

Bonneville Power Administration As of May 5, 2022



Bonneville
POWER ADMINISTRATION



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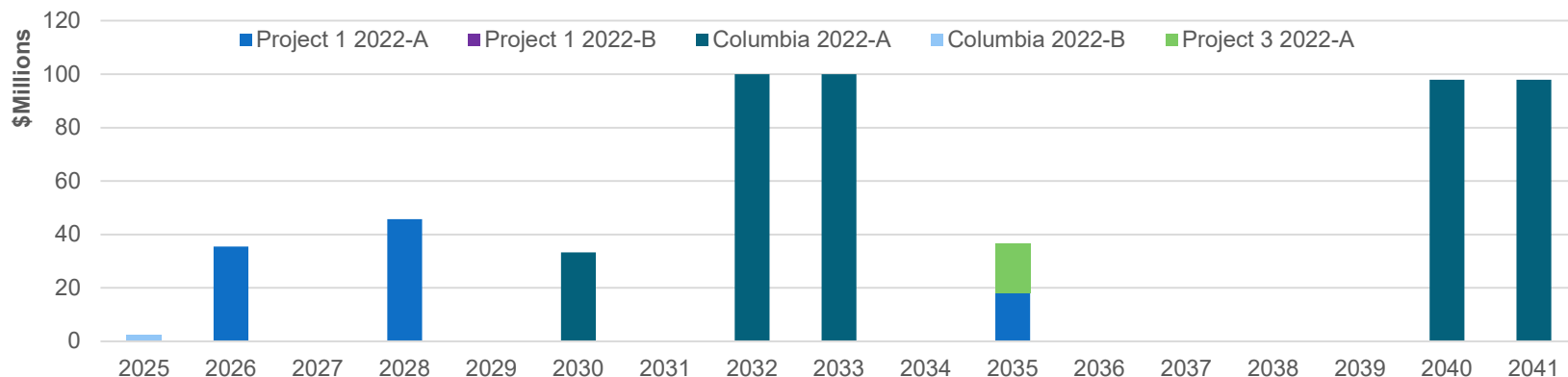
This investor presentation contains statements which, to the extent they are not recitations of historical fact, may constitute “forward-looking statements.” In this respect, the words “estimate,” “project,” “anticipate,” “expect,” “intend,” “believe” and similar expressions are intended to identify 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.

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Energy Northwest 2022-A/B Bonds

	Project 1	Columbia Generating Station	Project 3
Pricing Date*	Wednesday, May 11, 2022		
Settlement Date*	Thursday, June 2, 2022		
2022-A (Tax-Exempt)*	\$99,315,000	\$429,135,000	\$18,485,000
2022-B (Taxable)*	\$575,000	\$1,870,000	n/a
Optional Redemption*	Series A: Par call on 7/1/2032 Series B: Make-Whole Call	Series A: Par call on 7/1/2032 Series B: Make-Whole Call	Series A: Par call on 7/1/2032
Ratings (Moody's / S&P / Fitch)	Aa2 (Positive) / AA- (Stable) / AA (Stable)		

Preliminary Energy Northwest 2022-A/B Bonds Amortization*



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

BPA at a Glance

One Agency with Two Business Units	<ul style="list-style-type: none"> ■ Power Services and Transmission Services revenue was approximately \$3.8 billion in FY21 ■ BPA's customers primarily include utilities throughout the Pacific Northwest
Unique Hydro-Based System	<ul style="list-style-type: none"> ■ Virtually carbon-free, BPA markets power from 31 federally-owned hydroelectric projects and several Non-Federal projects
Funding Sources	<ul style="list-style-type: none"> ■ Access to capital through Federal and Non-Federal sources ■ Including the \$10.0 billion increase received in Nov 2021, BPA has access to a revolving facility to borrow up to \$13.7 billion in bonds from the U.S. Treasury, increasing to \$17.7 billion in FY28
Cost Recovery	<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
Non-Federal Payment Priority and Financial Reserves	<ul style="list-style-type: none"> ■ Cash payments for Non-Federal debt are met before payments by BPA to the U.S. Treasury ■ BPA maintains substantial cash and short-term investment balances in addition to having access to a \$750 million U.S. Treasury line of credit for operating expenses
Credit Ratings	<div>Moody's: Aa2, positive</div> <div>S&P: AA-, stable</div> <div>Fitch: AA, stable</div>

Marketed Hydro Projects



Columbia River Basin

- Diverse and expansive footprint providing power to 300k square miles served by BPA
- Federal dams in the Columbia River Basin contribute approximately 6,300 aMW of firm energy capacity to the region
- Storage in both Canada and the U.S. allows BPA to meet loads and increase reliability while still supporting multiple statutory purposes including:

Flood Control



Irrigation



Navigation

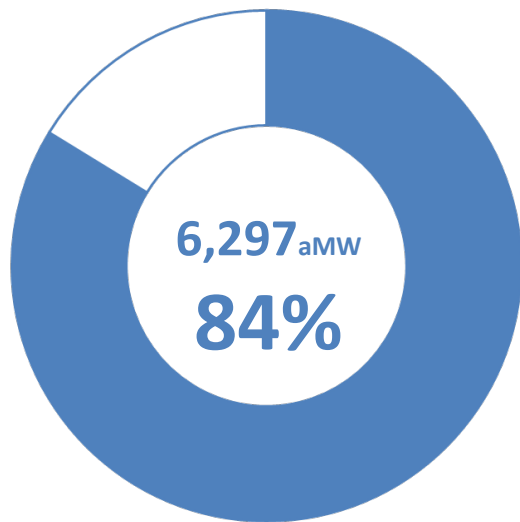


Recreation

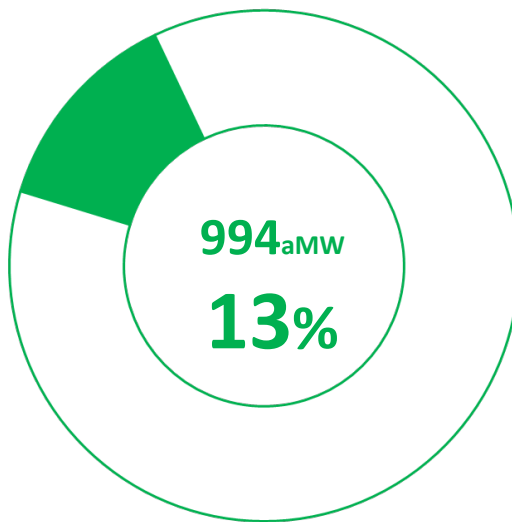


97% of Forecast Firm Power is Carbon Emission-free

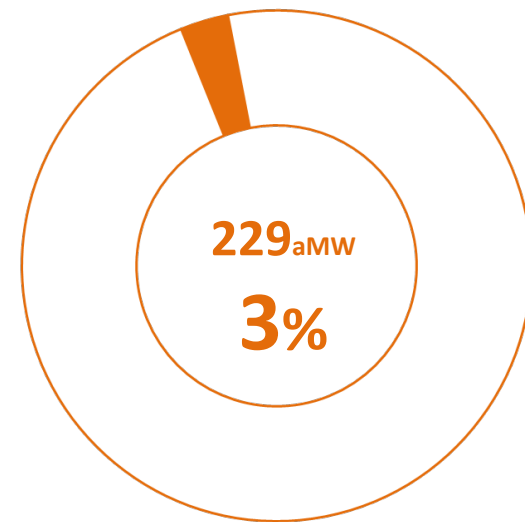
Carbon Emission-Free
Federal Hydroelectric



Carbon Emission-Free
Nuclear
Columbia Generating Station



Contract Purchases and
Other Resources



Statutory Guidance

By Law

- BPA must establish rates that recover all of its costs
- BPA must defer its U.S. Treasury payments if required to meet Non-Federal obligations

Federal Rate Approval

- The Federal Energy Regulatory Commission (FERC) reviews and approves BPA's rates to ensure they are sufficient to recover all costs

Expedited Rate Case

- Option to initiate an expedited rate case to propose increased rates

Priority of Payments

- By statute, payments and monetary credits to Non-Federal entities are always met prior to BPA's payments to the U.S. Treasury
- All BPA funds, including revenues generated from Power and Transmission, are available to meet Non-Federal costs

FIRST

Payments/Credits
other than to the
U.S. Treasury

- Non-Federal debt (including BPA-supported bonds issued by Energy Northwest, the Port of Morrow, and the Idaho Energy Resources Authority)
 - BPA O&M expenses
 - Other
- (No priority implied among Non-Federal payments)*

SECOND

U.S. Treasury
Payments

- Principal and interest on bonds, as well as the line of credit, with the U.S. Treasury
- Principal and interest to repay federal appropriations that funded capital investments in the Federal System
- Other

Additional Assurance of Payment

Short-term Credit Facility

- Overnight access to a \$750 million line of credit with the U.S. Treasury for operating expenses

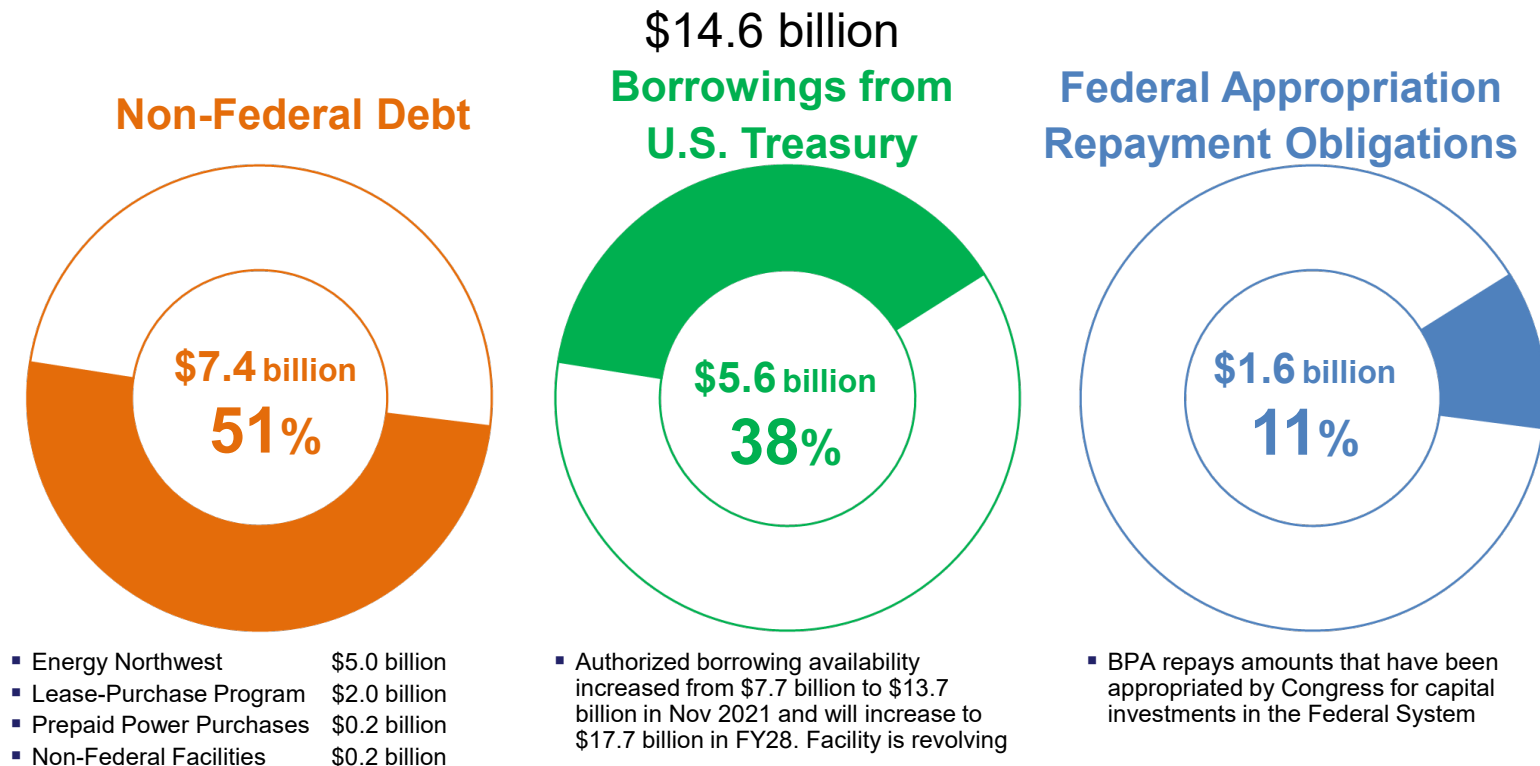
Two-year Rate Case

- Conduct a rate case every two years to ensure recovery of all costs, including Federal and non-Federal debt service
- In FY21, BPA made its 38th consecutive U.S. Treasury payment on time and in full

Reserves Provisions

- Provisions to increase rate, without undertaking a formal rate process, if Reserves Available for Risk (RAR) fall below established thresholds

Federal and Non-Federal Debt Outstanding*

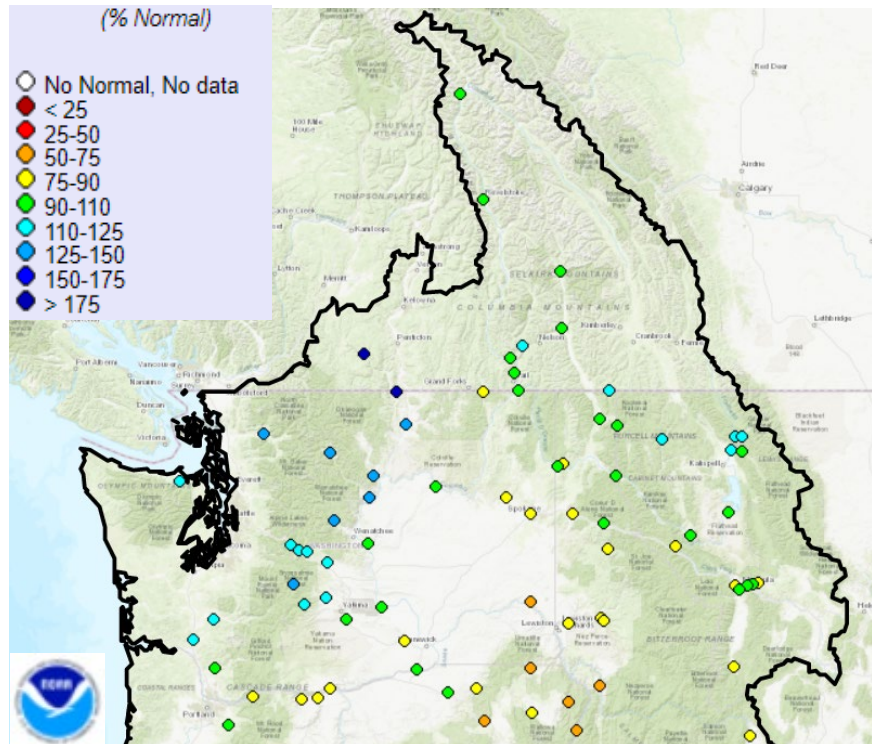


BPA evaluates current and forecast leverage ratios to determine if any rate action needs to be taken to maintain the 75%-85% leverage target through FY28 with a long-term target of 60%-70%

* Based on 9/30/2021 Audited FCRPS Financial Statements

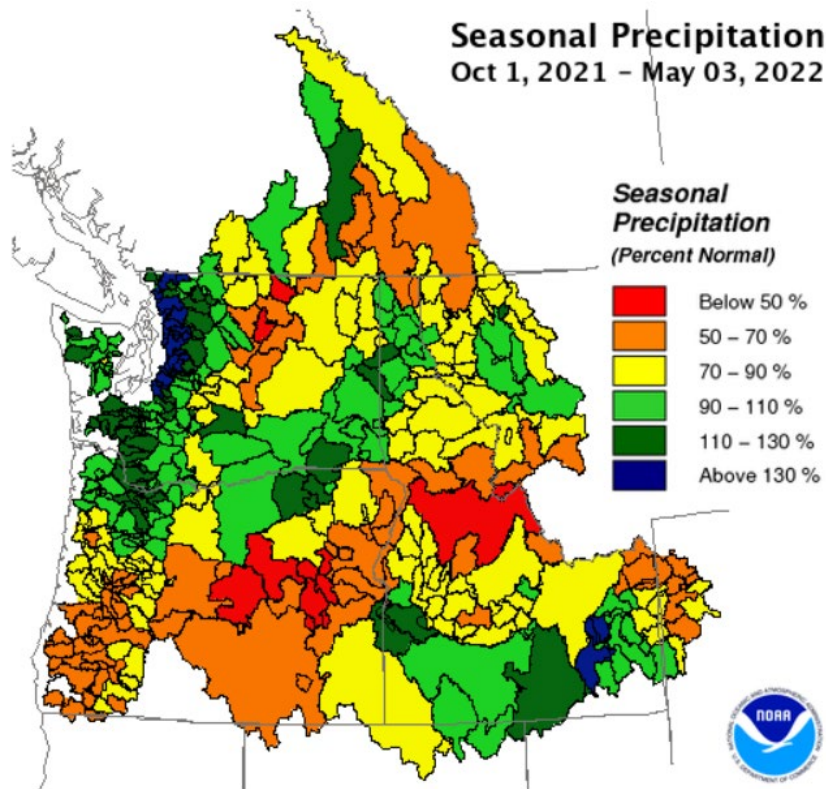
Water Supply

Observed River Run-off (Oct 21 – May 3)



- The majority of the Columbia River Basin water supply comes from precipitation and snowpack in Canada
- As shown here, the river run-off feeding the basin is currently at or exceeding 90% of normal
- As of early May, the FY22 water supply forecast is expected to be 93% of the 30-year historical average as measured at The Dalles Dam

Seasonal Surplus (Secondary) Sales



Creation Time: Wednesday, May 4, 2022

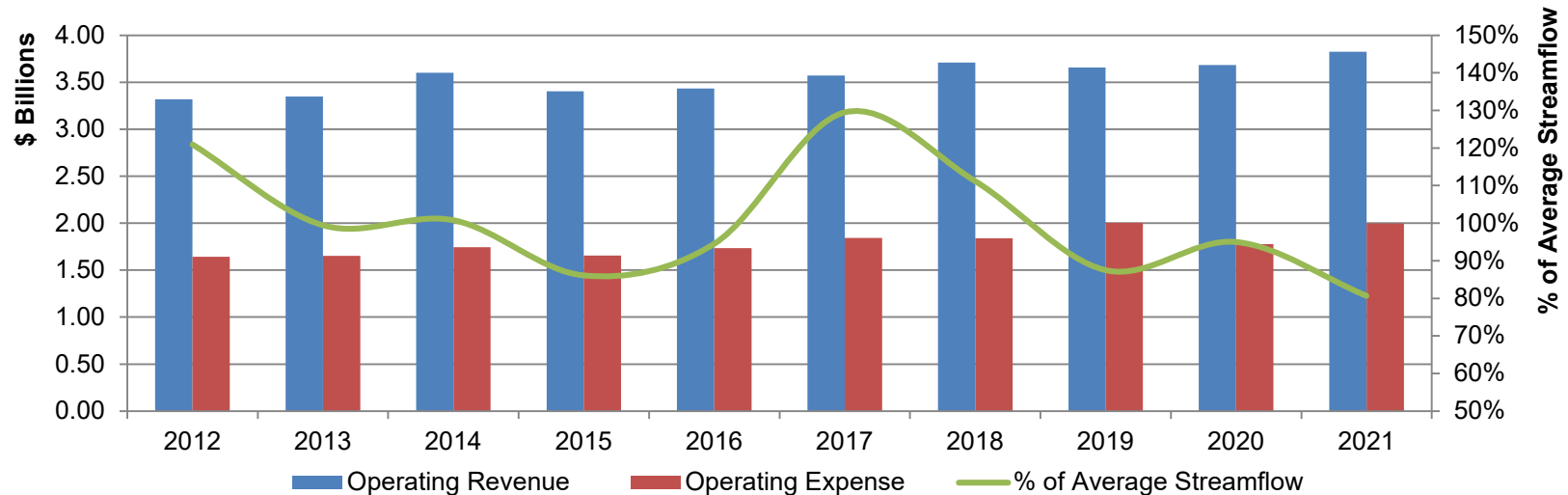
Northwest River Forecast Center

- The amount of energy produced by the hydroelectric system above firm energy
- Under *average* water conditions, this amount is estimated to be 1,324 aMW (Operating Year 2023)
- Expected sales of seasonal surplus (secondary) energy is an important part of BPA's ratemaking and risk mitigation
- Revenue from seasonal surplus was approximately 15% of BPA's total FY21 revenues of \$3.8 billion. The prior five years have averaged 11% of total revenues

Revenues & Expenses

More Stable than Streamflow

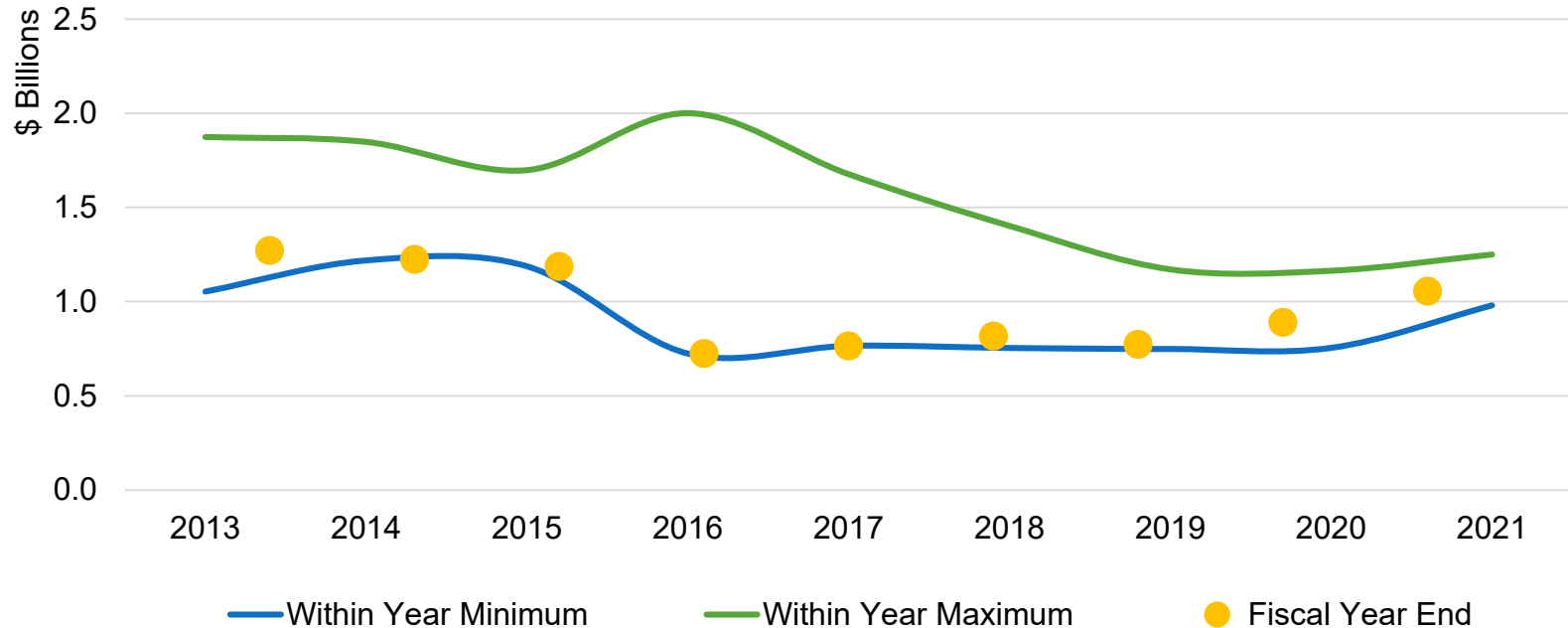
- The relationship of operating revenues to operating expenses has been stable when compared to wide variances in stream-flows and hydro-generation
- Sales of firm energy and transmission services contribute to the operating revenue stability



Streamflow data are based on the Operating Year (Aug 1 – July 31) and the financial information is based on the Fiscal Year (Oct 1 – Sept 30)

Financial Reserves

- BPA's total financial reserves fluctuate throughout the year, however, the balance is historically at its lowest point after the annual year-end U.S. Treasury payment



Financial Reserves

- BPA may defer borrowing for capital construction until the cash is needed. BPA also maintains a \$750 million line of credit with the U.S. Treasury
 - There was no outstanding balance at 9/30/2021

Year-End Reserves (\$Millions)				
Fiscal Year	Total Financial Reserves	Reserves Available for Risk (RAR)	U.S. Treasury Line of Credit	Days Liquidity on Hand
2017	766	568	750	258
2018	840	551	750	254
2019	773	484	750	222
2020	889	708	750	295
2021	1,056	825	750	284

Non-Federal Debt Service Coverage¹

(\$millions excluding ratios)

	FY19	FY20	FY21
Total Operating Revenues	3,656	3,684	3,823
Total Operating Expenses ²	2,003	1,778	1,996
Funds Available to meet Non-Federal Debt Service	1,653	1,906	1,827
Non-Federal Debt Service	338	462	336
Non-Federal Debt Service Coverage Ratio	4.9x	4.1x	5.4x

- Non-Federal Debt management actions, such as the Regional Cooperation Debt program, have continued to result in higher than historical Non-Federal Debt Service Coverage results

¹This 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

²Operating 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

Cyber Security

- Continued enhancements and expansion to operational security through the implementation and monitoring of real time cyber security controls in addition to on-going improvements to our capabilities and situational awareness
- Continued cultivation of alliances within the federal government to deploy intelligent devices to monitor external threats
- Subject to mandatory NERC reliability standards including Critical Infrastructure cybersecurity standards
- Robust cyber security assessment program with 50 employees supporting a 24x7 Cyber Security Operations and Analysis Center to process threat intelligence and threat hunting
- Columbia Generating Station (Energy Northwest) is regulated by the Nuclear Regulatory Commission requiring a comprehensive cyber security program. Columbia fully implemented all requirements by December 31, 2017

Vegetation Management and Fire Prevention Program

Goals

System reliability
Wildfire risk mitigation

Methods

Annual ground patrols
Semi-annual air patrols

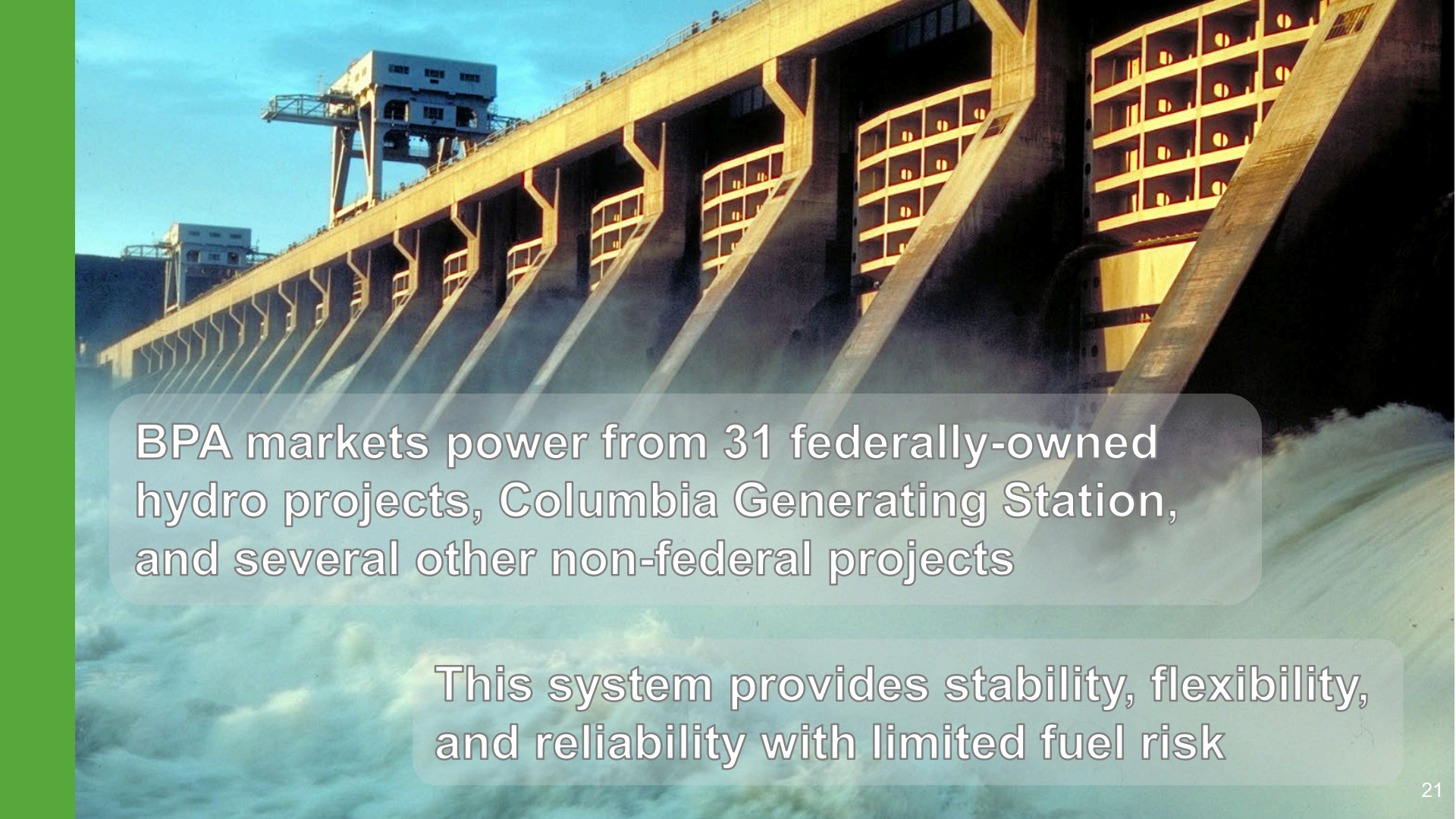
Results

Award winning program
Compliant with NERC rules
Successful WECC audits

Wildfire Mitigation Plan



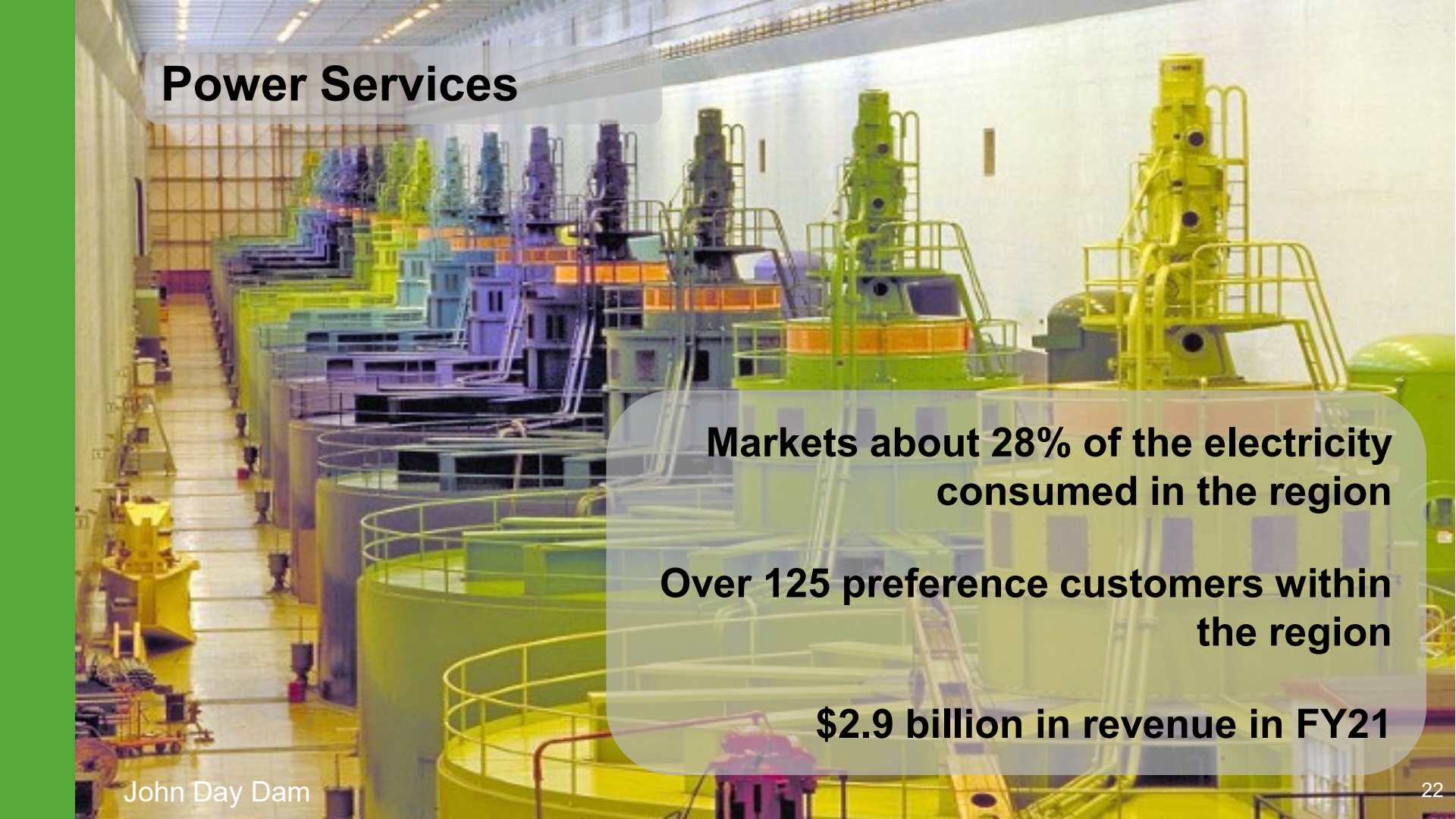
- In the Spring of 2020, BPA published its Wildfire Mitigation Plan
 - To prevent our lines and assets from sparking wildfires, and
 - To protect our lines and assets from the threat of wildfires
- In 2021, the plan was updated to include a Public Safety Power Shutoff procedure to allow for proactive de-energization of lines and facilities
 - Due to extreme weather like high winds or low humidity, and
 - To protect homes, businesses, property, and emergency responders



BPA markets power from 31 federally-owned hydro projects, Columbia Generating Station, and several other non-federal projects

This system provides stability, flexibility, and reliability with limited fuel risk

Power Services



**Markets about 28% of the electricity
consumed in the region**

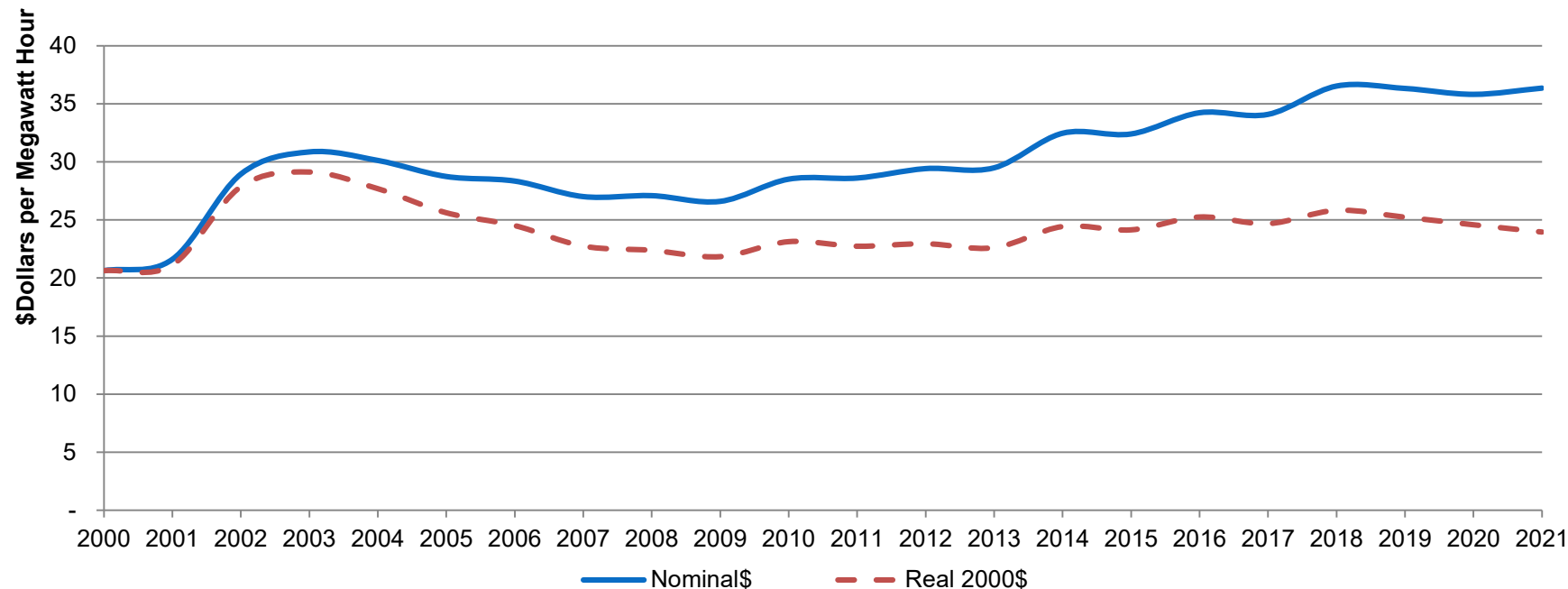
**Over 125 preference customers within
the region**

\$2.9 billion in revenue in FY21

Historical Average PF Preference Rates

Nominal (Actual) and Real (Inflation-Adjusted) Average PF Preference Rate Levels

- Power rates have remained relatively stable, especially on an inflation-adjusted basis



PF = Priority Firm Power

Real dollars derived using the BEA Implicit Price Deflator for GDP

Transmission Services

15k circuit miles of high voltage lines

262 substations

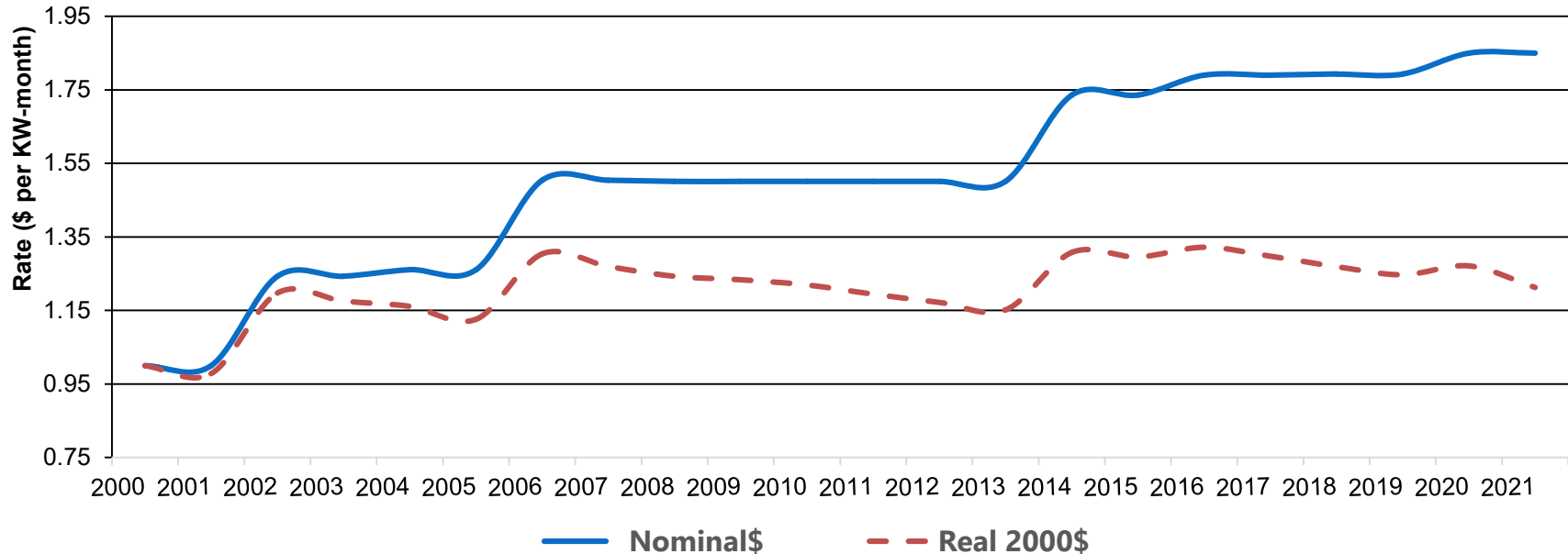
Over 300k square miles of
service territory

\$1 billion in revenue in FY21

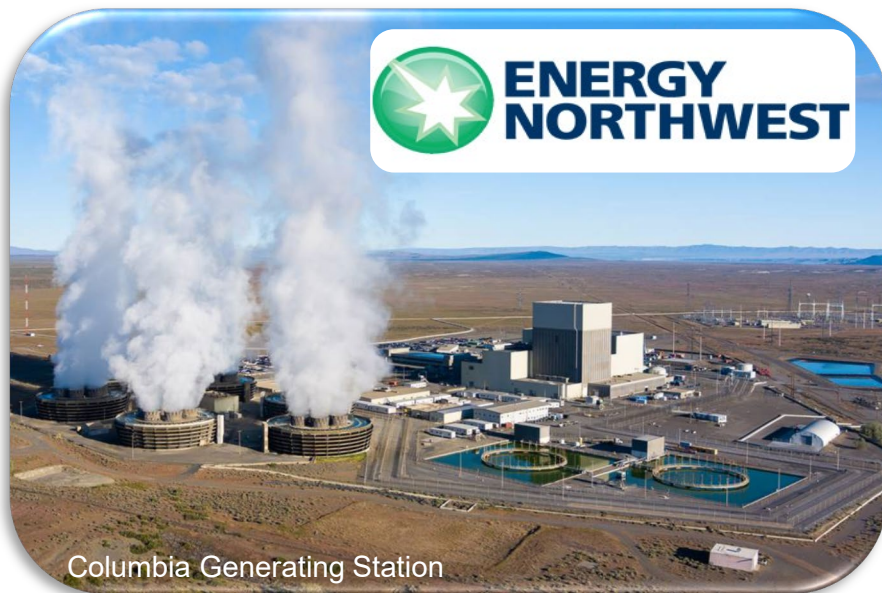
Historical Average Transmission Rates

Nominal (Actual) and Real (Inflation-Adjusted) Historical Firm P2P Rate

- Transmission rates have remained relatively stable on an inflation-adjusted basis



Non-Federal Debt



Columbia Generating Station

- Washington State Joint Operating Agency
- Owns and operates Columbia Generating Station (CGS)
- \$4.8 billion in BPA-supported obligations outstanding
 - \$4.2 billion in tax-exempt bonds
 - \$611 million in taxable bonds
 - \$49.4 million drawn on lines of credit which will be paid down with proceeds from the 2022-A/B transaction
- Continuing collaboration with Energy Northwest
 - Obligations are fully supported by BPA under existing net billing agreements
- Anticipate issuing up to \$2.9 billion in tax exempt net billed bonds between 2022-2030
 - The repayment of the net billed debt is secured by BPA's financial commitments

Non-Federal Debt – Transmission Issuers



- Oregon port district
- Authorized to finance transmission projects with publicly issued bonds and credit arrangements secured by BPA lease-purchase commitments
- As of 9/30/2021, \$1.3 billion in outstanding BPA-supported bonds



- 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
- As of 9/30/2021, \$510 million in outstanding BPA-supported bonds and \$81 million in an outstanding line of credit

Energy Northwest Series 2022-A/B

Summary and Schedule

	Project 1	Columbia Generating Station	Project 3
2022-A (Tax-Exempt)*	\$99,315,000	\$429,135,000	\$18,485,000
2022-B (Taxable)*	\$575,000	\$1,870,000	n/a
Interest Payment Dates*	Starting January 1, 2023 and semiannually on July 1 and January 1 thereafter		
Pricing Date*	Wednesday, May 11, 2022		
Settlement Date*	Thursday, June 2, 2022		
Maturities (July 1)	Series A: 2026, 2028, 2035 Series B: 2025	Series A: 2030, 2032-2033 2040-2041 Series B: 2025	Series A: 2035
Optional Redemption*	Series A: Par call on 7/1/2032 Series B: Make-Whole Call	Series A: Par call on 7/1/2032 Series B: Make-Whole Call	Series A: Par call on 7/1/2032
Ratings (Moody's / S&P / Fitch)	Aa2 (Positive) / AA- (Stable) / AA (Stable)		
Syndicate	J.P. Morgan, Wells Fargo Securities, BofA Securities, Citigroup		

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

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