STATEMENT OF
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BEFORE THE
SUBCOMMITTEE ON WATER AND POWER
COMMITTEE ON NATURAL RESOURCES
U.S. HOUSE OF REPRESENTATIVES
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EXAMINING THE PROPOSED FISCAL YEAR 2015 SPENDING, PRIORITIES AND THE MISSIONS OF THE BUREAU OF RECLAMATION, THE FOUR POWER MARKETING ADMINISTRATIONS AND THE U.S. GEOLOGICAL SURVEY'S WATER PROGRAM

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 Western's portion of the President's Fiscal Year (FY) 2015 Budget.

In this testimony, I will highlight a number of steps Western is taking to support the energy frontier together in cooperation with our customers and stakeholders. We are working on several major initiatives, each of which will greatly affect how we do business today and, more importantly, how we will conduct business in the future. I will also describe some of our accomplishments that continue to build and sustain strong communities throughout the western United States. Finally, I will provide an overview of Western's FY 2015 Budget.

Western markets and delivers clean, renewable, reliable, cost-based hydroelectric power and related services within a 15-state region of the central and western U.S. It is one of four Power Marketing Administrations (PMAs) within the U.S. Department of Energy (DOE) whose role is to market and transmit wholesale electric power from 14 multi-use water projects for the public benefit and manage the Transmission Infrastructure Program. Western's transmission system carries electricity from 56 power plants, operated by the Bureau of Reclamation (BOR), U.S. Army Corps of Engineers (COE), and the International Boundary and Water Commission (IBWC). Together, these plants have an installed capacity of 10,479 megawatts.

As an essential part of our mission of delivering power to 690 preference power customers and providing transmission to hundreds of other customers, Western's more than 1,400 employees manage more than 17,000 circuit-miles of transmission lines, 328 substations, 177,000 structures, and 26 facility locations covering a footprint of more than 1.3 million square miles making us one of the top 10 largest transmission providers in the United States. We also manage a substantial communications network in support of our systems. The combined physical assets represent just more than 4 percent of the U.S. transmission system. Western's advanced and

complex grid, which delivers power to millions of Americans, has fueled rural electrification throughout our service area.

Western customers benefit with reasonable rates today from investments made yesterday. They will benefit from reasonable rates tomorrow due to investments we are making with them today.

Our greatest responsibility is to manage the assets, some $4 billion strong, that are entrusted to us and ensure they are deployed wisely for our Nation and for our customers to keep the power flowing safely and reliably to more than 40 million Americans.

How we effectively manage resources is central to Western's success. If Western is to continue to provide excellent support for our customers and others, we need to consider the state of our assets and our needs in the future. Our challenge is to balance the need for investment and the needs of our customers against our available capital in a systematic, sensible and cost-effective way so we can continue to operate safely, securely, and reliably. Each region is different, legislatively and operationally, and those differences must be respected and recognized as we make decisions that guide Western's future.

Strategic Roadmap 2024

As Western looks to help power the energy frontier, we need to create a clear vision of our role in the industry, with our customers, and within the Federal Government. Since the summer of 2013, we have actively collaborated with customers, stakeholders, DOE, and our employees to develop a strategic roadmap that will serve as the guide to our mission in a changing industry through 2024 and beyond. Let me be clear that Western is not changing its mission to market and deliver clean, renewable, reliable, cost-based Federal hydroelectric power and related services, but rather exploring how that mission is best implemented in a changing world. Extensive workshops, meetings and focus groups provided input to our senior leadership team, forming the basis to develop four critical pathways. These pathways are the building blocks that support Western in accomplishing our mission.

The critical pathways are Business, Technology and Organizational Excellence, Mutually Beneficial Partnerships and Evolution of Services, culminating in the 2024 destination of Powering the Energy Frontier. These will help Western continue to deliver on our mission, manage resources effectively, and operate safely, securely and reliably, as well as the identification of opportunities and consideration of new, creative approaches that lead to consideration by each Western region for partnerships.

Asset Management

With a solid vision of where Western is headed and the roadmap to get there, we also need to have a very clear picture of where we are today. Asset management helps provide that picture. Asset management is a comprehensive, data-driven program that optimizes the use of equipment,

facilities, and operations to meet performance standards. Asset management connects equipment condition data, the consequences of equipment failure, and the relative lifecycle cost to create a measurable, risk-based assessment on any piece of equipment at any time, including replacement cycles and costs. Using this information, Western and its customers can plan system investments to ensure the greatest return when comparing needs, risk, reliability, and cost over time.

Western currently has two efforts underway to improve asset management. The first is a strategic-level refinement of capital planning activities to support our investment program. Each of our 10-year capital plans is regionally created and funded and then rolled up into a Western-wide capital investment plan to provide an accurate record of replacement strategies and sustained costs to support infrastructure needs across the agency.

The second effort is our Asset Management Program Improvement Project, the goal of which is to formalize and standardize how Western collects and processes asset information using industry-accepted standards and best practices. Western staff will create near real-time asset condition and capital investment recommendations, focusing initially on our high-value core assets—transmission line segments, power circuit breakers, and power transformers.

I have also established a new Risk Office as part of our senior team to implement Enterprise Risk Management and institutionalize risk-informed decision making. I expect this focus to lead to better informed decisions for Western, our employees, and our customers.

Sustainable Funding

One of the most critical needs facing Western today is the ability to acquire adequate capital funding to make infrastructure investments and sustain the level of reliability that Western and its customers have historically enjoyed and expect, while at the same time maintaining affordable services. Data available from our Asset Management Program, the Western-wide 10-year capital investment plan and a solid funding strategy will provide the analytical basis to articulate Western's infrastructure needs. Also this year, we have formalized this 10-year capital funding plan process so it can be repeated each year to support budget requests and funding discussions with preference power customers and DOE.

Human Capital Management

The best plans can only be accomplished with the best people, and Western's goals require a dedicated staff. Western employees are well-trained and highly committed to their work. Like the rest of the industry, I am increasingly concerned with human capital trends that may interfere with operating a reliable power system.

One of the most important trends is an aging workforce and the growing percentage of employees eligible for retirement, particularly in the mission-critical craft fields. These positions are responsible for transmission system operation and maintenance and represent almost 60

percent of Western's workforce. Currently, 15 percent of all Western personnel are eligible to retire.

Another trend impacting Western's workforce is the rapidly changing industry, which requires more technically skilled people that continue to be in high demand in industry and elsewhere. By using effective workforce planning and succession planning at every level of the organization, Western will ensure it has the right people in the right places across the agency. Western will look for ways to retain the knowledge of those expected to retire by offering mentoring and rotational programs. In addition, Western continues to invest in its employees by offering training programs at all levels. Western recently graduated a class of the Executive Leadership Development Program for future senior executives, and more recently, initiated a new development program targeted at mid-level managers. Western is also working to develop apprenticeship and new student programs to help create a pool of interested people and a way to bring them on board to fill critical positions.

Each of these strategic efforts, Strategic Roadmap, Asset Management, Sustainable Funding, and Human Capital Management, are linked and taken together provide Western the overarching framework to execute our mission to deliver cost-based, clean, reliable, renewable Federal hydropower to the western United States. Through our mission, Western's infrastructure and service play a critical role in building and sustaining strong communities throughout the West.

Western's Accomplishments Benefit Communities

I am proud of all we have accomplished in the past year. Western's focus clearly remains on three areas—maintaining and repairing existing infrastructure, preparing and managing for new and existing demands on the system, and fiscal responsibility.

Maintaining and Repairing Existing Infrastructure

Western's transmission system makes up a significant portion of the backbone of the grid in the western United States. Maintaining that system is a key element in keeping the lights on for communities, businesses and families throughout the West.

Reliability is both a hallmark and imperative of our business. Over the past year, the Upper Great Plains Region safely maintained the transmission system with no cascading outages and completed a substantial number of additions/replacements and augmentations to enhance the reliability of the system.

The Rocky Mountain Region has also completed the second phase of the Lovell-Yellowtail Transmission Project and completed the environmental impact statement for the Granby Pumping Plant-Windy Gap project, both reliability-driven projects.

The Sierra Nevada Region successfully used long-line maintenance procedures to complete Cottonwood-to-Roseville transmission line maintenance activities, which reduces the

environmental footprint of maintenance activities and significantly reduces the time and cost of undertaking the work.

The Desert Southwest Region completed installation of the capacitor bank at Kofa Substation, one of 22 active construction projects in the Region addressing infrastructure stability and reliability.

Preparing and Managing for New and Existing Demands on the System

As we approach a new energy frontier, there is no doubt the transmission system must be operated differently in the future than it was envisioned or constructed. The existing system has served well for more than 50 years, but it was not designed to handle large-scale, intermittent generation in real time. Hundreds of communities depend on Western to provide reliable service, not only now, but also in a future that may look very different from today. To be ready for that future, we must prepare today.

We reached a significant milestone in the remarketing of Boulder Canyon Project power with the publication of a *Federal Register Notice* on December 30, 2013 announcing the final marketing criteria to allocate the Post-2017 Resource Pool and calling for applications. We have worked long and hard on this collaborative process.

The Transmission Infrastructure Program's (TIP) Electrical District 5-to-PaloVerde Hub Project in Arizona is 75 percent complete. The project, which entails construction of a new 230-kilovolt transmission line, will increase transmission capacity to facilitate the delivery of renewable energy to consumers in Arizona, southern Nevada and southern California. Construction on this project is on track for the entire project to be commercially operated by Jan 1, 2015, which will bring the project in on time and within budget.

Western's TIP is one avenue we have to address new demands on the transmission system. The program was established in 2009 when Congress granted Western the authority to borrow up to $3.25 billion from the U.S. Treasury to construct or facilitate the development of transmission to deliver renewable energy.

Lessons learned during the program's first few years have been incorporated into revisions proposed by a joint DOE and Western optimization effort designed to create a more efficient and transparent process to screen and evaluate proposed projects. The proposed revisions to TIP were published in the *Federal Register* on September 27, 2013.

One particularly significant revision is Western's partnering with DOE's Loan Programs Office, which leverages their strength in financial management to support Western's strength in transmission line development and construction. We anticipate calling for submission of new project proposals this spring when program revisions are finalized.

Fiscal Responsibility

Low-cost Federal hydropower was a cornerstone in the development of the West, and it remains a key element in the economic life in maintaining strong communities. To keep our costs low, we must be good stewards of the resources entrusted to us.

Cost reduction initiatives, worked in collaboration with our customers and BOR, have helped the Colorado River Storage Project Management Center to extend the current rate for two years, providing seven years of rate stability for cost-based hydropower on which communities throughout the region can count.

Just recently, Western, BOR, the Hoover Contractors and their financial teams refinanced the original investment for the Hoover Visitor Center to a lower interest rate using a bond issuance. Customers were able to save $121 million, which is a sixty percent savings.

The Rocky Mountain Region, on behalf of the Colorado River Storage Project Management Center, awarded a contract for a pair of phase-shifting transformers for the Waterflow Substation located near San Juan, New Mexico, in the Four Corners area. Thanks to diligent work by contracting and legal staff at Western, the estimated $20 million initial purchase price was reduced during the bid and negotiation process to $12.5 million.

The Loveland Area Projects Power Marketing Initiative effort has been approved and will ensure that customers have locked in low rates for 30 years starting in FY 2024.

Challenges and Opportunities

As we move toward the future, there is, and will be, a significant increase in the interdependency of water, energy and fuel sources. The significance of the energy-water nexus is center stage with the specter of a historic drought in California and unprecedented low water levels.

Without adequate water, we do not have sufficient hydropower to meet our contractual obligations. Under many of our contracts, we must purchase power to meet our obligations, so our expenses go up. This is ultimately reflected in our cost-based rates and eventually reaches the consumer.

In some of our projects, specifically Central Valley Project and Boulder Canyon Project, we market only the hydro power that is available. Customers are responsible for obtaining the remainder of their energy needs. When that power is purchased on the open market at higher prices, the cost to the consumer goes up. Low water availability and higher prices drive demand toward other resources, and Federal hydropower becomes less competitive.

In addition, the costs of operating and maintaining electric power generation facilities safely and reliably have increased. Operating constraints for many federally owned and operated multipurpose projects have changed over time to meet enhanced environmental regulatory compliance requirements. These operating constraints, coupled with below-normal water years, have impacted the quantity, availability, and timing of Federal hydropower.

Historically, cost-based Federal hydropower has held a price advantage over replacement resource alternatives and provided a significant benefit to our customers and communities that depend on them. As that price gap narrows, the flexibility and value of Federal hydropower are diminished.

Western continues to partner with our Federal hydropower generation partners to increase project power accomplishments consistent with existing legislative and operating constraints. We also participate as a partner in regional resource planning forums to represent the interests of hydropower.

Adding to the challenge are the threats to our security, both physical and cyber, that have become more visible in recent years and continue to escalate. Western recognizes the importance of both proactively defending against threats and rapidly responding when threats are detected.

To that end, we have separated our Safety and Security programs into two separate programs to increase responsiveness, consistency, communication, and accountability. We have also centralized our Cybersecurity program to increase its visibility as well.

Last August, we deployed a state-of-the-art mobile security trailer equipped with the latest technology for detection and surveillance and modeled after proven military equipment. The trailer can be moved to areas where there may be security issues, thefts, or threats and is equipped with the latest technology for detection and surveillance.

Western also participated as an active player in the nationwide GridEx II exercise designed to test participants' ability to respond to cyber or physical security incidents. The exercise simulated multiple cyber and physical attacks with incidents designed specifically for Western. The exercise provided valuable lessons we will use as we continue to enhance our security posture.

Western's FY 2015 Budget Request

A critical challenge Western faces today is the ability to maintain sufficient funding to continue sustaining the safety, security, and reliability of our transmission system, both now and into the future. Much of Western's 17,000 miles of integrated high-voltage transmission infrastructure was constructed in the 1940s through 1960s, with an anticipated useful lifespan of 50 years. More than half of Western's infrastructure has reached or exceeded its original service life. Significant reinvestment in the system is required to maintain reliable power delivery.

Western is requesting Congress appropriate $93.4 million for its Construction, Rehabilitation, Operation, and Maintenance Account and $0.2 million for the Falcon and Amistad Operating and Maintenance Fund in FY 2015 as shown in Attachment 1.

A considerable portion of Western's mission requirement is dependent on a combination of offsetting collections and alternative financing, which are used to fund a variety of Western

activities including annual expenses, purchase power and wheeling and construction. These alternative financing efforts are pursued proactively and collaboratively with our customers to address funding needs. Through the Administration's support and customer participation, we continue to pursue and use alternative financing to meet our power delivery obligations.

Western estimates the FY 2015 priority construction program need is $86.6 million. Of this amount, we will be seeking alternative financing of $74.4 million, or approximately 86 percent of the FY 2015 requirement to fund Western's Construction and Rehabilitation program.

Closing Statement

Working together with our customers, we are repaying our expenses with interest, ensuring that the beneficiary pays and keeping costs down through sound business practices to be good stewards of the public's resources. In our role as a power marketer, Western continues to ensure our customers can depend on low-cost Federal hydropower. As a transmission provider, Western is a leader both in improving the reliability of the Nation's grid and in safety. Thank you, Mr. Chairman. I would be pleased to answer any questions that you or the Subcommittee members may have.

Attachment 1

Western Area Power Administration
Overview
Appropriation Summary by Program

Fund	(dollars in thousands) Program	Offsetting Collections [1/]	Alternative Financing	**Total**
Western CROM				
PPW	441,223	-260,510	-180,713	**0**
O&M and PD	309,863	-218,191	-10,497	**81,175**
C&R	86,645	0	-74,448	**12,197**
Subtotal, Western CROM	837,731	-478,701	-265,658	**93,372**
Falcon/Amistad	5,529	-4,499	-802	**228**
Colorado River Basins Power Marketing Fund	228,209	-251,209	0	**-23,000**
Transmission Infrastructure Program	15,629	-3,229	-12,400	**0**
Total, Western	1,087,098	-737,638	-278,860	**70,600**

[1/] Offsetting collections includes the Colorado River Dam Fund