

Quarterly Financial Report

2017 Second Quarter

Management's Discussion & Analysis

Profile

The Bonneville Power Administration (BPA) is a nonprofit federal power marketing administration based in the Pacific Northwest. Although BPA is part of the U.S. Department of Energy, it is self-funding and covers its costs by selling its products and services. BPA markets wholesale electrical power from 31 federal hydroelectric projects in the Northwest, one nonfederal nuclear plant and several small nonfederal power plants. The dams are operated by the U.S. Army Corps of Engineers and the Bureau of Reclamation. The nonfederal nuclear plant, Columbia Generating Station, is owned and operated by Energy Northwest, a joint operating agency of the state of Washington. BPA provides about 28 percent of the electric power used in the Northwest, and its resources – primarily hydroelectric – make its power nearly carbon free.

BPA also operates and maintains about three-fourths of the high-voltage transmission in its service territory. BPA's service territory includes Idaho, Oregon, Washington, western Montana and small parts of eastern Montana, California, Nevada, Utah and Wyoming.

BPA promotes energy efficiency, renewable resources and new technologies that improve its ability to deliver on its mission. It also funds regional efforts to protect and enhance fish and wildlife populations affected by hydropower development in the Columbia River Basin.

BPA is committed to public service and seeks to make its decisions in a manner that provides opportunities for input from stakeholders. In its vision statement, BPA dedicates itself to providing high system reliability, low rates consistent with sound business principles, environmental stewardship and accountability.

General

The Federal Columbia River Power System (FCRPS) financial statements combine the accounts of the Bonneville Power Administration (BPA), the accounts of the Pacific Northwest generating facilities of the U.S. Army Corps of Engineers (Corps) and the Bureau of Reclamation (Reclamation), as well as the operations and maintenance costs of the U.S. Fish and Wildlife Service for the Lower Snake River Compensation Plan facilities. Consolidated with BPA are "special purpose corporations" known as Northwest Infrastructure Financing Corporations (NIFCs), from which BPA leases certain transmission facilities.

FCRPS revenues are derived principally from the sale of power and transmission products and services. In 1937, the Bonneville Project Act created BPA and directed it to market federally produced hydroelectric power to customers, giving preference and priority in power sales to public bodies and cooperatives. The Act authorized BPA to provide, construct, operate, maintain and improve transmission facilities to deliver federal power at cost. BPA is obligated to meet its statutory and contractual load obligations to preference customers so they can meet their total retail loads and load growth, minus their own nonfederal power supply. As an open access transmission service provider, BPA provides ancillary and control area services to support basic transmission services, including providing balancing reserves for interconnected renewable generation. BPA



remains committed to providing nondiscriminatory open access transmission after meeting statutory responsibilities to preference customers and others.

BPA's hydroelectric power supply depends on the amount and timing of precipitation in the Columbia River Basin and the shape, or timing, of the resulting runoff. For ratemaking purposes BPA balances its firm load obligations with the runoff consistent with "critical water conditions." This assumption yields estimated power generation under historically low water conditions, which provides BPA with a reliable estimate of the firm power available to meet firm load obligations. Federal firm power is provided to meet regional preference customer loads first. BPA may also sell firm power to other entities, including regional investor-owned utilities and direct-service industrial customers. Power produced in excess of BPA's firm load obligations, if available, is considered by BPA to be surplus power and is sold in the Western Interconnection wholesale power markets. When generation is not sufficient to meet loads, BPA purchases power on the wholesale markets or acquires the output of resources.

Use of Estimates and Forward-Looking Information

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results may differ from those estimates.

This Management's Discussion and Analysis is unaudited and contains statements which, to the extent they are not recitations of historical facts, constitute "forward-looking statements." In this respect, the words "planned," "predict," "could," "estimate," "expect" and similar expressions are intended to identify forward-looking statements. A number of important factors affecting FCRPS business and financial results could cause actual results to differ materially from those stated in forward-looking statements due to factors such as changes in economic, industry, political and business conditions; changes in environmental laws, regulations and policies; and changes in climate, weather, hydroelectric conditions and power services supply and demand. BPA does not plan to issue updates or revisions to the forward-looking statements.

Rates

Fiscal Years 2016-2017

BPA conducted a consolidated power and transmission rate proceeding, BP-16, to establish rates for fiscal years 2016 and 2017. BPA concluded the BP-16 rate proceeding in July 2015. The Federal Energy Regulatory Commission (FERC) then granted interim approval of the rates on Sept. 17, 2015, and final approval on Feb. 2, 2016. When compared to the prior rate period, the final rates increased wholesale power rate levels by 7.1 percent on average and increased transmission and related rate levels by 4.4 percent on average. The power rate increase resulted from several factors, among them increased hydro system operations and maintenance costs, increased fish and wildlife expenses, the expiration of the effects of debt management actions that had temporarily reduced Power Services' revenue requirements for debt service, a scheduled exchange benefit increase under the 2012 Residential Exchange Program settlement, and higher transmission costs that Power Services bears from obtaining transmission and related service from Transmission Services and others to meet power sales obligations. The increase in rates for transmission and related service was caused mainly by capital investments in the transmission system.

Under BPA's U.S. Treasury payment probability standard, BPA establishes rates sufficient to maintain a level of financial reserves to achieve a 95 percent probability of making all of BPA's scheduled U.S. Treasury payments during the two-year rate period. As part of BPA's risk mitigation strategy, BPA has relied on a Cost

Recovery Adjustment Clause (CRAC) in its rates. The CRAC for the current rate period was designed to enable BPA to increase certain power and transmission rates within the rate period to obtain up to \$300 million per fiscal year of additional revenue, primarily Power Services revenue. The conditions for triggering the CRAC in fiscal years 2016 and 2017 did not occur.

Fiscal Years 2018-2019 Rates Process

Starting in June 2016, BPA worked with customers on the Integrated Program Review (IPR) and the Capital Investment Review to examine proposed spending for fiscal year 2018 and 2019 programs, and their associated benefits and costs, in anticipation of the rate proposal that BPA will make for fiscal years 2018 and 2019. BPA conducted a second, targeted IPR (IPR 2) process in February 2017 and will use that information in preparing BPA's final rate proposal. The new rate proceeding in which BPA, its customers and others participate began in November 2016. At the conclusion of the rate proceeding, the BPA administrator will issue a final record of decision supporting the adoption of the 2018-2019 Final Rate Proposal. The proposed rates will then be submitted to FERC for confirmation and approval. FERC's practice is to grant approval of BPA's rates on an interim basis at the beginning of the rate period, pending final review.

When preparing new rates for fiscal years 2018-2019, BPA will decide whether to include a CRAC or similar risk tools for the upcoming rate period. In July 2017, when the unaudited results for the nine months ended June 30, 2017 become available, BPA will determine whether the proposed CRAC will trigger for application to fiscal year 2018 rate levels.

Slice Product

BPA provides a power sales product called "Slice of the System," or "Slice." For this product, Slice customers pay for a fixed percentage of BPA's power costs in exchange for the right to an indeterminate and variable amount of power. The amount of power Slice customers receive is indexed to their Slice percentage and the decisions they make using a BPA-provided water routing simulator that reasonably represents the real-world constraints and capabilities of the FCRPS. BPA and its federal partners retain all operational control of resources that comprise the FCRPS at all times. In fiscal year 2016, BPA granted three Slice customers their requests to switch from Slice to other products. The aggregate amount of Slice that BPA will sell will decline to 22.3 percent of the system by fiscal year 2020. Currently, the amount is 26.6 percent.

Results of Operations

Operating revenues

A comparison of FCRPS operating revenues follows for the six months ended March 31, 2017, and March 31, 2016:

(Millions of dollars)

	<u>2017</u>	<u>2016</u>	Revenue Increase (Decrease)	%
				<u>Change</u>
Consolidated gross sales				
Power	\$ 1,347.3	\$ 1,272.2	\$ 75.1	6%
Transmission	466.8	460.2	6.6	1
Bookouts (Power)	(9.2)	(13.6)	4.4	(32)
Sales	1,804.9	1,718.8	86.1	5
U.S. Treasury credits	34.0	47.8	(13.8)	(29)
Miscellaneous revenues				
Power	15.0	11.9	3.1	26
Transmission	20.6	28.7	(8.1)	(28)
Total operating revenues	<u>\$ 1,874.5</u>	<u>\$ 1,807.2</u>	<u>\$ 67.3</u>	4

Total operating revenues increased \$67.3 million when compared to the same period last year. Consolidated gross sales for Power and Transmission Services, including the effect of bookouts, increased \$86.1 million.

Power Services gross sales increased \$75.1 million. Firm power sales increased \$16.9 million due to a combination of higher load shaping charges caused by colder-than-average weather offset by lower industrial power sales in fiscal year 2017. Surplus power sales increased \$58.2 million mainly due to increased natural streamflows in January, February and March when compared to the same period last year. Electricity prices for surplus power sales were higher when compared to the same period last year.

Transmission revenues increased \$6.6 million, with slightly over \$400 thousand recorded in connection with oversupply events during the second quarter of fiscal year 2017. Near-record streamflows from abundant precipitation and snowmelt required BPA to curtail the generation of certain wind-power generators at times during March 2017. During an oversupply event, BPA pays displaced generators and collects an equal amount from transmission customers based on their scheduled generation during the month. BPA expects intermittent curtailment of wind generators to occur during the fiscal third quarter, although BPA cannot quantify the dollar amount associated with such curtailments.

U.S. Treasury credits for fish and wildlife mitigation decreased \$13.8 million due to increased streamflows and higher federal generation. Increased federal generation led to a decrease in the amount of purchased power needed for fish mitigation in the second quarter of fiscal year 2017 when compared with fiscal year 2016.

Transmission miscellaneous revenues decreased \$8.1 million due to a \$4.0 million one-time contract termination fee and \$4.0 million in reimbursable revenue recorded for cost share projects in the first half of fiscal year 2016. These reimbursable revenues are offset by equivalent expenses incurred for work performed.

Bookouts are presented on a net basis in the Combined Statements of Revenues and Expenses. When sales and purchases are scheduled with the same counterparty on the same transmission path for the same hour, the power is typically booked out and not scheduled for physical delivery. The megawatt-hours that offset each other net to zero. The dollar values of these offsetting transactions reduce both sales and purchased power expense and are recorded as bookouts. Therefore, the accounting treatment for bookouts has no effect on net revenues, cash flows or margins.

Operating expenses

A comparison of FCRPS operating expenses follows for the six months ended March 31, 2017, and March 31, 2016:

(Millions of dollars)

	<u>2017</u>	<u>2016</u>	Expense Increase (Decrease)	%
				<u>Change</u>
Operations and maintenance	\$ 1,039.4	\$ 962.6	\$ 76.8	8%
Purchased power	59.1	67.5	(8.4)	(12)
Nonfederal projects	115.9	129.2	(13.3)	(10)
Depreciation and amortization	242.1	230.1	12.0	5
Total operating expenses	<u>\$ 1,456.5</u>	<u>\$ 1,389.4</u>	<u>\$ 67.1</u>	5

Total operating expenses increased \$67.1 million when compared to the same period of fiscal year 2016.

Operations and maintenance expense increased \$76.8 million primarily due to:

- Energy Northwest's Columbia Generating Station nuclear power plant's costs increased \$56.2 million because 2017 is a refueling year. Refueling occurs biennially, as occurred in fiscal year 2015, and refueling and maintenance expenses are typically higher in refueling years.
- Bureau of Reclamation operations and maintenance costs increased \$19.8 million. Primary drivers were additional work performed under an increased operating budget for fiscal year 2017, the ongoing

mechanical overhaul of generating equipment for Units 22-24, and new work related to the alignment of Unit 21 and refurbishment of the ring seal gate at the Grand Coulee Dam Third Power Plant. During the same period in fiscal year 2016, work was delayed on Unit 24 at Grand Coulee, which had the comparative impact of increasing current year expense. Additionally, labor costs increased due to additional personnel hired at Grand Coulee, Boise, and Minidoka dams.

- Generation conservation costs increased \$9.6 million largely due to increased spending on energy efficiency incentives and low income grants.
- Fish and wildlife cost decreased \$9.0 million as a result of less work being performed on tribal and estuary restoration projects.

Purchased power expense, including the effects of bookouts, decreased \$8.4 million due to near-record precipitation in the Columbia River Basin, which has led to exceptional water supply so far in fiscal year 2017. Also, BPA was required to purchase additional power in fiscal year 2016 to offset Federal Base System generation deficits created by the replenishment of certain U.S. and Canadian reservoir levels under Columbia River Treaty storage obligations.

Nonfederal projects debt service decreased \$13.3 million and reflects terms of the related outstanding debt for Columbia Generating Station and terminated nuclear Projects 1 and 3. Debt service also reflects past debt management decisions and actions under Regional Cooperation Debt efforts. (See Regional Cooperation Debt Program section in this Management's Discussion and Analysis.) Relative to the amounts forecast by BPA in establishing power rates for fiscal year 2017, debt management actions reduced debt service and the associated amortization of the related regulatory and nonfederal generation assets. (See Adjusted Net Revenues section in this Management's Discussion and Analysis.)

Depreciation and amortization increased \$12.0 million primarily due to higher amounts of completed transmission and federal system hydro generation assets in service.

Net interest expense

A comparison of FCRPS net interest expense follows for the six months ended March 31, 2017, and March 31, 2016:

(Millions of dollars)

	2017	2016	Expense Increase (Decrease)	% Change
Interest expense	\$ 141.4	\$ 173.9	\$ (32.5)	(19)%
Allowance for funds used during construction	(17.2)	(23.7)	6.5	(27)
Interest income	(1.8)	(3.3)	1.5	(45)
Net interest expense	<u>\$ 122.4</u>	<u>\$ 146.9</u>	<u>\$ (24.5)</u>	<u>(17)</u>

The net interest expense decrease of \$24.5 million was driven primarily by a decrease in interest expense. This decrease in interest expense is due in large part to an advanced payment of higher-interest-rate federal appropriations at the end of fiscal year 2016.

Other Operational Matters

Biological opinion and legal rulings

The operation of the federal system hydroelectric projects by the Corps, Reclamation and BPA, or "Action Agencies," is subject to the Endangered Species Act (ESA). A biological opinion (BiOp) evaluates the effects of a federal agency action on species and habitat protected under the ESA. If necessary, the BiOp includes recommended mitigation actions that will ensure agency actions are not likely to jeopardize listed species or result in the destruction or adverse modification of critical habitat.

In a pair of rulings in May and July of 2016, the U.S. District Court for the District of Oregon (the court) invalidated the FCRPS BiOp by NOAA's National Marine Fisheries Service (NMFS) and ruled that the Corps and Reclamation failed to comply with the National Environmental Policy Act when they issued decision documents to adopt and implement the FCRPS BiOp. The court ordered NMFS to prepare a new FCRPS BiOp by December 2018. The court also ordered the Corps and Reclamation to continue to implement and fund the 2008 FCRPS BiOp through 2018 and to prepare a new environmental impact statement (EIS) on FCRPS operations, including consideration of breaching the four lower Snake River dams. On Sept. 30, 2016, the Action Agencies published a Notice of Intent to Prepare an EIS in the Federal Register, which initiates the EIS development process. The court ordered the Action Agencies to issue a final EIS and decision documents in 2021; the entire process is therefore expected to take five years to complete.

In March 2017, in response to motions for injunction, the court ordered the Action Agencies defined above, to develop a plan for increased spill during the spring fish passage season at eight lower Snake and Columbia river dams beginning in the 2018 spring migration season, and to begin smolt monitoring several weeks earlier than called for in the BiOp in the spring of 2018. The court also ordered the federal government to develop a proposal for notifying plaintiffs of future capital spending projects at each dam during the NEPA remand period. The court invited the plaintiffs to file new motions to enjoin future projects that the plaintiffs believe are not needed for safe operation of the dams and substantially may bias the NEPA process.

BPA is not yet able to predict how federal system hydro operations will change in 2018 and beyond as a result of this ongoing legal action and the next BiOp. While the May 2016 court decision did not affect operations and maintenance expense reported to date for fiscal year 2017 or for fiscal year 2016, the March 2017 ruling will have financial impacts on BPA, mostly beginning with fiscal year 2018, which are currently being evaluated. In particular, BPA estimated in its court filing that it could incur approximately \$40.0 million per year in additional purchased power expense and/or lost revenue and face further limitations on FCRPS flexibility for integrated power and transmission operations.

Transmission line project

BPA is currently evaluating whether to construct a new transmission line and related facilities in western portions of Washington state and Oregon. Through March 31, 2017, BPA has made cumulative investments of \$127.9 million, primarily for environmental clearance, public involvement, surveys and preliminary design costs. The \$127.9 million includes capitalized indirect, overhead and interest costs and is reported under Construction work in progress on the Combined Balance Sheets. BPA expects that a decision whether to proceed with construction could be made in the second half of fiscal year 2017. If BPA decides to not proceed with this project, BPA will then evaluate the appropriate accounting treatment for applicable amounts recorded as construction work in progress.

Liquidity and Capital Resources

Cash and cash equivalents and financial reserves

As of March 31, 2017, the FCRPS cash and cash equivalents balance was \$490.3 million. BPA's cash and cash equivalents balance was \$129.3 million, and the combined balance held by Corps and Reclamation was \$361.0 million.

To ensure BPA is able to meet its financial responsibilities to counterparties and to the U.S. Treasury, BPA relies on measures such as financial reserves, a line of credit with the U.S. Treasury and a Cost Recovery Adjustment Clause that can raise rates, if needed. BPA's financial reserves were \$1.15 billion at March 31, 2017, as compared to \$1.53 billion at March 31, 2016. Financial reserves, a non-GAAP liquidity measure used by BPA management, consist of BPA cash and cash equivalents, investments in U.S. Treasury market-based special securities and deferred borrowing. The U.S. Treasury market-based special securities reflect the market value as if securities were liquidated as of the end of the period. Deferred borrowing

represents amounts that BPA is authorized to borrow from the U.S. Treasury for capital expenditures on utility plant assets and for expenditures on certain regulatory assets, primarily related to fish and wildlife, that BPA has incurred but has not borrowed for as of the end of the period. Starting in fiscal year 2017, BPA expects deferred borrowing to represent a larger share of financial reserves as BPA will no longer earn favorable interest-offset credits on cash balances with the U.S. Treasury. Carrying a higher deferred borrowing balance will not affect financial reserves but will change the timing of BPA's borrowings from the U.S. Treasury and the associated interest expense.

A comparison of BPA financial reserves, reported at fair value, follows:

<i>(Millions of dollars)</i>	<u>As of March 31, 2017</u>	<u>As of Sept. 30, 2016</u>	<u>As of March 31, 2016</u>
Cash and cash equivalents	\$ 490.3	\$ 579.6	\$ 1,044.4
Short-term investments in U.S. Treasury securities	<u>571.6</u>	<u>272.9</u>	<u>704.7</u>
	1,061.9	852.5	1,749.1
Less: Cash and cash equivalents held by Corps and Reclamation	361.0	367.2	343.8
Add: Deferred borrowing	<u>452.0</u>	<u>239.1</u>	<u>129.0</u>
BPA financial reserves balance	<u>\$ 1,152.9</u>	<u>\$ 724.4</u>	<u>\$ 1,534.3</u>

Access to capital

BPA makes capital investments to support its multifaceted responsibilities to the region. Historically BPA relied solely on its ability to borrow from the U.S. Treasury. However, BPA's U.S. Treasury borrowing authority is limited by law and, absent other actions, the limit could be reached within a few years. To assure funding necessary for critical infrastructure improvements, BPA has over several years expanded its options to include nonfederal debt refinancings, lease-purchases, the power prepay program, reserve and revenue financing and asset management strategies to more rigorously prioritize proposed capital investments.

BPA borrowing authority from the U.S. Treasury

The aggregate principal amount of debt BPA is authorized by Congress to have outstanding with the U.S. Treasury at any one time is \$7.70 billion. The U.S. Treasury borrowing authority may be used to finance capital programs for the FCRPS. In addition, BPA and the U.S. Treasury have agreed to a liquidity facility for Northwest Power Act expenses in the amount of \$750.0 million. Use of the facility is counted within the \$7.70 billion overall limit. For capital programs, the related U.S. Treasury debt is term limited depending on the facilities financed: 50 years for Corps and Reclamation capital investments, 35 years for transmission facilities, 15 years for fish and wildlife projects and six years for corporate capital assets.

As of March 31, 2017, BPA had \$4.76 billion of bonds outstanding to the U.S. Treasury and \$2.94 billion in remaining U.S. Treasury borrowing authority.

Regional Cooperation Debt Program

Starting in fiscal year 2014, BPA and Energy Northwest worked closely to establish a new phase of integrated debt management for their combined total debt portfolios, the debt service of which is borne by BPA ratepayers through BPA's rates. Energy Northwest-related debt refinanced under this effort is called Regional Cooperation Debt.

An important component of Regional Cooperation Debt is the issuance of new bonds by Energy Northwest to refund outstanding bonds shortly before their maturities when substantial principal repayments are due. Funds made available from these refinancings enable BPA to prepay higher-interest-rate federal obligations, which thus far have been limited to appropriations. The net effect of refinancing this Regional Cooperation Debt is that both the weighted-average interest rate and the maturity of BPA's overall debt portfolio will be reduced over the

life of the program. The refinancings also preserve and restore U.S. Treasury borrowing authority, enabling BPA to finance much-needed investments in critical infrastructure.

In fiscal year 2015 the objective of the Regional Cooperation Debt management actions was expanded to enable rate mitigation actions that allow for items such as the expensing of conservation costs beginning in fiscal year 2016 that BPA would otherwise defer and record as a regulatory asset.

Future Regional Cooperation Debt transactions, if implemented, would make funds available in the Bonneville Fund, within the U.S. Treasury, to prepay a portion of BPA's repayment obligation for federal appropriations, to make payments to reduce the outstanding principal amount of bonds issued by BPA to the U.S. Treasury, or for other debt management purposes likely to be determined through a public process. BPA estimates that the aggregate potential principal amount of future Regional Cooperation Debt refunding bonds in fiscal year 2017 through fiscal year 2024 could approximate \$2.82 billion.

Expense borrowing arrangement by Energy Northwest

Through the continued use of line-of-credit borrowing arrangements between Energy Northwest and certain banking institutions, BPA continues a program that began in 2016 to accelerate payments on comparatively higher-interest-rate federal appropriations.

To fund both operations and maintenance for Columbia Generating Station and interest expense on certain bonds, Energy Northwest may borrow up to \$500.0 million in fiscal year 2017 under the current borrowing arrangement. This agreement bears interest at variable rates under 1.2 percent per year and is due to be repaid on or before June 30, 2018. As of March 31, 2017, \$200.3 million had accumulated in the Bonneville Fund as a result of the fiscal year 2017 borrowing arrangement. The \$200.3 million would otherwise have been provided to Energy Northwest and is reflected as cash provided by operations in the FCRPS Combined Statements of Cash Flows. Interest expense funded by this arrangement relates to Energy Northwest bonds previously issued for Columbia Generating Station and for terminated nuclear Projects 1 and 3.

In fiscal year 2016, Energy Northwest borrowed \$259.0 million under a similar agreement. In February 2017, BPA funded Energy Northwest's repayment of \$249.1 million it received under the fiscal year 2016 borrowing agreement. Energy Northwest paid the remaining \$9.9 million out of cash on hand. A financing activity outflow of \$249.1 million was recorded in the FCRPS Combined Statements of Cash Flows, with the \$9.9 million reported as a significant noncash, other nonfederal item.

BPA expects that Energy Northwest will undertake similar actions in fiscal years 2018 through 2020, potentially saving BPA up to \$42.7 million in interest expense.

Lease-Purchase Program

The Lease-Purchase Program enables BPA to provide for continued investment in infrastructure to support a safe and reliable system for the transmission of power without using limited U.S. Treasury borrowing authority. Under this program, BPA generally acts as the construction provider and has entered into lease-purchase arrangements with third parties that issue bonds and other debt instruments to fund construction of specific transmission assets. These third parties include the Port of Morrow, Oregon, the Idaho Energy Resources Authority, and the NIFCs.

Credit ratings

In March 2017 the rating agencies reaffirmed the credit ratings on nonfederal debt backed by BPA. The ratings are subject to change, and current ratings are as follows:

- Moody's at Aa1 with a stable outlook
- Fitch at AA with a stable outlook
- Standard & Poor's at AA- with a stable outlook

Cash flows

A comparison of FCRPS cash flows follows for the six months ended March 31, 2017, and March 31, 2016:

(Millions of dollars)

	<u>2017</u>	<u>2016</u>	Cash Increase (Decrease)	% Change
Cash and cash equivalents at beginning of year	\$ 579.6	\$ 646.7	\$ (67.1)	(10)%
Cash flows from				
Operating activities	714.3	430.3	284.0	66
Investing activities	(668.2)	(314.1)	(354.1)	113
Financing activities	<u>(135.4)</u>	<u>281.5</u>	<u>(416.9)</u>	<u>(148)</u>
Net increase (decrease) in cash and cash equivalents	<u>(89.3)</u>	<u>397.7</u>	<u>(487.0)</u>	<u>(122)</u>
Cash and cash equivalents at end of the quarter	<u>\$ 490.3</u>	<u>\$ 1,044.4</u>	<u>\$ (554.1)</u>	<u>(53)</u>

Operating activities

Net cash provided by FCRPS operating activities through the first six months of fiscal year 2017 increased \$284.0 million to \$714.3 million when compared to the same period of fiscal year 2016. As a result of the factors previously discussed, the FCRPS had net revenues through the second quarter of fiscal year 2017 of \$295.6 million as compared to net revenues of \$270.9 million through the second quarter of fiscal year 2016, an increase of \$24.7 million. The increase in operating cash flows reflects changes in receivables and unbilled revenues, and to accounts payable and other accrued liabilities. However, the largest factor for the \$284.0 million increase was a net \$170.3 million increase in deferred payments relating to borrowing arrangements for Energy Northwest. This amount relates to cash requirements for Energy Northwest-related operations that Energy Northwest funded via borrowing arrangements with banking institutions instead of by payments from BPA. (See Expense borrowing arrangement by Energy Northwest section in this Management's Discussion and Analysis.)

Investing activities

Net cash used for FCRPS investing activities increased \$354.1 million to \$668.2 million for the six months ended March 31, 2017, when compared to the six months ended March 31, 2016. BPA continues to make significant investments in utility plant assets with \$343.6 million invested year-to-date in fiscal year 2017. Notable projects worked on include new transformers at Raver Substation in King County, Washington and upgrades to Chief Joseph Dam, McNary Dam and Ice Harbor Dam. However, in fiscal year 2017 there was a decrease of \$40.9 million in utility plant investments, primarily due to higher fiscal year 2016 capital work on upgrades and additions to the Celilo Converter Station.

The timing and amounts of purchases and maturities of U.S. Treasury securities vary depending on operational and cash management needs. Consistent with past practice and BPA's cash management strategy, BPA continued to invest in U.S. Treasury market-based special securities, which are classified as investments on the Combined Balance Sheets if their original maturity dates exceed 90 days. These securities earn a higher rate of interest than do cash or cash equivalents.

Fiscal year 2017 deposits to the Lease-Purchase Program restricted trust funds increased by \$58.3 million compared to the similar period last year as a result of entering into more leases in fiscal year 2017 than in 2016. Thus far in fiscal year 2017, BPA has entered into 12 leases totaling \$103.8 million as compared to four leases totaling \$45.5 million entered into for the same period in fiscal year 2016. Receipts from the lease-purchase restricted trust funds decreased by \$52.0 million thus far in fiscal year 2017 as a result of reduced ongoing expenditures to fund continuing Lease-Purchase Program construction.

Financing activities

Net cash used for FCRPS financing activities was \$135.4 million through the second quarter of fiscal year 2017, a decrease of \$416.9 million as compared to the same period of fiscal year 2016.

BPA did not borrow from the U.S. Treasury through the second quarter of fiscal year 2017. This is consistent with BPA's strategy for fiscal year 2017 of delaying borrowing from U.S. Treasury when possible to reduce interest expense.

Nonfederal debt proceeds increased \$58.5 million through the second quarter of fiscal year 2017. This increase was primarily due to increased Lease-Purchase Program activity, as previously discussed.

Nonfederal debt repayment increased by \$249.8 million through the second quarter of fiscal year 2017 as compared to the same period of fiscal year 2016. This increase was primarily a result of the repayment by BPA of a borrowing agreement with Energy Northwest. (See Expense borrowing arrangement by Energy Northwest section in this Management's Discussion and Analysis.)

Adjusted Net Revenues

A comparison of Adjusted Net Revenues (ANR) follows for the six months ended March 31, 2017, and March 31, 2016:

<i>(Millions of dollars)</i>	<u>2017</u>	<u>2016</u>
Net revenues	\$ 295.6	\$ 270.9
Adjustments		
Debt Service Reassignment actions ⁽¹⁾	3.9	3.7
Regional Cooperation Debt management actions ⁽²⁾	(194.1)	(193.4)
Revenue requirement adjustment ⁽³⁾	33.8	35.8
Adjusted Net Revenues	<u>\$ 139.2</u>	<u>\$ 117.0</u>

In fiscal year 2017, BPA continued the use of a Key Agency Target called Adjusted Net Revenues, a non-GAAP measurement designed to report net revenues after removing the current year effects of certain debt management actions and a rate mitigation adjustment. The effects of these actions and adjustment are not considered to be related to ongoing FCRPS operations, and BPA management has therefore determined that ANR is a better representation than net revenues of FCRPS financial performance for the periods presented.

ANR is FCRPS net revenues adjusted to reflect:

- 1) The removal of the effect on FCRPS net revenues of "Debt Optimization" actions that were implemented for several continuous years beginning in fiscal year 2001. Debt Optimization involved the refinancing of Energy Northwest debt to extend its weighted-average maturity, which in turn enabled BPA to reduce the aggregate principal amount of bonds issued by BPA and then outstanding to the U.S. Treasury. Debt Optimization actions initially had the effect of increasing FCRPS net revenues over what they otherwise would have been in each of the fiscal years in which the actions occurred. In subsequent fiscal years, the repayment of the extended Energy Northwest debt has had the effect of decreasing reported FCRPS net revenues. An element of Debt Optimization, referred to as Debt Service Reassignment, continues to reduce FCRPS net revenues resulting in adjustments to derive the ANR amount.
- 2) The removal of the effect on FCRPS net revenues of Regional Cooperation Debt management actions, from and after fiscal year 2014, to extend the weighted-average maturity of Energy Northwest debt. These Regional Cooperation Debt management actions have enabled BPA to prepay relatively higher-interest-rate federal appropriations in lieu of the repayment of Energy Northwest debt that had otherwise been assumed to be repaid in BPA's power rate proposals for the fiscal year(s) in which the appropriations prepayments were made.

Amounts related to Regional Cooperation Debt management actions vary from year to year depending on the change in the weighted-average maturities of the Energy Northwest debt.

3) The removal of the effect of an adjustment to the power rate case revenue requirement, which was accomplished through a revenue requirement offset. This offset was introduced so that the effects of certain Regional Cooperation Debt management and other cost management actions would serve to mitigate, to a limited extent, a rate increase. This offset limits upward power rate impacts of ceasing to debt finance energy conservation costs beginning in fiscal year 2016. The foregoing actions resulted in lower FCRPS net revenues than would be reported in their absence.

Additional Information

To see BPA's annual and quarterly reports, go to www.bpa.gov/goto/AnnualReport

For general information about BPA, refer to BPA's home page at www.bpa.gov

For information on Power Services, go to www.bpa.gov/power

For information on Transmission Services, go to www.bpa.gov/transmission

Federal Columbia River Power System

Combined Balance Sheets ^(Unaudited)

(Millions of dollars)

	As of March 31, <u>2017</u>	As of September 30, <u>2016</u>
Assets		
Utility plant		
Completed plant	\$ 18,524.7	\$ 18,276.5
Accumulated depreciation	(6,456.1)	(6,310.4)
Net completed plant	12,068.6	11,966.1
Construction work in progress	1,333.5	1,312.0
Net utility plant	13,402.1	13,278.1
Nonfederal generation	3,503.1	3,504.8
Current assets		
Cash and cash equivalents	490.3	579.6
Short-term investments in U.S. Treasury securities	571.8	272.9
Accounts receivable, net of allowance	44.7	50.5
Accrued unbilled revenues	335.6	279.8
Materials and supplies, at average cost	115.9	111.9
Prepaid expenses	24.1	31.8
Total current assets	1,582.4	1,326.5
Other assets		
Regulatory assets	6,010.6	6,180.2
Nonfederal nuclear decommissioning trusts	326.8	314.3
Deferred charges and other	339.9	293.8
Total other assets	6,677.3	6,788.3
Total assets	\$ 25,164.9	\$ 24,897.7
Capitalization and Liabilities		
Capitalization and long-term liabilities		
Accumulated net revenues	\$ 3,688.2	\$ 3,392.6
Debt		
Federal appropriations	2,903.0	2,866.9
Borrowings from U.S. Treasury	4,673.6	4,682.6
Nonfederal debt	7,249.4	7,158.2
Total capitalization and long-term liabilities	18,514.2	18,100.3
Commitments and contingencies (See Note 13 to 2016 Audited Financial Statements)		
Current liabilities		
Debt		
Borrowings from U.S. Treasury	85.1	76.1
Nonfederal debt	799.3	857.6
Accounts payable and other	458.3	437.2
Total current liabilities	1,342.7	1,370.9
Other liabilities		
Regulatory liabilities	2,112.7	2,143.8
IOU exchange benefits	2,471.9	2,551.9
Asset retirement obligations	188.2	185.7
Deferred credits and other	535.2	545.1
Total other liabilities	5,308.0	5,426.5
Total capitalization and liabilities	\$ 25,164.9	\$ 24,897.7

Federal Columbia River Power System

Combined Statements of Revenues and Expenses ^(Unaudited)

(Millions of dollars)

	Three Months Ended March 31,		Fiscal Year-to-Date Ended March 31,	
	<u>2017</u>	<u>2016</u>	<u>2017</u>	<u>2016</u>
Operating revenues				
Sales	\$ 974.0	\$ 897.1	\$ 1,804.9	\$ 1,718.8
U.S. Treasury credits	13.0	19.4	34.0	47.8
Miscellaneous revenues	19.4	21.5	35.6	40.6
Total operating revenues	1,006.4	938.0	1,874.5	1,807.2
Operating expenses				
Operations and maintenance	532.4	492.8	1,039.4	962.6
Purchased power	42.5	34.2	59.1	67.5
Nonfederal projects	64.4	64.6	115.9	129.2
Depreciation and amortization	121.2	116.1	242.1	230.1
Total operating expenses	760.5	707.7	1,456.5	1,389.4
Net operating revenues	245.9	230.3	418.0	417.8
Interest expense and (income)				
Interest expense	70.6	87.7	141.4	173.9
Allowance for funds used during construction	(8.2)	(11.0)	(17.2)	(23.7)
Interest income	(1.0)	(2.0)	(1.8)	(3.3)
Net interest expense	61.4	74.7	122.4	146.9
Net revenues	\$ 184.5	\$ 155.6	\$ 295.6	\$ 270.9

Federal Columbia River Power System

Combined Statements of Cash Flows ^(Unaudited)

(Millions of dollars)

	Fiscal Year-to-Date Ended March 31,	
	<u>2017</u>	<u>2016</u>
Cash flows from operating activities		
Net revenues	\$ 295.6	\$ 270.9
Non-cash items:		
Depreciation and amortization	242.1	230.1
Amortization of nonfederal projects	11.1	13.0
Deferred payments for Energy Northwest-related O&M and interest	200.3	30.0
Changes in:		
Receivables and unbilled revenues	(48.0)	(17.7)
Materials and supplies	(4.0)	(3.6)
Prepaid expenses	(2.2)	(8.0)
Accounts payable and other	53.9	(43.1)
Regulatory assets and liabilities	72.0	38.5
IOU exchange benefits	(80.0)	(77.9)
Other assets and liabilities	(26.5)	(1.9)
Net cash provided by operating activities	714.3	430.3
Cash flows from investing activities		
Investments in utility plant, including AFUDC	(343.6)	(384.5)
U.S. Treasury securities:		
Purchases	(742.0)	(572.0)
Maturities	443.3	557.9
Deposits to nonfederal nuclear decommissioning trusts	(1.8)	(1.7)
Lease-purchase trust funds:		
Deposits to	(103.8)	(45.5)
Receipts from	79.7	131.7
Net cash used for investing activities	(668.2)	(314.1)
Cash flows from financing activities		
Federal appropriations:		
Proceeds	36.1	29.0
Borrowings from U.S. Treasury:		
Proceeds	-	234.0
Nonfederal debt:		
Proceeds	104.0	45.5
Repayment	(260.6)	(10.8)
Customers:		
Net advances for construction	2.4	2.9
Repayment of funds used for construction	(17.3)	(19.1)
Net cash (used for) provided by financing activities	(135.4)	281.5
Net (decrease) increase in cash and cash equivalents	\$ (89.3)	\$ 397.7
Cash and cash equivalents at beginning of year	579.6	646.7
Cash and cash equivalents at end of quarter	\$ 490.3	\$ 1,044.4
Supplemental disclosures:		
Cash paid for interest, net of amount capitalized	\$ 156.5	\$ 182.3
Significant noncash investing and financing activities:		
Nonfederal debt increase for Energy Northwest	\$ 200.3	\$ 197.8
Nonfederal debt extinguished through refinancing for Energy Northwest	\$ -	\$ (130.0)
Other nonfederal	\$ (10.8)	\$ 10.7