

Bonneville Power Administration Overview As of March 2, 2020



High Voltage Transmission



Grand Coulee Dam



Columbia Generating Station



The information in this investor presentation is a summary of certain information concerning the Bonneville Power Administration (“BPA”) and is not intended to contain all information material to investors. This investor presentation is provided for your information and convenience only. This investor presentation does not constitute a recommendation or an offer or solicitation for the purchase or sale of any security or other financial instrument or to adopt any investment strategy. In no event shall BPA be liable for any use by any party of, or any decision made or action taken by any party in reliance upon the information contained herein. BPA makes no representations as to the legal, tax or accounting treatment of any BPA-supported security. You should consult with your own advisors as to such matters and the consequences of the purchase and ownership of BPA-supported securities. Past performance is not indicative of future performance, which will vary.

This investor presentation you are about to view is provided as of March 2, 2020. If you are viewing this presentation after March 2, 2020, there may have been events that occurred subsequent to such date that would have a material adverse effect on the financial information that is presented herein, and BPA has not undertaken any obligation to update this investor presentation.

This investor presentation contains statements which, to the extent they are not recitations of historical fact, may constitute “forward-looking statements.” In this respect, the words “estimate,” “project,” “anticipate,” “expect,” “intend,” “believe” and similar expressions are intended to identify forward-looking statements. A number of important factors affecting BPA’s business and financial results could cause actual results to differ materially from those stated in the forward-looking statements.

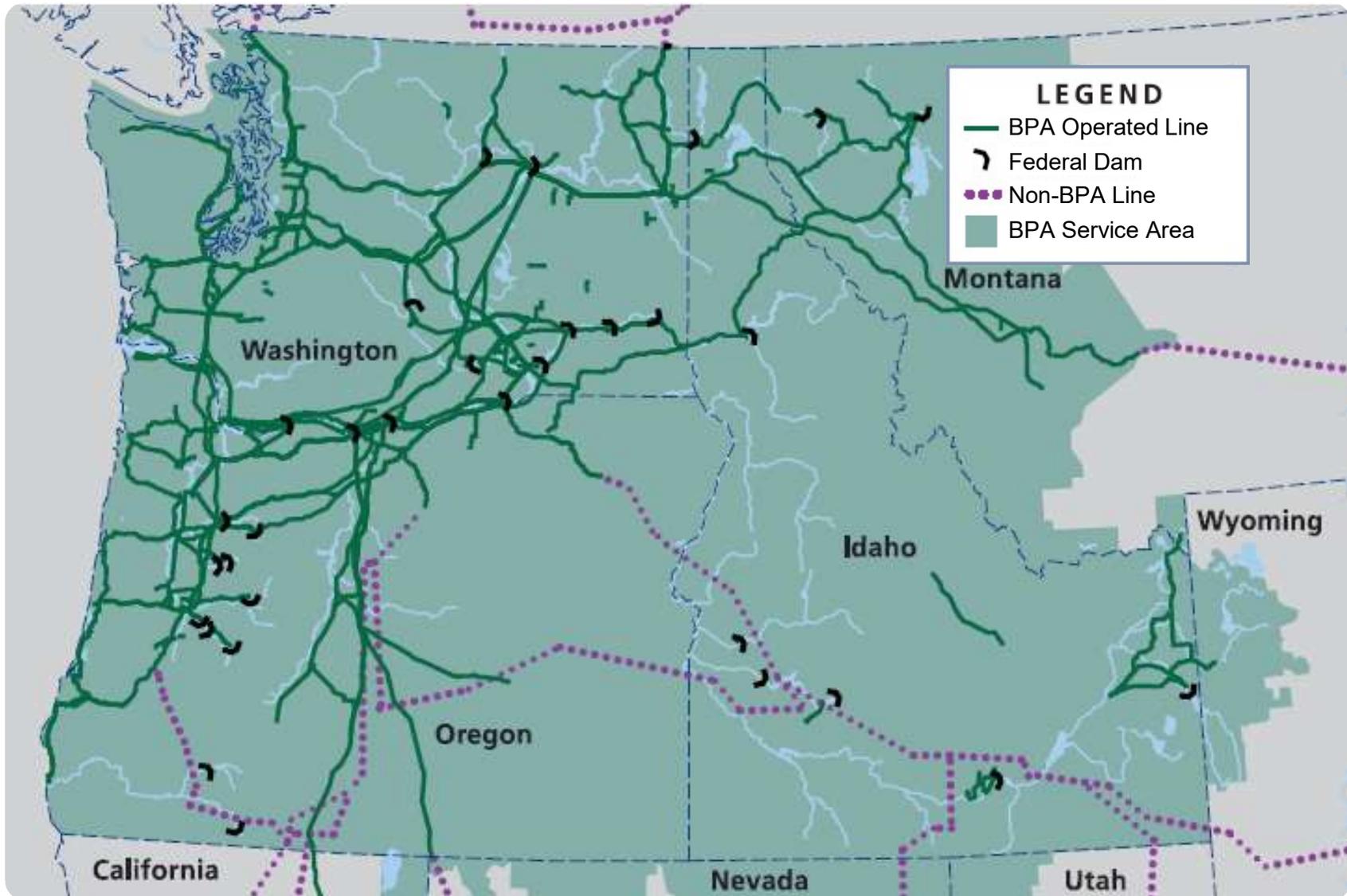
Bonds supported by BPA’s financial obligations and the obligations of BPA providing such support are not nor shall they be construed to be general obligations of the United States of America nor are such bonds or obligations intended to be or are they secured by the full faith and credit of the United States of America.

Port of Morrow: Transmission Facilities Revenue Bonds

Bonneville Cooperation Project No. 7, Series 2020-1 (Federally Taxable)	
Par Amount*	\$190,000,000
Structure*	Fixed rate maturities; Serial bonds due September 1, 2037 and 2038
Interest Payment Dates*	Starting September 1, 2020 and semiannually on March 1 and September 1 thereafter
Pricing Date*	Thursday, March 12 th , 2020
Settlement Date*	Thursday, March 19 th , 2020
	The Series 2020-1 Bonds will be special obligations of the Port of Morrow, Oregon (“POM” or the “Issuer”) payable solely from the trust estate pledged therefor which trust estate includes amounts derived from rental payments paid to the Issuer.
Security	Bonneville’s payments under the Lease-Purchase Agreement will be made solely from the Bonneville Fund. The Lease-Purchase Agreement provides that Bonneville’s obligation to pay the rental payments and all amounts payable under the Lease-Purchase Agreement is absolute and unconditional, and is payable without any set-off or counterclaim, regardless of whether or not the Project financed with the proceeds of the Series 2020-1 Bonds is operating or operable.
Use of Funds	The proceeds from the sale of the Series 2020-1 Bonds will be used by the Issuer to refinance indebtedness issued for the cost of acquiring, constructing, installing and equipping of certain transmission facilities owned by the Port of Morrow and leased to Bonneville. The Issuer financed such acquisition, construction, installation and equipping of transmission facilities through a credit agreement with Citibank, N.A., and secured its obligations under such credit agreement with a Lease-Purchase Agreement by and between the Issuer, as lessor, and Bonneville, as lessee, and the payments from Bonneville thereunder.
Optional Redemption*	Make Whole Call
Ratings	Moody's: Aa2 Fitch: AA
Tax Status	Interest on the Series 2020-1 bonds is expected to be subject to Federal income tax and exempt from Oregon state income tax (Please refer to Preliminary Official Statement)
Syndicate	Citigroup, BofA Securities, TD Securities and Wells Fargo Securities

**Preliminary, subject to change; when, as, and if issued*

Overview



BPA at a Glance

<p>One Agency with Two Business Units</p>	<ul style="list-style-type: none"> ■ Power Services and Transmission Services revenue were approximately \$3.7 billion in FY19 ■ BPA's customers primarily include utilities throughout the Pacific Northwest
<p>Unique Hydro-Based System</p>	<ul style="list-style-type: none"> ■ Virtually carbon-free, BPA markets power from 31 federally-owned hydroelectric projects and several Non-Federal projects ■ Provides stability, flexibility, and reliability to meet electric demands with limited fuel price risk, and are sufficient to serve load under various water conditions
<p>Available Funding Sources</p>	<ul style="list-style-type: none"> ■ Revolving authority to borrow up to \$7.7 billion in bonds from the U.S. Treasury <ul style="list-style-type: none"> ■ \$2.4 billion available as of Sept. 30, 2019 ■ Non-Federal Debt (such as the Series 2020-1 Bonds) accounts for approximately half of BPA's total debt
<p>Cost Recovery</p>	<ul style="list-style-type: none"> ■ BPA is required by law to establish rates to recover all costs ■ FERC reviews and approves rates to ensure that BPA rates recover all costs
<p>Non-Federal Payment Priority and Financial Reserves</p>	<ul style="list-style-type: none"> ■ Cash payments and monetary credits by BPA for Non-Federal Debt are met before payments by BPA to the U.S. Treasury; Non-Federal Debt coverage has exceeded 2.0x since 1999 ■ BPA maintains substantial cash and investment balances. When combined with a \$750 million U.S. Treasury line of credit, BPA had 222 days of liquidity on hand as of Sept. 30, 2019

One BPA -Two Business Units

Cash receipts from all sources deposited in the Bonneville Fund are available to pay Bonneville's costs, including Non-Federal debt costs

Power Services

- Provides approximately 27% of the electric power consumed within the Region
- Primarily markets power to over 125 Preference Customer utilities (which are qualifying publicly-owned utilities and consumer-owned electric cooperatives) and several federal agencies under contracts through September 2028
- Approximately \$2.8 billion in revenue in FY19

Transmission Services

- Delivers power between resources and loads within the Region and transmits imports to and exports from the Region
- Approximately three-fourths of the bulk transmission capacity in the Region
- 15,000 circuit miles of high voltage transmission lines and 260 substations and other facilities
- Approximately \$942 million in revenue in FY19
- Bonneville's payments under the Lease-Purchase Agreement will be made solely from the Bonneville Fund

Top Customers by Business Unit

Power Services Top 5 Customers (FY19)

Transmission Services Top 5 Customers (FY19)

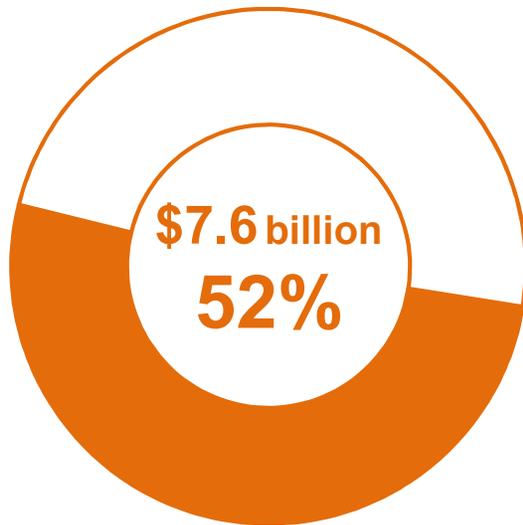
Customer	Percent of Sales ¹	Customer	Percent of Sales ¹
Snohomish County PUD No. 1 (Preference)	9%	Puget Sound Energy Inc. (IOU)	13%
Pacific Northwest Generating Cooperative (Preference)	7%	PacifiCorp (IOU)	11%
City of Seattle, City Light Dep't (Preference)	6%	Portland General Electric Company (IOU)	10%
Cowlitz County PUD No. 1 (Preference)	6%	Powerex Corp. (Power Marketer)	8%
Tacoma Power (Preference)	5%	Snohomish County PUD No. 1 (Preference)	5%
Total	33%	Total	47%

¹Approximate; excludes inter-business line transactions between Power Services and Transmission Services. In support of its power marketing activities, Power Services obtains large amounts of transmission and related service from Transmission Services.

Federal and Non-Federal Debt Outstanding¹

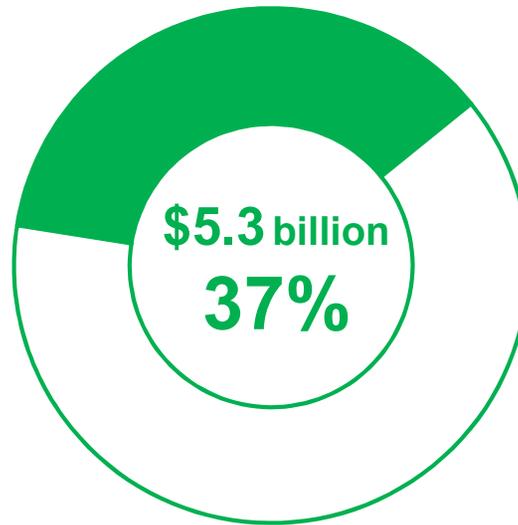
Total: \$14.5 billion

Non-Federal Debt



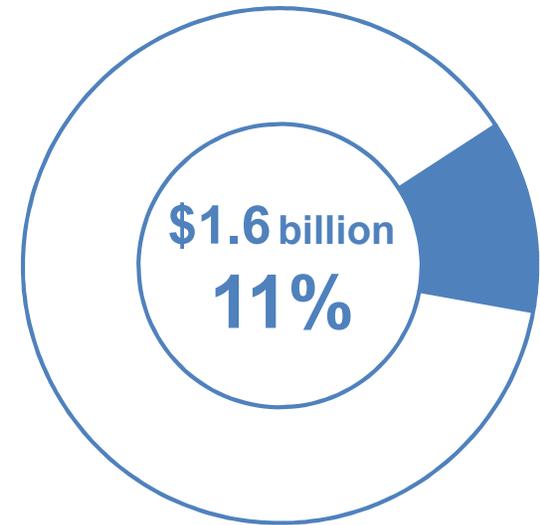
- Energy Northwest \$5.1 billion
- Lease-Purchase Program \$2.2 billion
- Prepaid Power Purchases \$0.2 billion
- Non-Federal Generation \$0.1 billion

Borrowings from U.S. Treasury



- BPA is authorized to issue and sell to the United States Treasury, and to have outstanding at any one time, up to \$7.7 billion aggregate principal amount of bonds

Federal Appropriation Repayment Obligations

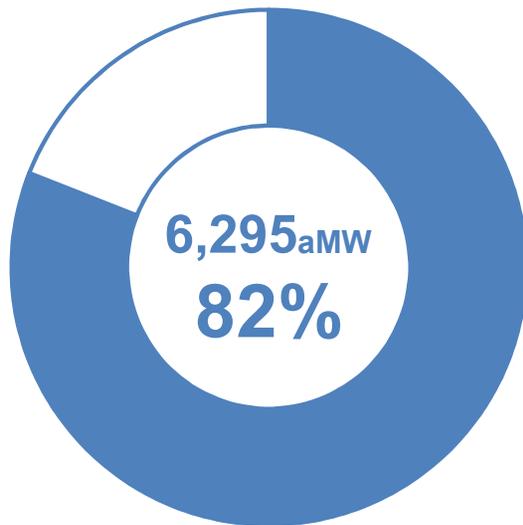


- BPA repays amounts that have been appropriated by Congress to construct the Federal System

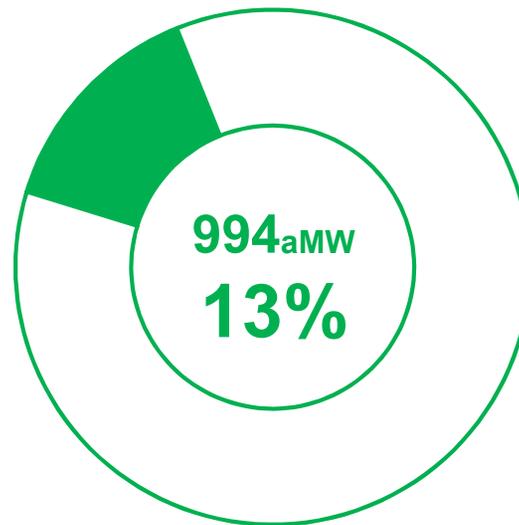
¹As of 9/30/2019

Virtually Emission-Free Assured Fuel Supply¹

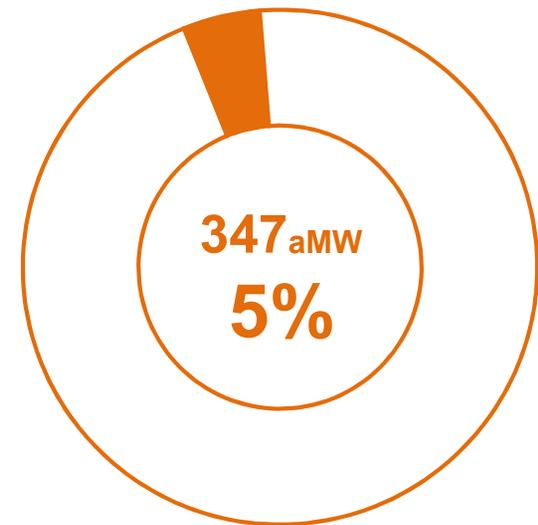
**Carbon Emission-Free
Federal Hydroelectric**



**Carbon Emission-Free Nuclear
Columbia Generating Station**



**Contract Purchases and
Other Resources**



- Firm energy capability is 7,636 aMW; 82% of which is firm energy from hydro
- Firm energy is the estimated amount of energy to be produced by the Federal System assuming historically low water conditions
- Combining the hydroelectric and nuclear generating resources, 95% of Federal System firm energy is Carbon Emission-Free

¹Operating Year 2021 statistics as of April 2019. Operating Year 2021 is August 1, 2020 through July 31, 2021

Vegetation Management and Fire Prevention

- BPA works to ensure system reliability and mitigate the risk of wildfires through a comprehensive vegetation management program that complies with Standard FAC-003 set forth by the North American Electric Reliability Corporation (NERC)
- A variety of efforts are employed to clear vegetation from rights-of-way based on the type and voltage of a structure as well as a 25' safety zone below power lines
- BPA performs semiannual aerial patrols in the Spring and Fall to inspect the entire transmission system, a portion of which utilizes Light Detection and Ranging (LiDAR)
 - LiDAR is a remote sensing system that has the capability to detect, with a high degree of accuracy, vegetation that requires maintenance

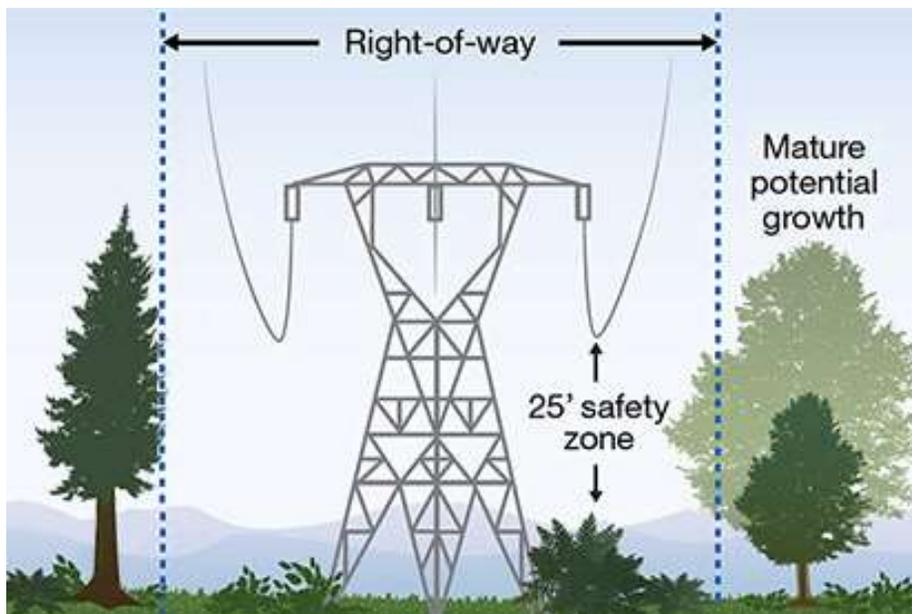
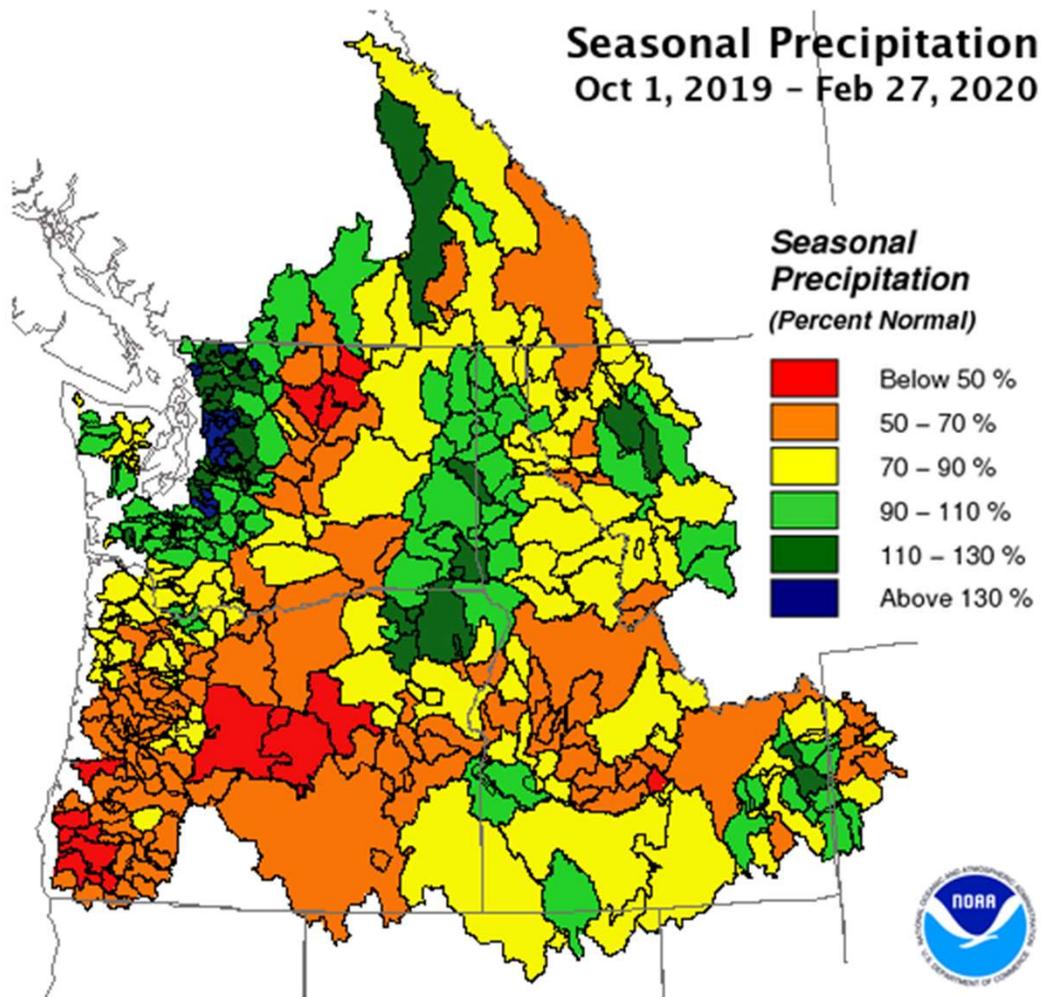


Diagram of BPA's Vegetation Management standards (not to scale)

- Annual ground patrols are accompanied by third-party contract arborists certified by the International Society of Arboriculture (ISA)
- Every three years, the Western Electricity Coordinating Council (WECC) conducts an audit to ensure that BPA is compliant
- The most recent audit, completed in July 2019, found no violations of this standard
- In addition, BPA's vegetation management program has received Environmental Stewardship accreditation from the Right-of-Way Stewardship Council

Seasonal Surplus (Secondary) Sales



Creation Time: Friday, Feb 28, 2020

Northwest River Forecast Center

- The amount of energy produced by the hydroelectric system above firm energy is seasonal surplus (secondary) energy
- Unlike firm energy, seasonal surplus (secondary) energy varies with annual precipitation and weather conditions
- Under *average* water conditions this amount is estimated to be 1,702 aMW (Operating Year 2021)
- Expected sales of seasonal surplus (secondary) energy is an important part of BPA's ratemaking and risk mitigation
- Revenue from seasonal surplus was approximately 9% of BPA's total revenues of \$3.7 billion (FY19)

BPA Key Credit Highlights



Cost Recovery

<p>Organic Statutes</p>	<p>BPA is required by law to establish rates that recover all of its costs, including amounts for Non-Federal Debt and lower payment priority Federal Debt</p>
<p>Two Year Rate Cases</p>	<p>BPA has elected to conduct a rate case every two years</p> <ul style="list-style-type: none"> ▪ Transparency and customer involvement are fundamental goals ▪ To assure repayment, BPA's rates are established to achieve at least a 95% Treasury Payment Probability over the two year rate period <p>The most recent two year rate period (BP-20) began on October 1, 2019 and will be in effect until September 30, 2021</p>
<p>FERC Ensures Rates are Adequate</p>	<p>FERC reviews and approves rates to ensure that BPA rates recover all costs</p>
<p>Cost Recovery Obligation is Carried Forward</p>	<p>If BPA were unable to meet all of its costs in a period because rates combined with its financial reserves were insufficient, BPA would be required to recover the costs in future rates</p>

Additional Non-Federal Payment Assurance

Overnight Access to Treasury	BPA has overnight access to a \$750 million line of credit with the U.S. Treasury
Cost Recovery Adjustment Clause (CRAC)	BPA rates include provisions to increase Power Services' and Transmission Services' rate levels, without undertaking a formal rate process, if Reserves Available for Risk (RAR) fall below certain thresholds
Defer Treasury Payment	By law, BPA must defer its U.S. Treasury payments to meet Non-Federal obligations
Expedited Rate Case	BPA may initiate an expedited rate case to propose increased rates and believes it would be able to complete the process within 6 months
Leverage Policy	<p>BPA evaluates current and forecast leverage ratios to determine if any rate action needs to be taken to maintain the 75%-85% leverage target by FY28 and a long-term target of 60%-70%</p> <p>The Leverage Policy has triggered for Transmission Services in BP-20 to fund \$26.4 million per year of capital investments in lieu of borrowing</p>
Financial Reserves Policy	<p>Enables BPA to increase rates to collect additional revenues when RAR fall below the equivalent of 60 days threshold based on year end balances</p> <p>The Financial Reserves Policy Surcharge has triggered for Power Services in FY20 to collect an additional \$30 million from December 2019 through September 2020</p>

BPA Financial Reserves and Management

- BPA uses Reserves Available for Risk (RAR) as a measure of accumulated cash flow derived and retained from operations
- In addition to the CRAC provisions, BPA has a \$750 million short-term line of credit for expenses with the U.S. Treasury that can be used to mitigate financial risk
 - There was no outstanding balance as of September 30, 2019
- BPA also monitors Total Financial Reserves, which is financial liquidity on hand to meet current expenses, consisting of RAR as well as cash derived other than from operations
 - As of September 30, 2019 BPA had \$773 million of Total Financial Reserves

Year-End BPA Reserves for Risk (\$millions)			
Fiscal Year	Reserves Available for Risk	U.S. Treasury Line of Credit	Days Liquidity on Hand ¹
2016	602	750	281
2017	568	750	258
2018	551	750	254
2019	484	750	222
2020 ²	515	750	NA ³

¹ Days Liquidity on Hand, defined to be (RAR + Available U.S. Treasury Short-Term Expense Line of Credit)/(Operating Expenses/360).

² FY20 year-end forecast as of 1/31/2020. The primary reason for the forecast increase in RAR is the planned \$30 million increase in Power revenues as a result of the Power Financial Reserves Policy Surcharge being implemented for Fiscal Year 2020 rates.

³ Forecasted FY20 Days Liquidity on Hand is unavailable because BPA does not prepare forecasts of certain Operating Expenses used in the calculation.

Non-Federal Debt Service Coverage¹

(\$millions excluding ratios)	FY2019	FY2018	FY2017
Total Operating Revenues	3,656	3,710	3,570
Total Operating Expenses ²	2,003	1,840	1,842
Funds Available to meet Non-Federal Debt Service	1,653	1,870	1,728
Non-Federal Debt Service	337	359	330
Non-Federal Debt Service Coverage Ratio	4.9x	5.2x	5.2x

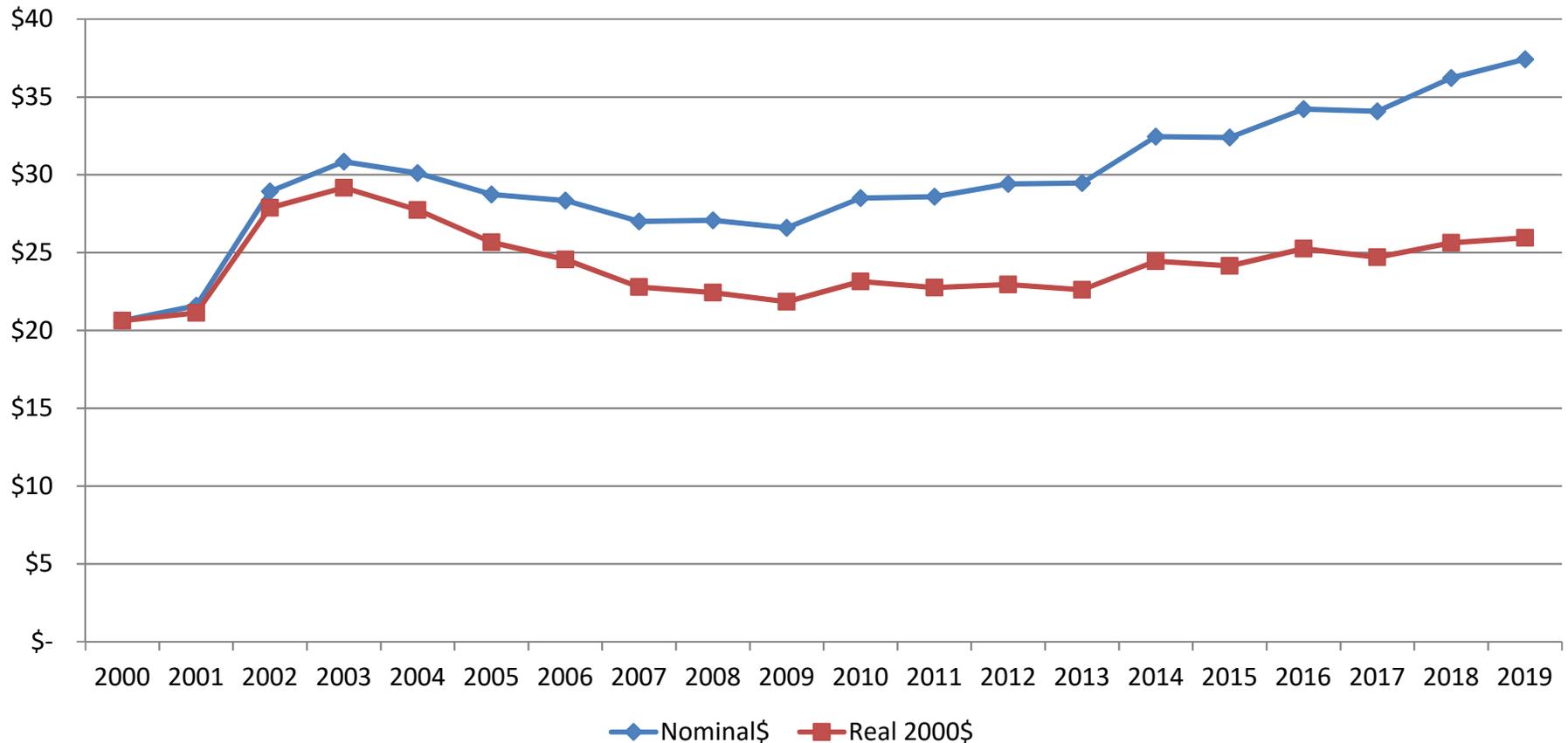
- Due to Non-Federal Debt management actions including Regional Cooperation Debt, Non-Federal Debt Service Coverage results have been above historical ranges in FY17, FY18, and FY19
 - Regional Cooperation Debt actions enabled BPA to prepay an additional \$227 million in high-interest Federal Appropriations Repayment Obligations in FY19, \$275 million in FY18, and \$687 million in FY17, over the amounts otherwise scheduled for repayment in BPA's rates

¹ This information is presented in Official Statements for BPA-backed, Non-Federal Debt bond issuances however, BPA's audited financial statements do not include a similar table.

² Operating Expenses include the following items from the Federal System Statement of Revenues and Expenses: BPA O&M, Purchased Power, Book-outs, Non-Federal entities O&M-net billed, Non-Federal entities O&M non-net-billed, and the Residential Exchange Program. Operating Expenses do not include certain payments to the Corps and Reclamation.

Historical Average PF Preference Rates

Nominal (Actual) and Real (Inflation-Adjusted) Average PF Preference Rate Levels
Per Megawatt Hour, FY00 - FY19



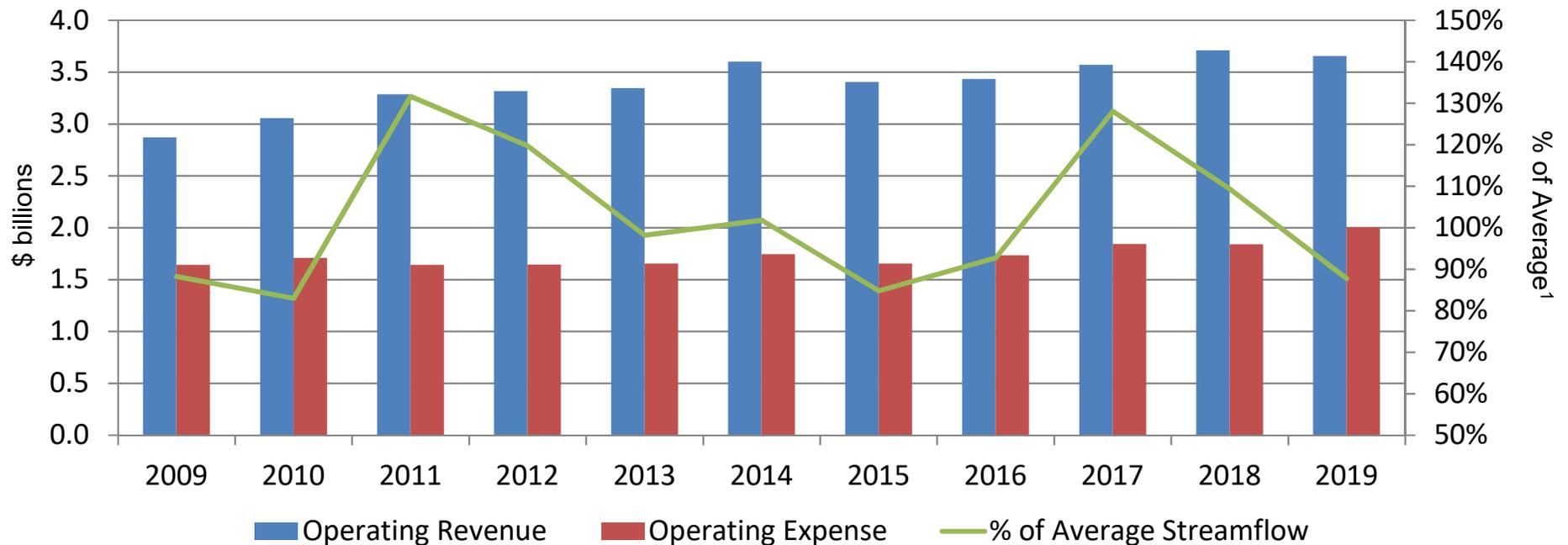
- BPA Power rates have remained relatively stable, especially on an inflation-adjusted basis
- BPA implemented a significant rate increase when needed in 2002 following the 2001 West Coast Power Crisis

Revenues & Expenses More Stable than Streamflow

- The relationship of operating revenues to operating expenses has been stable relative to wide variances in stream-flows and hydro-generation
 - Much of this stability in revenues is attributable to the high proportion of revenues that BPA derives from sales of firm energy and transmission services

- The FY20 water supply forecast for the Columbia River basin at The Dalles Dam is 96% of average as of February 27th, according to the NOAA/NWS River Forecast Center

BPA Operating Revenues and Expenses Comparison to Streamflow¹



¹Historical average (1928-2019) of 132 Million Acre Feet (MAF) at The Dalles Dam. Streamflow reflects BPA's operating year results.(August 1-July 31) and financial results reflect BPA's fiscal year (October 1-September 30).

BPA Finance



Non-Federal Debt – Transmission Issuers

Bonds supported by BPA are not general obligations of the United States of America and are not secured by the full faith and credit of the United States of America

- Transmission Lease-Purchases
 - BPA expects that the amount of BPA-supported lease-purchase bonds issued to refinance short-term bank facilities could be up to \$550 million in FY21
 - BPA partners with the Port of Morrow and the Idaho Energy Resources Authority to facilitate such issuances supported by the lease-purchase agreements



- Oregon port district
- Authorized to finance transmission projects with publicly issued bonds and credit arrangements secured by BPA lease-purchase commitments
- \$899 million^{1,2} BPA-supported bonds outstanding
- Additional BPA-supported lines of credit outstanding in the amount of \$800 million^{1,2}
 - \$200 million of outstanding lines of credit will be refunded with the proceeds of the 2020-1 bonds
- Absent a change in law, BPA believes that interest on such future bonds would NOT be exempt from federal income tax but would be exempt from Oregon state income tax



- Energy-related financing authority created by Idaho legislation
- Authorized to finance transmission projects with publicly issued bonds and credit arrangements secured by BPA lease-purchase commitments
- \$201 million¹ BPA-supported bonds outstanding
- Additional BPA-supported lines of credit outstanding in the amount of \$110 million¹
 - After September 30, 2019 BPA borrowed an additional \$71 million on an existing line of credit
- Absent a change in law, BPA believes that interest on such future bonds would NOT be exempt from federal income tax but would be exempt from Idaho state income tax

(1) As of September 30, 2019.

(2) Following the issuance of the Series 2020-1 Bonds, there will be approximately \$1.1 billion of BPA-supported bonds issued by the Port of Morrow outstanding, and an additional \$600 million of BPA-supported lines of credit outstanding.

POM Series 2020-1 Summary and Schedule

Bonneville Cooperation Project No. 7, Series 2020-1 (Federally Taxable)		Maturity *	Par Amount*
Par Amount*	\$190,000,000	9/1/2037	\$95,000,000
Interest Payment Dates*	Starting September 1, 2020 and semiannually on March 1 and September 1 thereafter	9/1/2038	\$95,000,000
Pricing Date*	Thursday, March 12 th , 2020	Total	\$190,000,000
Settlement Date*	Thursday, March 19 th , 2020		
Optional Redemption*	Make Whole Call		
Ratings	Moody's: Aa2 Fitch: AA		
Syndicate	Citigroup, BofA Securities, TD Securities and Wells Fargo Securities		

**Preliminary, subject to change; when, as, and if issued*

Preliminary Timeline*

Date	Event
March 2, 2020	Post Preliminary Official Statement and Investor Presentation
March 12, 2020	Price Bonds
March 19, 2020	Bond Closing

Contact Information

Nadine M. Coseo
Treasurer
Manager, Financial
Strategy & Operations
(503) 230-3337
nmcoseo@bpa.gov

Alayne M. Switzer
Manager, Revenue
Requirement, Repayment
& Investor Relations
(503) 230-4025
amswitzer@bpa.gov

Additional investor information:
<http://www.bpa.gov/goto/investors>