

STATEMENT OF
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U.S. DEPARTMENT OF ENERGY
BEFORE THE
SUBCOMMITTEE ON WATER, POWER, AND OCEANS
COMMITTEE ON NATURAL RESOURCES
U.S. HOUSE OF REPRESENTATIVES
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EXAMINING THE PROPOSED FISCAL YEAR 2016 SPENDING, PRIORITIES AND
THE MISSIONS OF THE BUREAU OF RECLAMATION, THE FOUR POWER
MARKETING ADMINISTRATIONS AND THE U.S. GEOLOGICAL SURVEY'S
WATER PROGRAM

Mr. Chairman, Mr. Ranking Member, and Members of the Subcommittee, I appreciate the opportunity to testify today. My name is Elliot Mainzer. I am the Administrator of the Bonneville Power Administration (Bonneville). I am excited to work with our employees, customers and constituents, state, local and tribal governments, and Congress to position Bonneville to continue to deliver value to the Pacific Northwest well into the future.

In my testimony today, I will share with the Committee Bonneville's significant successes over the past year, how we are addressing key challenges and opportunities, and I will provide an overview of the Fiscal Year (FY) 2016 budget.

BONNEVILLE'S RECENT SUCCESSES AND KEY CHALLENGES

Since its creation, Bonneville has been a major force in the Pacific Northwest, providing renewable hydro power that is the cornerstone of the region's economy, helping to preserve and restore the environment and raising the standard of living for both urban and rural citizens. Bonneville's foundational commitment to being a wise steward of the region's valuable resources enabled us to meet the challenge of managing through difficult economic times while making important progress in areas that advance both regional and national energy goals.

Debt Repayment

Bonneville ratepayers repay, with interest, the debt on the Federal investment in the Federal Columbia River Power System (FCRPS). In FY 2014, Bonneville made its full scheduled payment of \$991 million to the U.S. Treasury. That sum included an additional \$321 million appropriations payment. This payment marks the 31st year in a row that Bonneville has made a full, on-time payment to the Treasury. We expect to make the 32nd consecutive payment by the end of this fiscal year on time and in full. Bonneville finances its approximately \$4.1 billion annual cost of operations and investments primarily through power and transmission revenues and borrowing from the U.S. Treasury at interest rates comparable to the rates prevailing in the market for similar bonds issued by government corporations.

Rates – Managing for Short and Long-Term

Keeping rates as low as possible, consistent with sound business principles, while addressing the demands on the power and transmission system and achieving key public purpose objectives remains an important priority. Bonneville is in the process of determining rates for power sales and transmission services for FY 2016 and FY 2017. This process will be completed in the summer of 2015, with a final Bonneville proposal for FY 2016 and FY 2017 rates submitted to the Federal Energy Regulatory Commission (FERC) for approval.

Capital Strategy

Bonneville's most important strategic priority is to maintain and enhance the value of the FCRPS. The FCRPS power and transmission assets are aging and require significant capital investment to allow them to continue to provide reliable and low-cost service well into the future. Bonneville, its utility customers and Federal partners have successfully maintained and enhanced extremely reliable power and transmission systems despite aging facilities.

As this critical infrastructure ages, replacements and upgrades will continue to increase operational efficiency and provide needed capacity and capabilities, ensuring that the region has an adequate, reliable and low-cost power system. Bonneville also invests to fulfill regional commitments for energy efficiency and fish and wildlife restoration.

I intend to work closely with our customers and other stakeholders to optimize use of capital across our various asset classes in a way that is sustainable in terms of customer rate impacts.

A sizeable portion of our transmission system is on federally managed land, and last year we had the opportunity to provide the Committee with information about our experience with the management of electricity rights-of-way on these lands. We are continuing to work with the Federal land management agencies in supporting their management goals while ensuring that Bonneville is able to maintain a reliable transmission system.

Innovative Financing Tools

Bonneville's success in meeting its growing capital demands and delivering public benefits to its ratepayers hinges greatly on sufficient access to low cost sources of capital. To supplement the traditional use of borrowing authority from the U.S. Treasury to finance investments, Bonneville is utilizing other funding sources to meet future needs of the power and transmission systems; however, there are limits to these funding tools.

One innovative tool we implemented in FY 2013 was the power customer prepayment program, which allows customers to prepay their power bill in the form of block purchases. As a result of the FY 2013 prepayment solicitation, Bonneville received \$340 million in prepayments, which is being used to fund needed FCRPS hydroelectric investments. In addition, the Lease Financing Program enables Bonneville to continue to invest in infrastructure to support safe and reliable transmission. Bonneville has signed more than \$1 billion in leases under this program.

Increasing Demands on the Power and Transmission System

To meet our statutory obligations to our preference customers and meet our obligations as an open access transmission provider, we must bring non-federal sources of balancing capacity and flexibility into our operations, including both supply side and demand side

resources. We must also address growing reliability compliance requirements and do so as efficiently and cost-effectively as possible.

Workforce Challenges

We are facing unprecedented changes on the regulatory, technology, and market design fronts at a time when our physical assets and systems are aging and requiring significant capital investment and renewal. We also face a dynamic and changing transmission marketplace and operations. At the same time, many of our employees are eligible to retire in the near future. It is important that Bonneville continue to attract and retain skilled individuals to meet the growing demands of a competitive and rapidly changing industry.

Succession planning efforts are currently underway and one such effort is the new Executive Succession Program we launched late last year. This pilot program is designed to create a sustainable, structured approach to increase the number of employees who are ready and able to take on senior leadership positions at Bonneville.

Transmission Planning and Development

Bonneville will continue to develop innovative approaches to planning transmission development in the region. To support the load growth and marketing needs of transmission customers, we are collaborating with stakeholders to revise and enhance policies and procedures with the objectives of: promoting more efficient and effective regional transmission planning processes and timelines; clarifying rights and responsibilities for Bonneville and its customers; ensuring equitable cost allocation; reducing financial risks to Bonneville and its ratepayers, and mitigating stranded investment exposure.

Bonneville continued to build its legacy as the leader in high-voltage transmission in the Northwest in 2014. We took our latest step in facilitating the growth of renewable resources with the May 2014 start of construction on a new 500-kilovolt transmission project in Washington state. The 38-mile Central Ferry-Lower Monumental transmission line will be able to carry more than 800 additional megawatts of renewable wind energy from areas east of the Cascade Mountains to heavily populated areas to the west. The line is expected to be energized by December 2015, in time to serve pending transmission requests, including for renewable power. Another key project to add transmission capacity resumed in 2014. The 28-mile Big Eddy-Knight Transmission Project is intended to serve requests from large generators, including wind projects, for interconnection with Bonneville's high-voltage transmission system. Bonneville expects to complete construction in late 2015.

Bonneville is continuing its environmental review process for the proposed 79-mile I-5 Corridor Reinforcement transmission project in southwestern Washington. This line is proposed to improve transmission system reliability and relieve congestion in western Washington and northern Oregon.

Bonneville also began construction on the upgrade of the Pacific Direct Current Intertie in the summer of 2014. One of the world's longest and highest-capacity transmission lines, the intertie delivers carbon-free Northwest hydropower and wind energy to California, as well as carrying electricity north to meet peak demand in the Northwest. The \$428 million project to upgrade the four-decade-old equipment will increase intertie capacity from 3,100 megawatts to at least 3,220 megawatts, as well as strengthen the line against weather and other threats to reliability and performance. Work on the project is expected to continue through November 2016.

Bonneville also continues to constructively engage with neighboring service providers to find creative solutions to serve our customers in southeastern Idaho. Bonneville is well positioned to serve these loads following the conclusion of current service arrangements in 2016, and continues to advance long-term service options, such as the Boardman-to-Hemingway 500-kilovolt transmission project.

Cyber and Physical Security

Bonneville is committed to meeting its obligations as a trustworthy steward of its cyber and physical assets. In July 2014, Bonneville launched a new Cyber Security Operations and Analysis Center. The center is staffed 24/7 with experts in the field of cyber security intelligence analysis, network monitoring and incident response. The center provides Bonneville with greater insight and control for the network operations centers, cutting down its time to respond to threats.

Bonneville is committed to complying with Critical Infrastructure Protection (CIP) standards established by the North American Electric Reliability Corporation (NERC). We are currently working towards applying the Federal Information Security Management Act, including its recently passed updates, to equipment used in grid operations, and we are working to comply with NERC CIP version 5 by the April 2016 deadline.

Bonneville is also committed to protecting national critical infrastructure, like control centers, and substations supporting high voltage transmission. Bonneville has implemented a long term Security Asset Management Strategy and a "Critical Asset Security Plan" that will ensure installation of enhanced security infrastructure at our most critical substations. The strategy follows the Department of Energy (DOE) Graded Security Protection guidelines and is a "Risk Based Approach" to protecting critical assets. This strategy enhances NERC CIP requirements.

Business Resiliency

Continuity of Operations ensures the continued performance of essential functions under a broad range of circumstances. At Bonneville, we have developed plans to respond to any event that has the potential to interrupt our ability to operate safely and effectively. In addition to preparing for potential earthquakes, severe storms, wildfire, explosions, or terrorist attacks, Bonneville is working internally, as well as with regional governmental

jurisdictions, customer utilities and Federal agencies, to facilitate an effective disaster response that ensures resiliency.

In late 2014, Bonneville ushered in a new era of reliability with the opening of an additional 36,000 square-foot, \$23 million scheduling facility in Spokane, Washington. This new operations hub will help Bonneville maintain power and transmission scheduling functions if the primary facilities in Portland, Oregon and Vancouver, Washington become unavailable. The state-of-the art facility fortifies the Federal power and transmission systems, greatly improving Bonneville's ability to respond in an emergency. The new scheduling center adds to the capability of the nearby Munro Control Center, which provides dispatch for Bonneville's lower-voltage transmission lines and serves as a backup to the Dittmer Control Center. The addition of the scheduling capability means Bonneville can continue or quickly restore power and transmission operations, even if Dittmer or headquarters were completely incapacitated.

Northwest Power Pool Members' Market Assessment

In 2014 and early 2015, we made progress in our important work with the Northwest Power Pool Members' Market Assessment and Coordination Committee, of which I am a co-chair. The effort by diverse public and investor-owned utilities is exploring more efficient use of generation and transmission resources through tighter coordination of system operations. With a continued focus on situational awareness, capacity adequacy and economic optimization of resources, we can lay the foundation for an even more reliable, flexible, low-cost and environmentally sustainable power system.

To me, this does not require a radical remaking of the system, but rather a continued evolution that builds on the Northwest's longstanding tradition of developing cost-effective, pragmatic solutions. Key accomplishments this year included development of regional tools to support operations and reliability, agreement on data sharing among regional parties, refinement of policy and market design protocols, and issuance of a request for proposal for a possible Market Operator from which we learned a lot. Because of these accomplishments, the utilities have committed to formally implement these tools, through bilateral agreements and in a transparent manner.

BPA's guiding principles always anticipated the need to move toward market solutions incrementally and with due diligence. These tools not only should provide value to the region, but would function as essential building blocks for a potential Northwest Security Constrained Economic Dispatch (SCED) should it become desirable to more fully capture greater benefits in the future. .

Columbia River Treaty

Another important and pressing strategic initiative concerns the future of the Columbia River Treaty. In December 2013, the U.S. Entity, consisting of the U.S. Army Corps of Engineers and Bonneville, delivered the final regional recommendation concerning the

post-2024 future of the Columbia River Treaty to the U.S. Department of State. I look forward to continued collaboration with regional and national interests to advance the modernization of the Treaty.

Fish and Wildlife

Bonneville's strategy for mitigating the impact of the FCRPS on fish and wildlife builds on the strong foundation we have established and takes us several years into the future. Our strategy focuses on the Northwest Power Act and the Northwest Power and Conservation Council's Fish and Wildlife Program, the Endangered Species Act and Biological Opinions covering both the Federal hydro system and the transmission system, as well as the historic Columbia Basin Fish Accords. It continues our commitment to improving salmon and steelhead runs in FCRPS rivers and uses the best available science. It also embraces our effective implementation through state-of-the-art hydro, habitat and hatchery actions along with valued partnerships with tribes, Federal and state agencies and conservation groups.

We have the highest salmon passage in the nation, with juvenile fish dam passage survival performance standards of 93 to 96 percent. Our hatcheries are conserving wild fish and bringing back sockeye, chinook and coho salmon to places they had ceased to occupy. And, most important of all, we are seeing adult fish return at levels not seen in decades, so much so that in 2014 there were fisheries open from April through November.

We are facing a potential court decision on the Biological Opinion this year. Although we cannot predict the outcome of this litigation, we are cautiously optimistic that our all-H strategy – hydro improvements, tributary and estuary habitat restoration, and hatchery operations with best management practices – will be recognized as comprehensive and beneficial across all life stages, with results in recent years that show its success.

Part of Bonneville's commitment to help facilitate its obligations for fish and wildlife mitigation includes beginning construction, possibly as early as FY 2016, on three significant fish projects. These projects require Congressional expenditure authority (for Bonneville to use its self-financing authority) and are listed in the Proposed Appropriations (Expenditure Authority) Language of Bonneville's FY 2016 Congressional Budget submission pursuant to Public Laws 93-454 and 96-501. These projects are consistent with the Northwest Power Act and help fulfill our Fish Accord commitments.

Energy Efficiency

With our public power utility partners, we are funding energy efficiency infrastructure to meet the ambitious regional goals of the Northwest Power and Conservation Council (Council), and using energy efficiency as our priority resource to augment power

supplied to our customers. Since Congress passed the Pacific Northwest Electric Power Planning and Conservation Act in 1980, more than half of the region's new demand for electricity has been met through energy conservation.

Since 2010, Bonneville and its public power partners have saved at least 560 average megawatts of electricity, greatly surpassing the five-year goal of 504 aMW set by the Council in its Sixth Power Plan. Public power utilities and Bonneville continue to lead the region's energy efficiency efforts. This fantastic accomplishment could only be achieved through the great collaboration that we have in the Pacific Northwest.

Pacific Northwest Smart Grid Demonstration Project

New interactive technologies hold the promise of enhancing grid operations and helping solve energy industry challenges. At the center of this effort is the \$178 million Pacific Northwest Smart Grid Demonstration Project, the largest in the nation. The five-year project, funded by the American Recovery and Reinvestment Act of 2009, is in its final phase in 2015. Bonneville is contributing \$10.2 million, matched by DOE funds.

The funds have allowed the testing of new two-way communication of load behavior and supply cost information intended to increase cost savings and make more efficient use of existing resources. Led by Battelle Memorial Institute, the collaborative effort involves 11 public and private utility participants in five states, five technology partners, two universities and 60,000 metered customers. The project has deployed \$79 million in smart grid technologies throughout the Northwest, increasing energy productivity and services in the region.

FY 2016 BUDGET OVERVIEW

Bonneville is in sound financial condition and is well positioned for the future. Bonneville's FY 2016 budget proposes estimated accrued (self-financed) expenditures of \$3.0 billion for operating expenses, \$30 million for projects funded in advance (funded by customers), and \$1.1 billion for capital investments.

Bonneville's commitment to fish and wildlife mitigation and enhancement is exemplified in its substantial direct program budget of \$322 million, capital and expense.

Bonneville's FY 2016 budget is a business-based budget that aligns well with Department of Energy priorities and goals.

Table BP-5 in Bonneville's FY 2016 Congressional Budget submission provides increased transparency regarding potential Bonneville third-party financing activity and projects funded in advance, which is estimated at about \$1.7 billion during the FY 2015 through the FY 2020 period.

Please see Attachment A for budget data based on current services for FYs 2014 through 2016.

CONCLUSION

Mr. Chairman, this concludes my prepared remarks. I am excited by the role Bonneville is playing and will continue to play to achieve regional goals for clean, low-cost, and reliable electricity supplies while operating in a fiscally prudent manner. I would be happy to respond to any questions from the Committee.

Attachment A

Bonneville Power Administration

Funding Profile by Subprogram ^{1/}

(Accrued Expenditures in Thousands of Dollars)

	Fiscal Year			
	2014 Actuals	2015 Original ^{2/}	2015 Revised ^{2/}	2016 Proposed
Capital Investment Obligations				
Associated Project Costs ^{3/}	58,187	N/A	211,829	240,790
Fish & Wildlife	37,353	N/A	51,807	54,807
Conservation & Energy Efficiency ^{3/}	77,887	N/A	92,000	94,800
Subtotal, Power Services	173,427	N/A	355,637	390,398
Transmission Services	340,825		704,254	621,816
Capital Equipment & Bond Premium	30,204	N/A	34,669	39,356
Total, Capital Obligations ^{3/}	544,456	1,055,079	1,094,559	1,051,569
Expensed and Other Obligations				
Expensed	3,262,726	2,996,419	2,911,588	3,040,716
Projects Funded in Advance	384,689	46,491	30,000	30,000
Total, Obligations	4,191,871	4,097,988	4,036,147	4,122,285
Capital Transfers (cash)	567,000	209,270	209,270	206,900
BPA Total	4,758,871	4,307,258	4,245,417	4,329,185
Bonneville Net Outlays	262,365		156,739	56,365
Full-time Equivalents (FTEs)	2,893	3,200	3,100	3,100

Public Law Authorizations include:

Bonneville Project Act of 1937, Public Law No. 75-329

Federal Columbia River Transmission System Act of 1974, Public Law No. 93-454

Regional Preference Act of 1964, Public Law No. 88-552

Flood Control Act of 1944, Public Law No. 78-543

Pacific Northwest Electric Power Planning and Conservation Act of 1980 (Northwest Power Act), Public Law No. 96-501

These notes are an integral part of this table.

- ^{1/} This budget has been prepared in accordance with PAYGO. Under PAYGO all Bonneville budget estimates are treated as mandatory and are not subject to the discretionary caps included in the Budget Control Act of 2011. These estimates support activities which are legally separate from discretionary activities and accounts. Thus, any changes to Bonneville estimates cannot be used to affect any other budget categories which have their own legal dollar caps. Because Bonneville operates within existing legislative authority, Bonneville is not subject to a "pay-as-you-go" test regarding its revision of current-law funding estimates.
- ^{2/} Original estimates reflect Bonneville's FY 2015 Congressional Budget Submission. Revised estimates, consistent with Bonneville's annual near-term funding review process, provide notification to the Administration and Congress of updated capital and expense funding levels for FY 2015.
- ^{3/} Includes infrastructure investments designed to address the long-term electric power related needs of the Northwest and to reflect significant changes affecting Bonneville's power and transmission markets.