

Bonneville Power Administration As of April 16, 2024



Bonneville
POWER ADMINISTRATION



Grand Coulee Dam

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 April 16, 2024. If you are viewing this presentation after April 16, 2024, 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.

This investor presentation you are about to view is provided as of April 16, 2024 in connection with the proposed offering of Columbia Generating Station Electric Revenue and Refunding Bonds, Series 2024-A, Project 3 Electric Revenue Refunding Bonds, Series 2024-A (the “Series 2024-A Bonds”), and Project 1 Electric Revenue Refunding Bonds, Series 2024-B, Columbia Generating Station Electric Revenue Bonds, Series 2024-B, and Project 3 Electric Revenue Refunding Bonds, Series 2024-B (the “Series 2024-B Bonds”, and collectively with the Series 2024-A Bonds, the “Series 2024-AB Bonds” or the “Bonds”).

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. If you are viewing this presentation after April 16, 2024, 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 none of Energy Northwest, Bonneville Power Administration (BPA), J.P. Morgan Securities LLC, Wells Fargo Securities, or BofA Securities, Inc. (the “Underwriters”) has undertaken any obligation to update this investor presentation. The information presented is not warranted as to completeness or accuracy and is subject to change without notice. You agree not to duplicate, download, screen capture, electronically store, or record this presentation, nor to produce, publish or distribute this presentation in any form whatsoever.

This investor presentation is provided for your information and convenience only. Any investment decisions regarding the Bonds should be made only after a careful review of the complete Preliminary Official Statement and respective Official Statement. The information in this investor presentation is a summary of certain information concerning the Bonds, Energy Northwest and BPA. This investor presentation is not intended to contain all information material to investors.

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, including the Bonds, or to adopt any investment strategy. Any offer or solicitation with respect to the Bonds will be made solely by means of the Preliminary Official Statement and Official Statements, which describe the actual terms of such Bonds. In no event shall the Underwriters, Energy Northwest or BPA be liable for any use by any party of, for any decision made or action taken by any party in reliance upon, the information contained herein, and such information is to be considered by you in evaluating the merits of participating in any transaction mentioned herein only in connection with the Preliminary Official Statement and Official Statements. Energy Northwest, BPA and the Underwriters make no representations as to the legal, tax or accounting treatment of the Bonds, or any other effects such transactions may have on you and your affiliates. You should consult with your own advisors as to such matters and the consequences of the purchase and ownership of the Bonds. Nothing in these materials constitutes a commitment by the Underwriters or any of their affiliates to enter into any transaction. No assurance can be given that any transaction mentioned herein could in fact be executed. Past performance is not indicative of future performance, which will vary. Transactions involving the Bonds may not be suitable for all investors. Clients should contact their salesperson at, and execute transactions through, an entity of the Underwriters or other syndicate member entity qualified in their home jurisdiction unless governing law permits otherwise.

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 and Energy Northwest’s business and financial results could cause actual results to differ materially from those stated in the forward-looking statements.

ROADSHOW DISCLAIMER

Energy Northwest Series 2024-A/B Bonds

	\$569,280,000 Series 2024-A		\$266,460,000 Series 2024-B			
	Columbia Generating Station, Series 2024-A		Project 3, Series 2024-A	Project 1, Series 2024-B	Columbia Generating Station, Series 2024-B	
	Project 3, Series 2024-A		Project 1, Series 2024-B	Project 3, Series 2024-B		
Pricing Date*	Tuesday, April 23, 2024			Wednesday, May 8, 2024		
Par Amount*	\$514,440,000	\$54,840,000	\$189,940,000	\$9,595,000	\$66,925,000	
Maturities (July 1)*	2030-2033, 2035, 2038-2040		2037	2025-2027	2031	2028
Optional Redemption*	Par call on July 1, 2034					
Settlement Date*	Wednesday, May 22, 2024					
Tax Status	Tax-Exempt					
Ratings (Moody's / S&P / Fitch)	Aa1 (Negative) / AA- (Stable) / AA (Stable)					
Bond Counsel	Foster Garvey P.C.					
Municipal Advisor	Public Financial Management, Inc.					
Joint Senior Managers	J.P. Morgan (lead underwriter for the Series 2024-A Bonds)			Wells Fargo Securities (lead underwriter for the Series 2024-B Bonds)		
Co-Manager	BofA Securities					

*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 total operating revenue was approximately \$4.3 billion in FY23 ■ 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 ■ 300K square-mile service area serving approximately 15 million people
Funding Sources	<ul style="list-style-type: none"> ■ Access to capital through Federal and Non-Federal sources ■ Revolving authority to borrow up to \$13.7 billion in bonds from the U.S. Treasury, increasing to \$17.7 billion beginning in FY28, \$7.9 billion currently available (as of 9/30/2023)
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 short-term credit facility for operating expenses
Credit Ratings	<p>Moody's: Aa1, negative S&P: AA-, stable Fitch: AA, stable</p>

Current Agency Highlights

- **New contracts & competitively positioned:**
 - Expect to execute new long-term power sales contracts in mid 2025 to go into effect in 2028
 - BPA's current average effective Tier 1 rate is ~\$35/MWh
 - Increased interest in BPA's capacity-based products that help integrate and balance renewables
- **Historic Fish & Wildlife settlements (2 agreements):**
 - Result is potential 10 year stay in litigation (initial 5 year stay and potential 5 year renewal)
 - Commits BPA to \$200M (plus inflation) over 20 years, \$100M over 10 years (plus inflation), and \$200M (no inflation) over 10 years
- **BPA Transmission expansion:**
 - Accelerating work on nearly \$2B of "evolving grid" projects to help meet customer need, enhance reliability, and integrate renewables
 - First-ready/First-served queue reform adopted to help manage the significant increase in generator interconnection requests



Fish Ladder at the Bonneville Dam

One Agency – Two Business Units

Power Services

- Provides about 28% of the electricity consumed in the region
- Markets power from 31 federally-owned hydroelectric projects and several Non-Federal projects, including the Columbia Generating Station
- Over 125 preference customers within the region
- \$3.2 billion in revenue in FY23



Transmission Services

- 15,000 circuit miles of high voltage lines
- 259 substations
- Over 300k square miles of service territory
- \$1.3 billion in revenue in FY23



BPA Service Territory



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 6,600 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



Direct Generation Fleet

Carbon Emission Free



Grand Coulee
33 Units
6,684 MW*



Chief Joseph
27 Units
2,614 MW*



John Day
16 Units
2,480 MW*



The Dalles
22 Units
2,080 MW*



Bonneville
18 Units
1,221 MW*



McNary
14 Units
1,120 MW*



Lower Monumental
6 Units
930 MW*



Little Goose
6 Units
930 MW*



Lower Granite
6 Units
930 MW*



Ice Harbor
6 Units
693 MW*

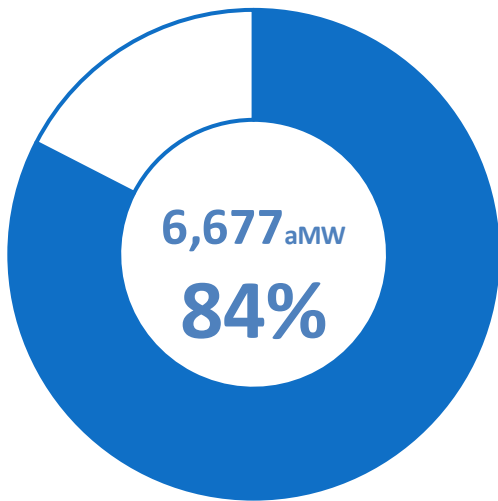
* Maximum MW capacity

21 additional projects (not pictured), 51 Units, 2,254 MW*
1 nuclear power plant, 1 Unit, 1,169 MW (rated capacity)

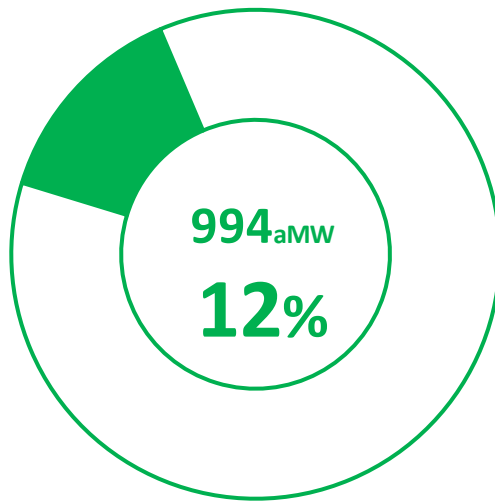
Totaling to 31 total hydro projects & 1 nuclear plant, 206 Units, 23,105 MW*

96% of Forecast Firm Power is Carbon Emission-free

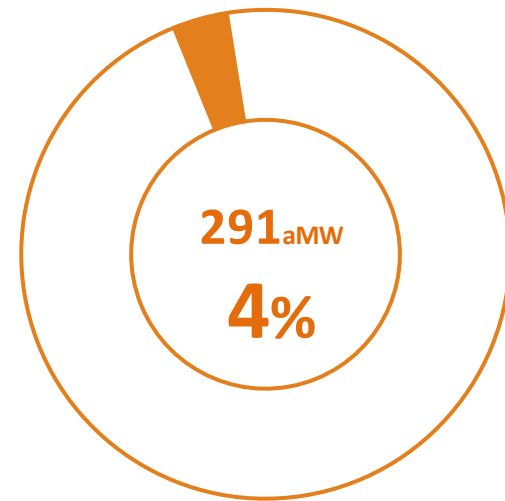
Federal Hydroelectric
Carbon Emission-Free



Columbia Generating Station
Nuclear
Carbon Emission-Free



Contract Purchases and
Other Resources



Operating Year 2025 forecast statistics from the 2023 Pacific Northwest Loads and Resources Study, April 2023

Statutory Guidance

By Law

- BPA must establish rates that recover all of its costs
- BPA must first meet Non-Federal obligations before making payments to the U.S. Treasury

Federal Rate Approval

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

Environment

- The Northwest Power Act directs Bonneville to protect, mitigate, and enhance fish and wildlife resources to the extent they are affected by the Federal System Hydroelectric Projects, which are located on the Columbia River and its tributaries

Priority of Payments

- BPA's payments and monetary credits to Non-Federal entities have priority over 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 service (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 (**Next rate case is a three year rate case (2026-2028) to match current contract period*)
- In FY23, BPA made its 40th consecutive U.S. Treasury payment on time and in full

Expedited Rate Case

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

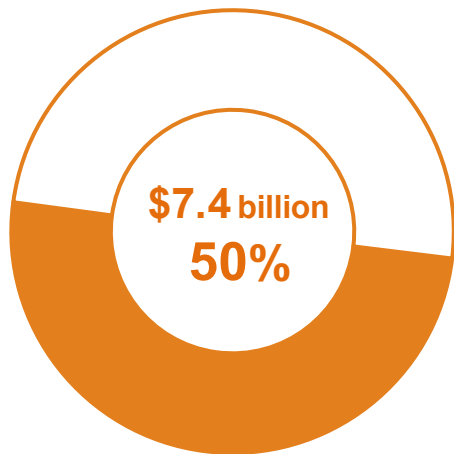
Reserves Provisions

- 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*

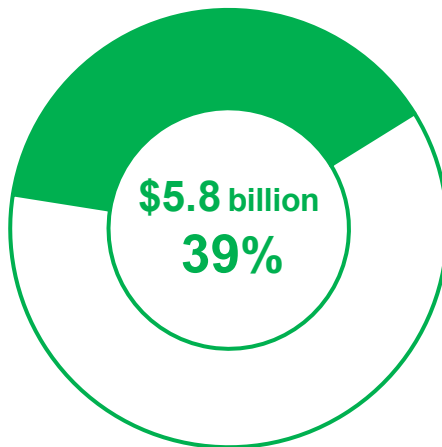
\$14.8 billion outstanding @ 9/30/23

Non-Federal Debt



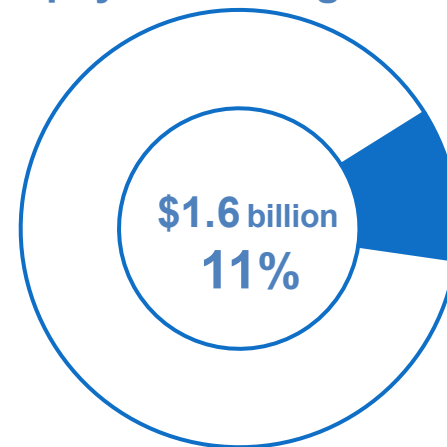
- Energy Northwest \$5.2 billion
- Lease-Purchase Program \$2.0 billion
- Other \$0.2 billion

Borrowings from U.S. Treasury



- Current authorized borrowing availability \$13.7 billion and increasing to \$17.7 billion in FY28. Facility is revolving

Federal Appropriation Repayment Obligations



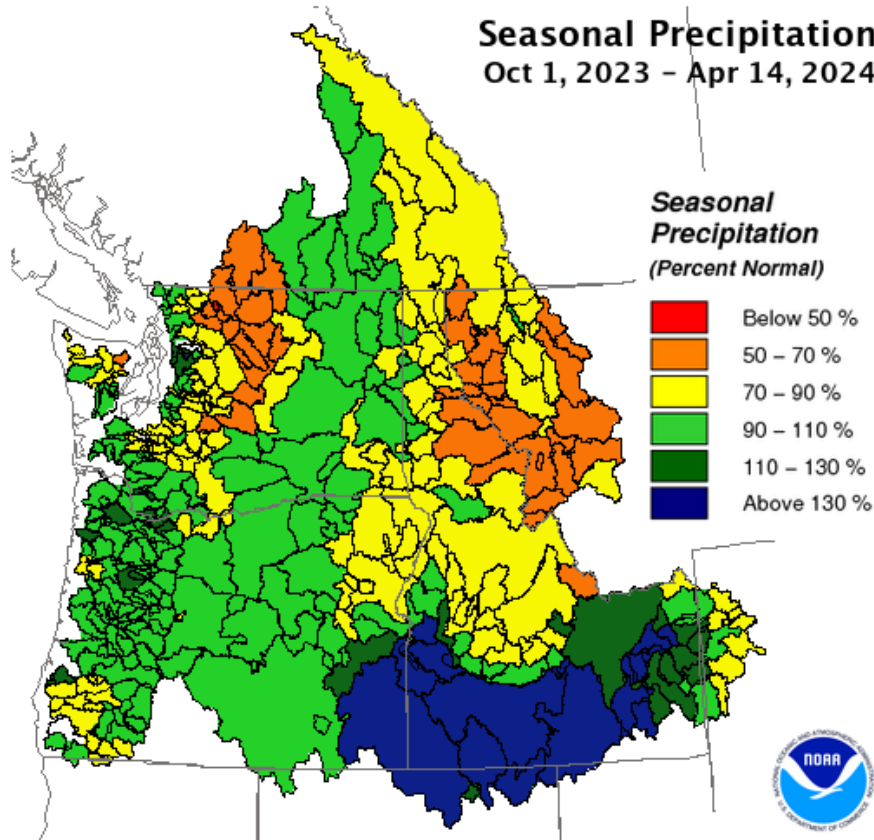
- BPA repays amounts that have been appropriated by Congress for capital investments in the Federal System

BPA recently implemented a Sustainable Capital Financing policy to shift away from 100% debt financing of capital and to incorporate revenue financing as a predictable and consistent method of funding capital. The target is to achieve a debt-to-asset ratio no greater than 60% by 2040

* Based on 9/30/2023 Audited FCRPS Financial Statements

Seasonal Surplus Sales

Seasonal Precipitation
Oct 1, 2023 – Apr 14, 2024



- The amount of energy produced by the hydroelectric system above firm energy and may be sold outside of the region
- Under median water conditions, this amount is estimated to be 1,089 aMW (Operating Year 2025)
- Expected sales of seasonal surplus (secondary) energy is an important part of BPA's ratemaking and risk mitigation
- Final 2024-2025 Rates assumed revenue from net seasonal surplus energy sales would average approximately \$362 million per fiscal year of the rate period
- Equivalent to approximately 9% of BPA's total FY23 operating revenues of \$4.2 billion



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



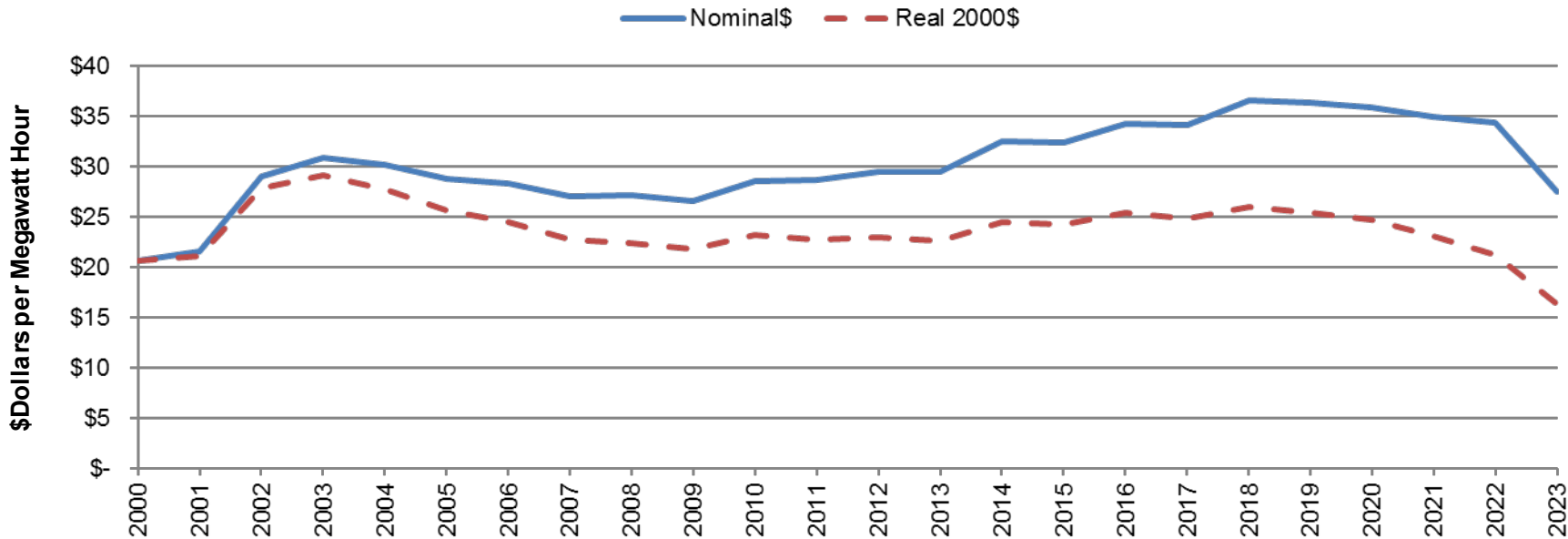
Streamflow data are based on the Operating Year (Aug 1 – July 31) and the financial information is based on the Fiscal Year (Oct 1 – Sept 30)

Historical Power Rates

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

Historical Average PF Preference Rates

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



PF = Priority Firm Power

Real dollars derived using the BEA Implicit Price Deflator for GDP

FY23 includes the effect of RDC

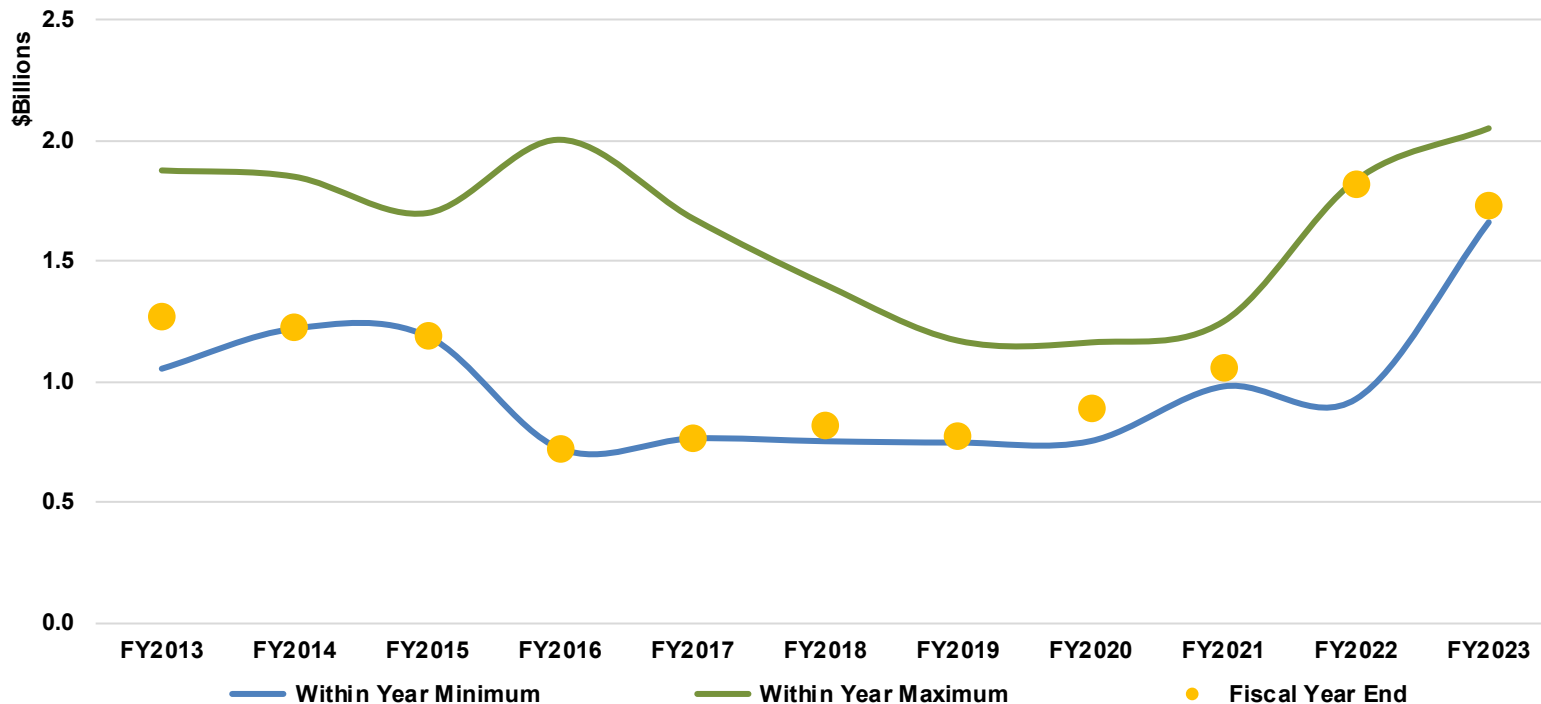
Impact of Climate Change

- BPA has been studying and monitoring the impacts of climate change on Bonneville's assets and operations for over 15 years
- Climate change signals are beginning to emerge in our streamflow records and are expected to continue
- As a result of this effort, BPA has recently updated its streamflow forecasting model to utilize the most recent 30-years to better reflect these impacts. The results forecast:
 - Higher annual volumes as regional precipitation increases
 - Higher winter and spring flows
 - Earlier spring runoff peaks are beginning to emerge
 - Lower June-July flows and longer periods of low summer flows
- BPA's 2024-2028 Strategic Plan includes supporting regional carbon reduction efforts as a strategic priority



Financial Reserves

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



Cash, investments, and deferred borrowing (capital expenditures eligible to be funded with borrowing, but funds not yet borrowed)

Financial Reserves

- BPA may defer borrowing for capital construction until the cash is needed
- BPA also maintains a \$750 million short-term credit facility with the U.S. Treasury
 - There was no outstanding balance as of 9/30/2023

Year-End Reserves (Dollars in Millions)				
Fiscal Year	Total Financial Reserves	Reserves Available for Risk (RAR)	U.S. Treasury Short-Term Credit Facility	Days Liquidity on Hand
2019	\$773	\$484	\$750	222
2020	889	708	750	295
2021	1,056	825	750	284
2022	1,834	1,511	750	380
2023	1,727	1,287	750	258

Days Liquidity on Hand = (RAR + Available U.S. Treasury Line of Credit) / (Operating Expenses/360)

Non-Federal Debt Service Coverage¹

- 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
- The decrease in FY23 net revenues is primarily due to: (i) the Power and Transmission Reserves Distribution Clauses that triggered for application to FY23 rates, which included a \$363 million planned decrease in revenues to be collected and (ii) significant purchased power expense that was incurred in FY23

(\$millions excluding ratios)	FY21	FY22	FY23
Total Operating Revenues	\$3,823	\$4,722	\$4,248
Total Operating Expenses ²	1,996	2,144	2,848
Funds Available to meet Non-Federal Debt Service	\$1,827	\$2,578	\$1,400
Non-Federal Debt Service	336	357	390
Non-Federal Debt Service Coverage Ratio	5.4x	7.2x	3.6x

¹ This information is presented in Official Statements for BPA-backed, Non-Federal Debt bond issuances. 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, 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 and Physical Asset Security

Cyber Security

- Implementation and monitoring of real time cyber security controls by permanent, full-time team
- Coordination of cyber security with other federal government agencies
- Subject to mandatory NERC reliability standards including Critical Infrastructure cybersecurity standards
- 24x7 Cyber Security Operations and Analysis Center
- Redundant system control centers that are geographically separated

Physical Asset Security

- Strategy in place to deter, detect, delay, assess, communicate and respond to security-related events
- Measures include physical hardening, contract security officers, physical access control systems, intrusion detection systems, and video surveillance systems
- Permanent, full-time team dedicated to monitoring threat intelligence information and coordinating with state and federal government agencies



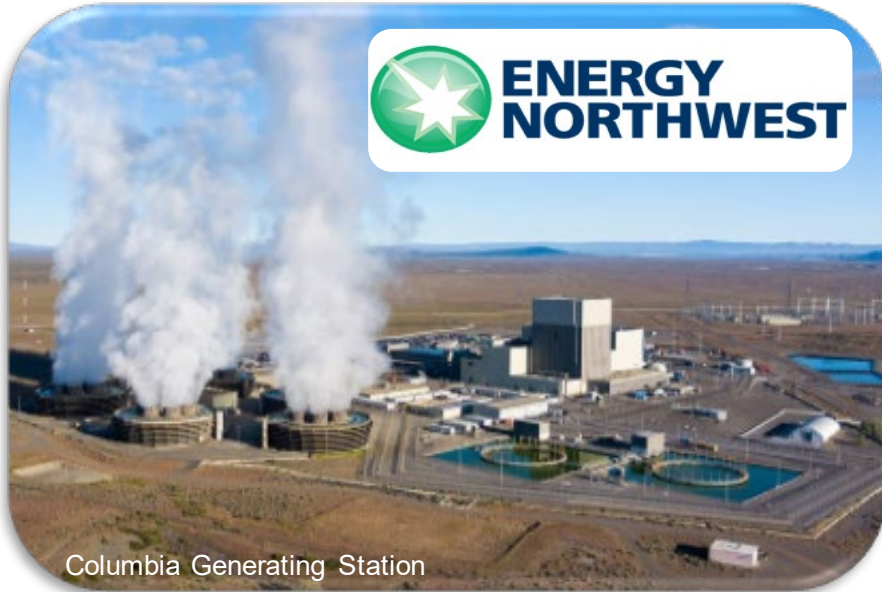
High Voltage Transmission Line Tower

Vegetation Management & Wildfire Mitigation

- BPA uses a tiered approach to manage risks:
 - System Hardening: Robust vegetation management program to minimize risk and customer impact
 - Situational Awareness Monitoring: Enhanced weather monitoring and forecasting; Asset management tools used to understand criticality, health & risk
 - Wildfire Season: Utilize enhanced protection and control settings
 - Extreme Risk Days: Stand up Public Safety Power Shutoff (PSPS) decision making team
 - Activate PSPS: As a last resort, BPA triggers the PSPS
- Wildfire liability:
 - Tort Claims: All settlements or court judgments from tort claims are paid by the United States Judgment Fund, not the Bonneville Fund. As a result of the 2020 wildfires, 3 separate suits were filed in 2024, totaling approximately \$2B
 - In addition to the tort claims, an inverse condemnation complaint was filed in the United States Court of Federal Claims in Washington DC
 - The US Government has filed a motion to dismiss which has yet to be ruled on
 - Bonneville is unable to predict at this time the source of payments for any settlement or judgments arising from an inverse condemnation claim



Non-Federal Debt – Energy Northwest



Columbia Generating Station

- Washington State Joint Operating Agency
- Owns and operates Columbia Generating Station (CGS)
- \$5.19 billion in BPA-supported obligations outstanding*
 - \$4.83 billion in tax-exempt bonds
 - \$365 million in taxable bonds
- Anticipate issuing up to \$2.6 billion in tax exempt net billed bonds between 2024-2030
- The repayment of the net billed debt is secured by BPA's financial commitments

- BPA has a continuing collaboration with Energy Northwest
- Obligations are fully supported by BPA under existing net billing agreements
- Regulated by the Nuclear Regulatory Commission requiring a comprehensive cyber security program. Columbia fully implemented all existing requirements by December 31, 2017

* Excludes unamortized premiums and cost of issuance. See slide 15 for audited GAAP based numbers

Non-Federal Debt – Transmission Issuers



- Port district located in Morrow County, OR
- Authorized to finance transmission projects with publicly issued bonds and credit arrangements secured by BPA lease-purchase commitments
- As of 9/30/2023, \$1.2 billion in outstanding BPA-supported bonds
- Potential issuance of approximately \$81 million expected to price in June 2024 through a syndicate including Wells Fargo Securities, TD Securities, and BofA Securities (EMMA notice posted 3/18/2024)



- 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 9/30/2023, \$484 million in outstanding BPA-supported bonds and \$81 million in an outstanding line of credit anticipated to be refunded in June 2024 with proceeds of bonds issued by the Port of Morrow

Energy Northwest Series 2024-A/B

Preliminary Amortization and Schedule

Series 2024-A/B Schedule*

Date	Event
April 16, 2024	Post Preliminary Official Statement and Investor Presentation
April 23, 2024	Price Series 2024-A Bonds
May 8, 2024	Price Series 2024-B Bonds
May 22, 2024	Closing for Series 2024-A/B Bonds

Series 2024-A/B Preliminary Amortization*

\$569,280,000 Series 2024-A <i>Pricing April 23, 2024*</i> <i>Lead Underwriter - J.P. Morgan</i>
--

\$266,460,000 Series 2024-B <i>Pricing May 8, 2024*</i> <i>Lead Underwriter - Wells Fargo</i>

Maturity Date	Columbia Series 2024-A	Project 3 Series 2024-A
7/1/2025	-	-
7/1/2026	-	-
7/1/2027	-	-
7/1/2028	-	-
7/1/2029	-	-
7/1/2030	38,475,000	-
7/1/2031	79,980,000	-
7/1/2032	34,975,000	-
7/1/2033	37,035,000	-
7/1/2034	-	-
7/1/2035	46,540,000	-
7/1/2036	-	-
7/1/2037	-	54,840,000
7/1/2038	91,145,000	-
7/1/2039	92,060,000	-
7/1/2040	94,230,000	-
Total	514,440,000	54,840,000

Maturity Date	Project 1 Series 2024-B	Columbia Series 2024-B	Project 3 Series 2024-B
7/1/2025	59,580,000	-	-
7/1/2026	63,590,000	-	-
7/1/2027	66,770,000	-	-
7/1/2028	-	-	66,925,000
7/1/2029	-	-	-
7/1/2030	-	-	-
7/1/2031	-	9,595,000	-
7/1/2032	-	-	-
7/1/2033	-	-	-
7/1/2034	-	-	-
7/1/2035	-	-	-
7/1/2036	-	-	-
7/1/2037	-	-	-
7/1/2038	-	-	-
7/1/2039	-	-	-
7/1/2040	-	-	-
Total	189,940,000	9,595,000	66,925,000

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

Contact Information

Nadine M. Coseo
Treasury Manager,
Financial Strategy & Operations

(503) 230-3337

nmcoseo@bpa.gov

Tracy Carlson
Lead, Revenue Requirement,
Repayment & Investor Relations

(503) 230-3257

tlcarlson@bpa.gov

Additional investor information:

<https://www.bpa.gov/about/finance/investor-relations>

Bonneville
POWER ADMINISTRATION

