TESTIMONY OF ELLIOT MAINZER ADMINISTRATOR AND CHIEF EXECUTIVE OFFICER BONNEVILLE POWER ADMINISTRATION

HEARING ON "EXAMINING THE PROPOSED FISCAL YEAR 2019 SPENDING,

PRIORITIES AND MISSIONS OF THE BUREAU OF RECLAMATION AND THE FOUR

POWER MARKETING ADMINISTRATIONS"

SUBCOMMITTEE ON WATER, POWER, AND OCEANS

COMMITTEE ON NATURAL RESOURCES

UNITED STATES HOUSE OF REPRESENTATIVES

MARCH 21, 2018

Good afternoon, Chairman Lamborn and members of the Subcommittee. My name is Elliot Mainzer and I am the Administrator and Chief Executive Officer of the Bonneville Power Administration (BPA). I'm pleased to be here today to discuss BPA's proposed budget for Fiscal Year 2019 and current issues for BPA's operations and financial health.

Role of the Bonneville Power Administration:

BPA is a Federal Power Marketing Administration headquartered in Portland, Oregon. BPA markets electric power, provides transmission, and supports development of energy efficiency throughout the Pacific Northwest. BPA serves a 300,000 square mile area that includes Oregon, Washington, Idaho, western Montana, and parts of northern California, Nevada, Utah, and Wyoming with a population of about 13.5 million people. BPA markets the electric power produced from 31 Federal hydroelectric projects in the Pacific Northwest owned by the U.S Army Corps of Engineers (USACE) and the Bureau of Reclamation. BPA also acquires non-Federal power, including the power from one nuclear power plant, the Columbia Generating Station, to meet the needs of its customer utilities.

BPA maintains and operates 15,238 circuit miles of transmission lines, 260 substations, and associated power system control and communications facilities over which this electric power is delivered. BPA also supports the protection, mitigation, and enhancement of fish and wildlife affected by the development of the hydro system as part of its efforts to preserve and balance the economic and environmental benefits of the Federal Columbia River Power System (FCRPS). Combined, these assets are worth billions of dollars. It is BPA's responsibility to plan for and fund their operations and maintenance, while also preserving and enhancing physical and cyber security.

BPA Strategic Plan for 2018-2023:

In January, BPA released its 2018-2023 Strategic Plan to describe how it will operate in a commercially successful manner while meeting its public responsibilities. BPA developed this strategic plan after listening to customers and constituents express their interests in BPA's commercial viability and ability to meet its statutory obligations. The strategic plan comes at a moment when BPA is midway through 20-year power sale contracts with its preference power customers and those customers are looking to how BPA will be positioned to meet their needs beyond the terms of their current contracts.

BPA adopted the following strategic goals:

- 1. Strengthen financial health
- 2. Modernize assets and system operations
- 3. Provide competitive power products and services
- 4. Meet transmission customer needs efficiently and responsively

Acting on these goals will put BPA on a path to become more competitive and responsive to customer needs, modernize our assets and operations to leverage and enable industry change, and deliver on our public responsibilities through a commercially successful business.

BPA Financial Plan:

Following release of its 2018 – 2023 Strategic Plan, BPA issued its 2018 Financial Plan. The Financial Plan provides a framework for decision-making by defining the financial constraints within which BPA operates and establishing objectives to strengthen financial health. The three financial health objectives outlined in the financial plan are: improve cost-management discipline, build financial resiliency and maintain a strong independent financial health assessment. BPA will work collaboratively with its customers and stakeholders through public processes to determine the best course of action toward meeting its three financial health objectives.

Future Rates

In the coming months BPA will initiate a renewed focus on cost management. BPA is taking aggressive steps to manage the rising costs of operating the federal power and transmission systems, starting by establishing a cost-management goal to keep the sum of program costs, by business line, at or below the rate of inflation through 2028.

To meet this goal, and in response to customer input, BPA is initiating a new approach for setting spending levels during its Integrated Program Review (IPR) public process. The IPR is the public review process for the costs that will be recovered through rates during the following two-year rate period. Instead of BPA's past practice of determining program costs through a bottom-up approach, BPA leadership will set firm cost constraints at the start of the process in alignment with this cost-management objective. BPA's decisions regarding program funding levels will be guided by the other objectives outlined in its strategic plan.

BPA will initiate its Fiscal Years 2020 and 2021 IPR in June with a series of public workshops to discuss categories of program spending. Following the completion of the IPR process, BPA will file its initial rates proposal for those years in November.

BPA Asset Management Strategy

The foundation of BPA's value is the base of Federal transmission assets it owns and operates, and the generating resources from which it markets electricity. The FCRPS is the nation's largest interdependent carbon free, renewable energy resource system. This iconic Federal hydropower system, coupled with BPA's expansive high-voltage transmission grid and the output of the region's only commercial nuclear plant, provides power valued at more than \$3 billion annually.

BPA utilizes an asset management strategy to apply best-practice industry standards to manage the lifecycle costs of Federal assets. This is central to maintaining the long-term value and reliability of the power and transmission systems. Achieving these objectives for power requires collaborative, long-term planning with our Federal partners, the U.S.

Army Corps of Engineers, and Bureau of Reclamation. Through the Asset Investment Excellence Initiative, the three agencies have established prioritized goals to drive aligned investment decisions and improve contracting and project-management practices.

BPA Capital Financing

The Bonneville Project Act of 1937 provides the statutory foundation for BPA's power marketing and transmission responsibilities and authorities. In 1974, the Federal Columbia River Transmission System Act provided BPA self-financing authority, established the Bonneville Fund (a permanent, indefinite appropriation) allowing BPA to use its revenues from electric power and transmission rates to pay all its costs without further appropriation, and authorized BPA to sell bonds to the U.S. Treasury to finance the region's high-voltage electric transmission system requirements.

As of 2017, Congress has provided BPA with revolving U.S. Treasury borrowing authority of \$7.7 billion. At the end of 2017, BPA had consumed \$5 billion of its borrowing authority, leaving \$2.7 billion remaining. Based on projections from BPA's most recent rate filing, this source of financing will be depleted by 2023, putting BPA's future capital program at risk.

In its strategic plan, BPA sets the objective to ensure planned capital needs are met on a rolling 10-year basis and to preserve \$1.5 billion of available borrowing authority for operational and capital liquidity to mitigate unexpected changes without having to swiftly and materially increase rates.

To continue investing in and maintaining the tremendously valuable Federal power and transmission assets, BPA will need to look beyond its traditional financing source and consider an "all of the above" capital financing strategy. Each possible source of additional capital has its limitations and probabilities of availability, and BPA will evaluate them within the context of their cost, certainty, and impacts on other stated financial health goals.

Cyber and physical security

I would also like to address the significance of cyber and physical security issues BPA shares with the entire electric power industry.

<u>Cyber Security:</u> As part of DOE, BPA incorporates lessons learned and industry best practices, participates in the Cyber Security Risk Information Sharing Program (through the Cooperative Protection Program) and Einstein 3 Accelerated, and implements the requirements of the DOE Risk Management Framework among other federal guidance. BPA operates a 24/7 cyber security operations and analysis center as part of its cyber threat intelligence program,

BPA is subject to the mandatory National Electric Reliability Corporation (NERC) reliability standards including cyber security standards provided for in the Critical Infrastructure Protection standards. Additionally, BPA implements the National Institute of Standards and Technology risk management framework required of federal agencies and applies that framework, including cyber testing and assessment, to operational

technology. BPA maintains a close working relationship with DOE counter intelligence and participates in the joint government-ESCC meetings, GridEx, as well as other industry groups with a focus on anticipating and mitigating cyber security risks.

<u>Physical Security:</u> With more than 15,000 miles of high-voltage electric transmission lines and 260 substations in seven western states, the BPA transmission system plays a vital role in the Western Interconnection. BPA's system is subject to the physical security standards provided for in the NERC Critical Infrastructure Protection standards as well as protection requirements prescribed by DOE. BPA actively implements emerging regulatory requirements and has programs in place for regular inspections, upgrades, and capital investments in its security assets.

As a part of the nation's electricity transmission system, BPA prepares for and responds to emergencies. After Hurricane Irma, DOE deployed subject matter experts from BPA and other utilities to Puerto Rico to provide technical assistance to the USACE with planning, cost estimates, validation, and quality assurance and quality control. Other BPA employees were deployed in their roles as ESF-12 responders to Puerto Rico and the U.S. Virgin Islands. BPA had a total of 26 employees deployed at various times between September and March. BPA and its employees were pleased to be able to contribute to this restoration effort. BPA also is a member of the Spare Transformer Equipment Program and western regional mutual assistance networks.

Evolving Western Markets

Energy and capacity markets in the Western U.S. have changed significantly over the past few years. The Western Energy Imbalance Market (EIM), which is administered by the California Independent System Operator (CAISO), began operations in 2014. The EIM, which has 11 current or planned utility members, dispatches participating generating resources every five minutes, reducing total operating costs and providing a broader pool of resources to support renewable resource integration.

BPA plays a key role in EIM operations because market participants make intra-hour energy transfers across BPA's transmission system. In 2017, BPA and CAISO signed a Coordinated Transmission Agreement to clearly document the business processes and technical requirements for using the BPA transmission system for EIM transfers. BPA has also engaged with other Northwest hydro generators and the CAISO to develop a proposal for a day-ahead flexible capacity product. Our goal is to develop a product that compensates resources for providing valuable flexibility and capacity to meet the increasing ramping needs of California's large wind and solar energy fleets. BPA has always been a major player in markets throughout the West. The transmission system modernization investments BPA will discuss as part of its IPR process this June could position BPA to take a more active role in these evolving energy and capacity markets, while preserving preference customers' statutory rights to purchase Federal power.

Fish and Wildlife Commitments

BPA partners with states, tribes, Federal and local governments, the Northwest Power and Conservation Council, and others across four states in the Columbia River Basin to mitigate for the effects of constructing and operating the Federal Columbia River Power System.

In May 2016, the United States District Court for the District of Oregon ruled on litigation challenging the NOAA Fisheries 2014 Biological Opinion (BiOp), which evaluates the effects of hydro system operations on ESA-listed salmon, steelhead, and other anadromous species. The Court ruled that the BiOp failed to comply fully with the Endangered Species Act (ESA) and ordered the agencies to complete a new biological opinion by December 31, 2018.

The Court also ruled that the Federal agencies did not comply with requirements of the National Environmental Policy Act (NEPA) when they adopted the BiOp. As a result, the Court ordered the Federal agencies to comply with NEPA. The Court wrote that NEPA review should consider all reasonable alternatives, which could include "the option of breaching, bypassing, or even removing a dam." The Court noted it "may be considered more financially prudent and environmentally effective than spending hundreds of millions of dollars more on uncertain habitat restoration and other alternative actions." While BPA is not a defendant in this litigation, BPA's role is integral to successful management of this system.

BPA, the USACE, and the BOR are co-lead agencies for development of the new Environmental Impact Statement (EIS). Regional, state, and tribal agencies are participating as cooperating agencies. The co-lead agencies are currently working with the cooperating agencies to develop the preliminary alternatives for analysis in the draft EIS. Alternatives will include actions ranging from no changes to current operations, to changes in spill and reservoir operations, to breaching dams on the lower Snake River. The draft EIS will be issued in 2020, and a final EIS and Record of Decision in 2021. There is a robust public engagement process in place.

NOAA Fisheries is on schedule to complete a new BiOP for hydro operations by the end of 2018. In the meantime, in January 2018, following motions for injunction filed in January 2017 and a court-mandated regional process, the Court ordered increased spill levels for the 2018 spring fish passage season at eight FCRPS dams on the lower Columbia and lower Snake Rivers. Spring fish passage spill operations pursuant to that order are set to begin April 3. The United States, through the Department of Justice, has appealed the orders granting in part the injunction motions and ordering increased spill, and the Ninth Circuit Court of Appeals scheduled expedited oral argument for March 20. While BPA is not a defendant in this litigation, BPA's role is integral to successful management of this system.

Increased spill levels will constrain the ability to generate electricity from the dams. In defending the motions for injunction in early 2017, BPA evaluated the costs of increased spill to be \$40 million on average, depending on water and market conditions. In its final FY 2018-2019 rate decision, BPA included a spill surcharge provision to calculate the

costs of the court-ordered increase in spill, which authorizes BPA to pass the estimated increase in spill costs to customers unless BPA determines it can absorb those costs through reductions in spending on its public programs.

Also, I would like to take this opportunity to thank members of the Pacific Northwest Congressional delegation who have been supportive of measures needed in the lower Columbia River to control predation by marine mammals on listed salmon and steelhead. This predation is an ongoing major contributor to losses to returning adult fish.

Columbia River Treaty

The Columbia River Treaty is an agreement between the United States and Canada that jointly coordinates operations for flood risk management and hydropower generation and provides other benefits as well. The Treaty went into effect in 1964 and has been a model of transboundary water resource cooperation ever since.

We are nearing an important date for the Treaty: in 2024, 60 years of prepaid flood control space from Canada will end and the Treaty shifts to a different flood-risk management regime. Either country also may terminate the agreement at any point after September 2024 with at least 10 years advance notice. This presents the opportunity for both countries to reconsider whether aspects of the Treaty's implementation can be modernized post-2024 so that it better reflects today's realities and continues to provide appropriate benefits to the region.

The U.S. Government reached consensus on a high level position for negotiations of a modernized post-2024 Columbia River Treaty in June 2015, informed by the final regional recommendation delivered to State by BPA and the Corps (together, the "U.S. Entity"). The U.S. Entity and State Department, among a Federal agency team, have been meeting regularly to discuss strategies for the negotiation. The U.S. Entity Team and State Department with other Federal agency experts have been meeting regularly to discuss strategies for the negotiation. The State Department also is working with Canadian officials to set a date for the beginning of negotiations.

Conclusion

Mr. Chair, for more than eighty years, BPA has developed and managed the electric power infrastructure that is the engine of the region's economic vitality and a source of clean, reliable electricity for millions. In an era of limited financial resources and a challenging market environment, it is essential that BPA remains aggressive in making sound financial decisions for its program costs and in the investments in Federal electricity assets. I believe that the 2018-2023 Strategic Plan BPA has just released is a blueprint for those decisions. I would be happy to respond to questions from the Committee.

Bonneville Power Administration

Funding Profile by Subprogram $^{1/}$

(Accrued Expenditures in Thousands of Dollars)

		Fiscal Year					
	2017	2018	2018	2019			
	Actuals	Original ^{/2}	Revised ^{/2}	Proposed			
Capital Investment Obligations			•				
Associated Project Costs 3/	206,870	N/A	242,795	264,735			
Fish & Wildlife	5,402	N/A	50,532	44,000			
Subtotal, Power Services	212,271	N/A	293,327	308,735			
Transmission Services	297,019		466,241	489,066			
Capital Equipment & Bond Premium	11,328	N/A	28,860	28,860			
Total, Capital Obligations ^{3/}	520,618	783,590	788,429	826,661			
Expensed and Other Obligations							
Expensed	3,311,458	3,360,901	3,128,229	3,140,939			
Projects Funded in Advance	141,470	40,107	42,052	41,125			
Total, Obligations	3,973,547	4,184,598	3,958,710	4,008,724			
Capital Transfers (cash)	908,712	333,134	183,126	408,637			
Bonneville Total	4,882,259	4,517,732	4,141,835	4,417,361			
Bonneville Net Outlays	382,042		(27,242)	23,061			
Full-time Equivalents (FTEs)	2,891	3,100	3,000	3,000			

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

Outyear Funding Profile by Subprogram $^{1/}$

(Accrued Expenditures in Thousands of Dollars)

Fiscal Year

	2020	2021	2022	2023
Capital Investment Obligations		•		
Associated Project Costs 3/	313,375	338,652	345,501	352,223
Fish & Wildlife	38,033	33,599	29,047	29,291
Subtotal, Power Services	351,408	372,251	374,548	381,514
Transmission Services	591,313	587,667	597,679	558,149
Capital Equipment & Bond Premium	4,880	16,257	9,267	11,292
Total, Capital Obligations 3/	947,601	976,175	981,494	950,955
Expensed and Other Obligations				
Expensed	3,135,130	3,249,861	3,348,599	3,423,253
Projects Funded in Advance	35,855	34,705	34,645	32,581
Total, Obligations	4,118,585	4,260,740	4,364,738	4,406,790
Capital Transfers (cash)	318,370	351,560	352,048	372,400
Bonneville Total	4,436,955	4,612,300	4,716,786	4,779,189
Bonneville Net Outlays	49,356	105,487	123,468	79,365
Full-time Equivalents (FTEs)	3,000	3,000	3,000	3,000

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 that are 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 dollar caps. Because Bonneville's oblligations are and will be incurred under pre-existing legislative authority, Bonneville is not subject to a "pay-as-you-go" test regarding its revision of current-law funding estimates.
- Original estimates reflect Bonneville's FY 2018 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 2018.
- 3/ Includes infrastructure investments to address the long-term electric power related needs of the Northwest and significant changes affecting Bonneville's power and transmission markets.

Additional Notes

Capital funding levels reflect external factors such as the significant changes affecting West Coast power and transmission markets, along with planned infrastructure investments designed to address the long-term needs of the region.

Cumulative advance amortization payments as of the end of FY 2017 are \$5,130 million.

Refer to 16 USC Chapters 12B, 12G, 12H, and Bonneville's other organic laws, including P.L. 100-371, Title III, Sec. 300, 102 Stat. 869, July 19, 1988, regarding Bonneville's ability to obligate funds.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving electric utility industry.

Net Outlay estimates are based on current cost savings to date and anticipated cash management goals. They are expected to follow anticipated management decisions throughout the rate period that, along with actual market conditions, will impact revenues and expenses. Actual Net Outlays are volatile and are reported in Report on Budget Execution and Budgetary Resources (SF-133). Actual Net Outlays could differ from estimates due to changing market conditions, streamflow variability, continuing restructuring of the electric industry, and other reasons.

Revenues, included in the Net Outlay formulation, are calculated consistent with cash management goals and assume a combination of adjustments. Assumed adjustments include the use of a combination of tools, including upcoming rate adjustment mechanisms, a net revenue risk adjustment, debt service refinancing strategies and/or short-term financial tools to manage net revenues and cash. Some of these potential tools will reduce costs rather than generate revenue, causing the same Net Outlay result. Adjustments for depreciation and 4(h)(10)(c) credits of the Northwest Power Act are also assumed.

FY 2017 Net Outlays are based on Bonneville's FY 2017 audited actuals. FYs 2018 and 2019 Net Outlays are calculated using Bonneville's revenue forecast from the BP-18 rate case. FYs 2020 and 2021 assume no growth in Offsetting Collections compared to FYs 2018 and 2019. FYs 2022 and 2023 assume a growth in Offsetting Collections based on standard inflation factors.

FTE outyear data are estimates and may change. Bonneville is facing a dynamic and changing transmission marketplace and operations while, at the same time, many of its 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. Accordingly, FTE estimates may need to be adjusted in the future.

Amounts in tables and schedules may not add to totals due to rounding.

Major Outyear Considerations

Bonneville's outyear estimates reflect ongoing efforts to achieve its long-term mission and strategic direction. The outyear estimates are developed with consideration and support of Bonneville's multi-year performance targets that lay out the course for achieving Bonneville's long-term objectives. Outyear capital investment levels support Bonneville's infrastructure program, hydro efficiency program, and its fish and wildlife mitigation projects.

Bonneville continues to incorporate the various aspects of the Energy Policy Act of 2005 related to its business, in particular the energy supply, conservation, and new energy technologies for the future that are highlighted in the legislation.