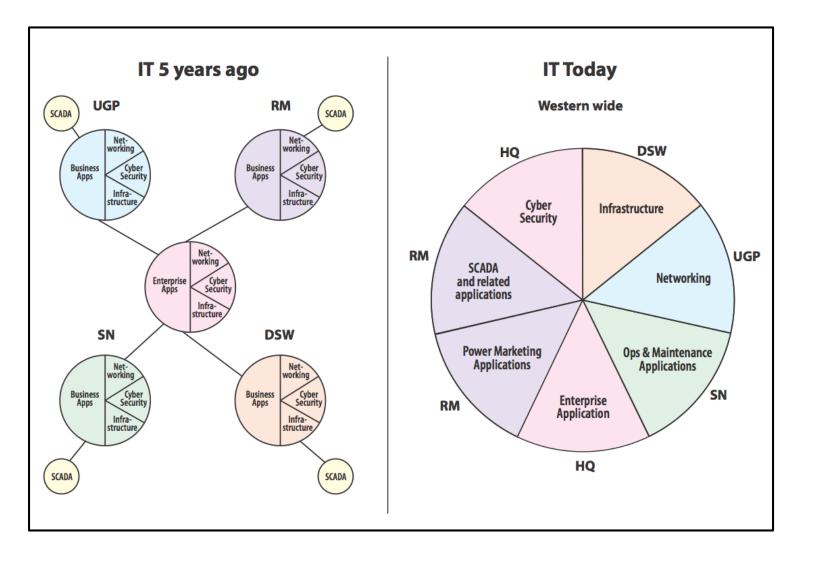
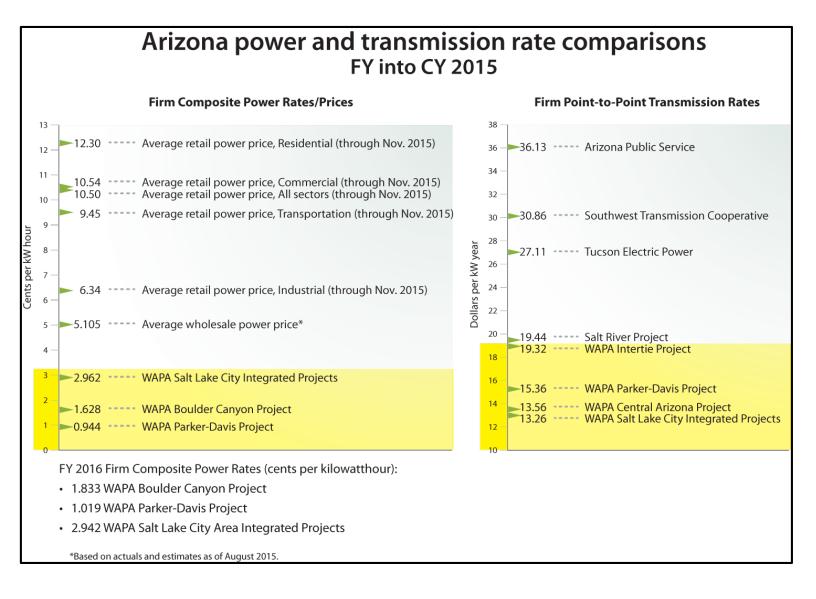


Exhibit 2: An Example, Arizona Rates Comparison



**Exhibit 3: Western Area Power Administration Budget Overview** 

# **Appropriation Summary by Program**

	(dollars in thousands)			
Fund	Appropriation	Offsetting Collections <sup>1</sup>	Alternative Financing	Total
Western CROM				
PPW	0	367,009	214,625	581,634
O&M and PD	77,023	219,828	6,343	303,194
C&R	18,558	0	43,884	62,442
Subtotal, Western CROM	95,581	586,837	264,852	947,270
Falcon/Amistad	232	3,838	323	4,393
Colorado River Basins Power Marketing Fund <sup>2</sup>	-23,000	236,530	0	213,530
Transmission Infrastructure Program	0	3,761	3,500	7,261
Total, Western Mission	72,813	830,966	268,675	1,172,454
Source as percent of total	6.2%	70.9%	22.9%	

<sup>&</sup>lt;sup>1</sup> Offsetting collections includes the Colorado River Dam Fund <sup>2</sup> The Colorado River Basin Power Marketing Fund reflects obligational authority requested. Net budget authority after off-setting collections is -\$23 million.