BONNEVILLE POWER ADMINISTRATION

2023 Annual Report

The power of resilience

ABOUT

The Bonneville Power Administration 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 dams 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% of the electric power generated in the Northwest, and its resources — primarily hydroelectric — make BPA power nearly carbon free.

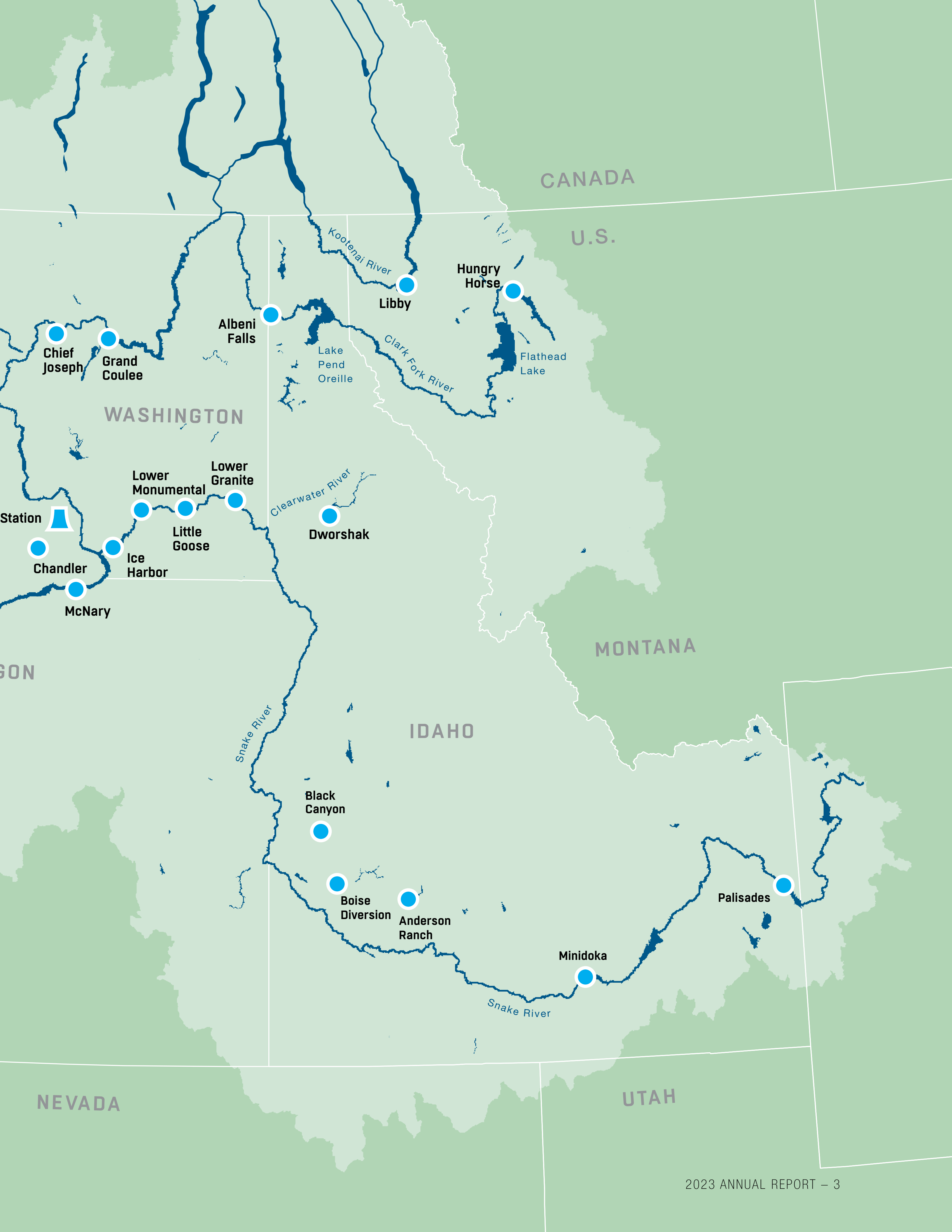
BPA also operates and maintains more than 15,000 circuit miles of high-voltage transmission in its service territory. BPA's territory includes Idaho, Oregon, Washington, western Montana and small parts of eastern Montana, California, Nevada, Utah and Wyoming.

BPA promotes energy efficiency, renewable resources and new technologies that improve its ability to deliver on its mission. To mitigate the impacts of the federal dams, BPA implements a fish and wildlife program that includes working with its partners to make the federal dams safer for fish passage.

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

HYDROELECTRIC DAM

NUCLEAR POWER


CANADA
U.S.
Kootenai River
Libby
Hungry Horse
Albeni Falls
Lake Pend Oreille
Clark Fork River
Flathead Lake
Chief Joseph
Grand Coulee
WASHINGTON
Lower Monumental
Lower Granite
Clearwater River
Station
Little Goose
Dworshak
Chandler
Ice Harbor
McNary
GON
MONTANA
IDAHO
Snake River
Black Canyon
Boise Diversion
Anderson Ranch
Palisades
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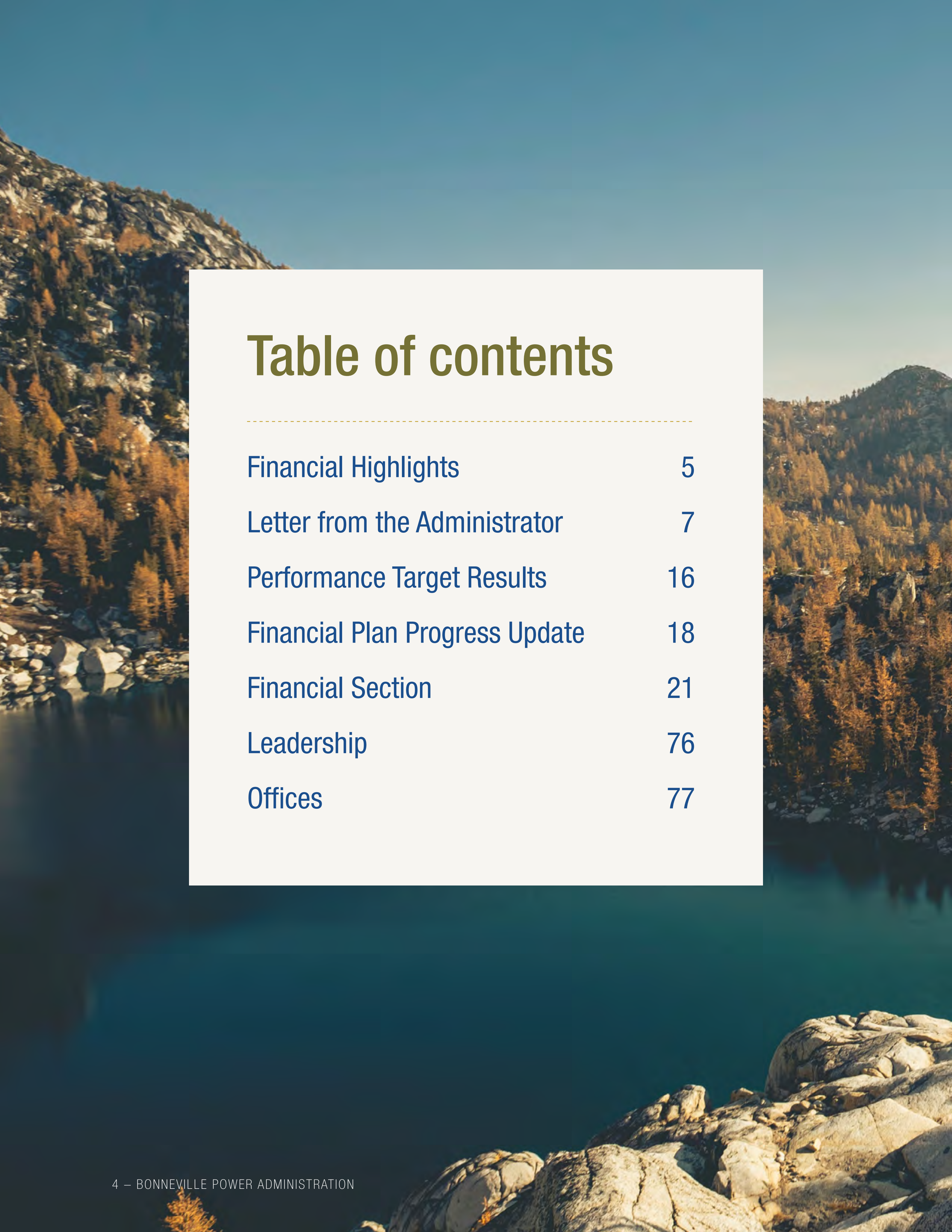
NEVADA
UTAH



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FINANCIAL HIGHLIGHTS

FEDERAL COLUMBIA RIVER POWER SYSTEM

FISCAL YEAR 2023

	GOAL	RESULT
Net revenues	≥ $(332)M	$(257)M
IPR cost expenditure	≤ $1.901B	$1.899B
Days cash on hand	≥ 60	181
Capital expenditures	$662M – $896M	$729M
Debt-to-asset ratio	≤ 82%	81%
Available U.S. Treasury borrowing authority	≥ $1.5B	$7.9B

CREDIT RATINGS

ON BPA-BACKED NONFEDERAL BONDS

Moody's: Aa1

Fitch: AA

S&P Global: AA-

2024–2028 Strategic Goals

Invest in people
Foster a positive culture and work environment that supports a resilient, engaged workforce capable of delivering on our public-service mission and responsibilities.

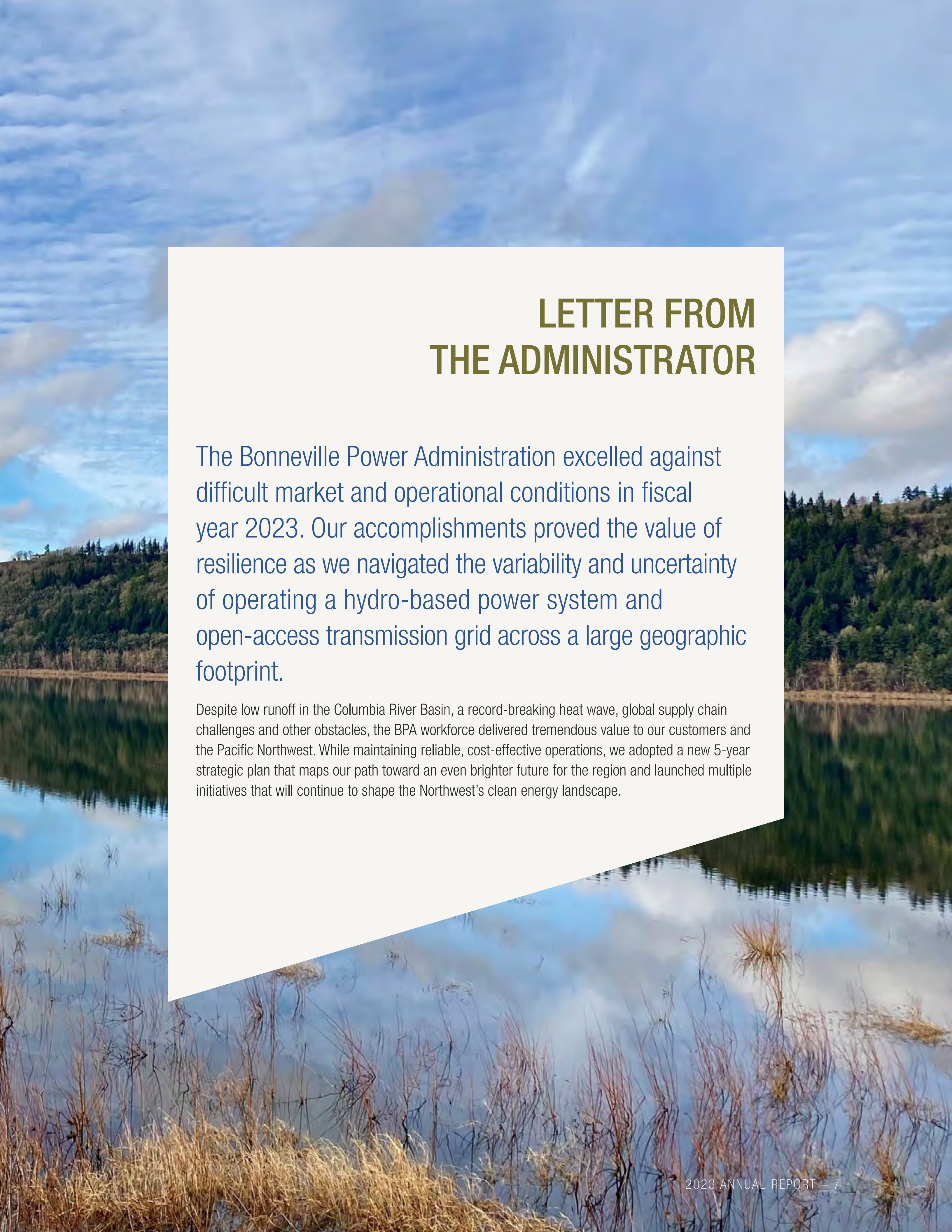
Enhance the value of products and services
Maximize the value of the federal system and the products and services we offer to meet our customers' evolving needs.

Sustain financial strength
Provide stable, competitive power and transmission rates over the long term.

Mature asset management
Manage risk and maximize asset value by delivering the right projects at the right time.

Preserve safe, reliable system operations
Protect and enhance the delivery of power and transmission services in an evolving landscape.

Modernize business systems and processes
Improve the efficiency, accuracy and flexibility of internal business capabilities.



LETTER FROM THE ADMINISTRATOR

The Bonneville Power Administration excelled against difficult market and operational conditions in fiscal year 2023. Our accomplishments proved the value of resilience as we navigated the variability and uncertainty of operating a hydro-based power system and open-access transmission grid across a large geographic footprint.

Despite low runoff in the Columbia River Basin, a record-breaking heat wave, global supply chain challenges and other obstacles, the BPA workforce delivered tremendous value to our customers and the Pacific Northwest. While maintaining reliable, cost-effective operations, we adopted a new 5-year strategic plan that maps our path toward an even brighter future for the region and launched multiple initiatives that will continue to shape the Northwest's clean energy landscape.

Maintaining competitive rates and financial strength

BPA kicked off fiscal year 2023 by reducing rates through reserve dividend distributions of $350 million for power and $13 million for transmission. This rate relief was possible because of our exceptional financial performance in FY 2022; the liquidity BPA has built by applying our Financial Reserves Policy; and the policy's framework that guides when and how to deploy reserves when they reach healthy levels.

As the year unfolded, that liquidity proved beneficial. In what became the 13th driest year on record, we had to make significant power purchases, driving up expenses. Skilled forecasting, planning and marketing approaches, combined with strategic actions to preserve liquidity, allowed Power Services to partially offset the power purchases costs. In addition, Transmission Services expertly managed the federal grid to ensure reliability and maximize capacity, enabling increased sales. Despite the dry year, we beat our agency net revenue target of negative $332 million by $75 million — far from mid-year forecasts that indicated we would miss the target by as much as $50 million. Our financial position remains strong, with substantial liquidity and U.S. Treasury borrowing authority, and high investment-grade credit ratings.

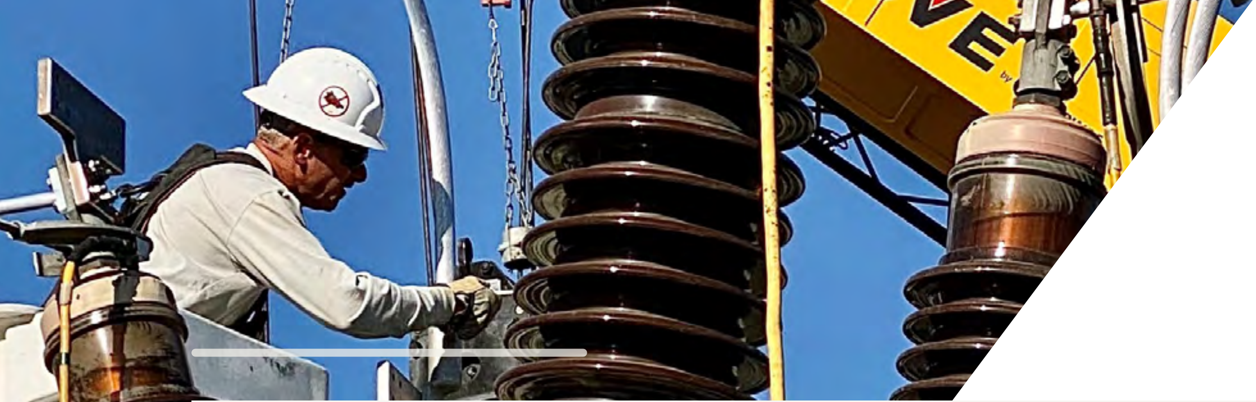
Cost discipline across the agency further boosted our bottom line. We beat our $1.9 billion agency target for program expenses by $2 million, despite unexpected expenses from inflation and increased demand for mission-critical work. As we saw those expenses rise mid-year, we made a concerted effort to focus spending on the highest priority areas, changing BPA's cost trajectory and coming in below budget.

Both Power and Transmission landed above their upper thresholds for financial reserves, triggering their reserves distribution clauses. The RDC amounts of $285 million for Power and $130 million for Transmission can be used to reduce customers' rates, reduce debt or for other high value purposes in FY 2024. The administrator will determine how to allocate the reserve distribution amounts after a public process, with a final decision expected by Dec. 15, 2023.

Among other financial highlights, we made our annual payment to the U.S. Treasury for the 40th consecutive year on time and in full, totaling $1.02 billion in FY 2023. These payments demonstrate BPA's ongoing ability to meet all of its financial commitments.

Credit rating agencies have taken note of BPA's solid financial footing. Moody's upgraded its credit rating on BPA-backed nonfederal bonds to Aa1 — the rating agency's second highest rating — marking BPA's first upgrade since 2009. Fitch and S&P maintained their high-investment grade ratings for BPA-backed nonfederal bonds. This is evidence that our financial policies are working and that BPA is well-positioned to lead the region toward a prosperous clean energy future.

As further evidence of BPA's financial strength, in July we released final power and transmission rates for fiscal years 2024 and 2025. We adopted the terms of a settlement agreement that holds power and transmission rates flat for the next 2-year rate period. Power rates also include $258 million of anticipated cash flow that provides a financial buffer to mitigate future market volatility or other unexpected costs, as we saw in 2023. Both power and transmission rates once again include revenue financing to help fund capital investments and continue reducing BPA's debt-to-asset ratio. The adoption of the rate settlement was a positive outcome for our customers, the region and BPA, as it furthers our ability to sustain financial strength over the long term.



A people-focused plan for the future of clean energy

Looking next year and beyond, BPA issued a new 2024–2028 Strategic Plan that describes how we will preserve reliability, respond to changing customer needs and strengthen resilience in the changing industry landscape.

Our strategy starts with investing in people. We're prioritizing workforce and recruitment objectives to ensure we have the right people in the right positions; and to fill critical skills that are necessary for us to accomplish this work. We continue to prioritize safety and focus on building a culture where people feel valued, accountable and enabled to deliver results.

Intentional collaboration and relationship-building will strengthen our workforce as we begin to implement a new set of strategic initiatives. This will be especially critical as we continue to onboard a record-level of new employees, having welcomed 355 new federal employees to the BPA family in FY 2023. Notably, BPA's turnover rate reduced from a high of 9% in FY 2022 to 5.4% in FY 2023. And we continue to make progress reaching candidates for positions that are notoriously hard to fill by expanding our outreach efforts and adopting more aggressive recruitment strategies.

One of the first things new employees learn when they join our workforce is that nothing is more important than their safety and the safety of all employees. Our results this year reflected the strong habits we've built over the years, instilling safety as a core value and carrying out our "see something, say something, do something" mentality. We beat all of our safety targets, including completing 89% of corrective actions on time, above the target of 80%; and reported a recordable incidence rate of 0.7, below the ceiling of 0.9. We remain steadfast in our ambition to becoming the safest utility in North America.

COMING TOGETHER

Members of the BPA workforce had dozens of opportunities to come together, learn and grow in FY 2023, thanks to events hosted by the Culture Office, Civil Rights and Equal Employment Opportunity Office, Safety Office, employee resource groups and others. Some of the most popular events included the Leadership Speakers Series, Culture Cafes, and diversity and EEO trainings. These offerings help strengthen our workforce and our ability to achieve BPA's goals for our customers and the region.

Powering the Pacific Northwest

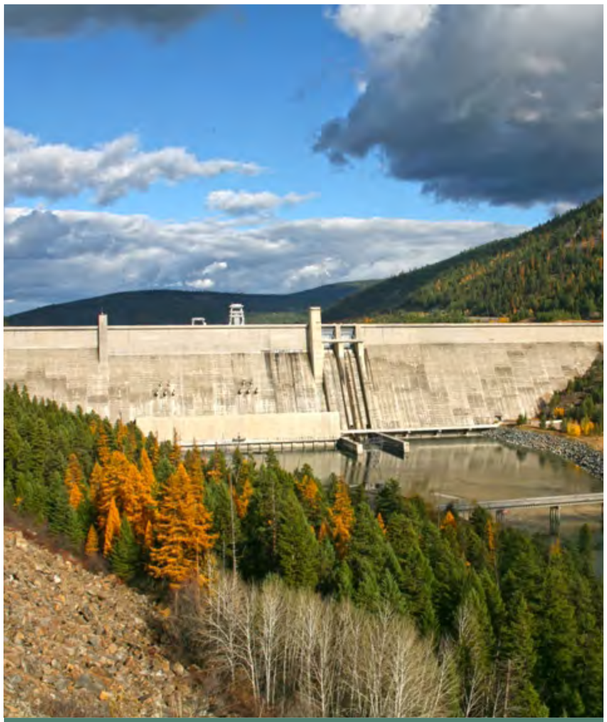
Water conditions in the Columbia River Basin were below average in FY 2023, coming in at 76% of normal. But the Federal Columbia River Power System performed reliably through extreme weather and record-breaking demand.

During the heat wave in August, BPA broke its record for summer peak load, hitting 9,075 megawatts — about 320 MW above the previous peak in June 2021. Thanks to advanced planning, we were able to meet all of our power obligations, plus offer surplus power into the wholesale market. Close coordination between our hydro operators and traders also maximized our flexibility to sell power during peak hours when it was the most valuable, boosting net revenues. Separately, a “spring for summer” swap that BPA and BC Hydro agreed to earlier in the year created additional flows in the first part of August. This agreement allowed us to store water in Canadian reservoirs during peak spring runoff when there was more water than needed, and then coordinate with the National Oceanic and Atmospheric Administration and fish managers to best use the water for fish migration in hotter, drier periods. A side benefit of the swap this year was an increase in generation in the first two weeks of August.

Looking toward the future, BPA and its power customers made significant progress in our Provider of Choice process to establish new long-term agreements that will replace contracts expiring in 2028. We released our draft policy in July, sharing BPA’s positions on the post-2028 policies, products and services we expect to offer. We collected extensive input from customers that we are now taking into account before releasing a final policy in early 2024. In general, we heard appreciation for the draft policy and that it struck a balance of needs and interests.

COLUMBIA RIVER TREATY NEGOTIATIONS CONTINUE

The U.S. and Canada made progress in negotiations to modernize the Columbia River Treaty as it approaches its 60th year. In addition to holding the 18th round of negotiations in FY 2023, the Department of State also held public listening sessions to hear from the region. With certain flood control provisions set to expire in 2024, BPA is cautiously optimistic about progress toward achieving the United States’ key objectives of careful flood risk management; ensuring a reliable and economical power supply; and improving the ecosystem. The U.S. is also looking to secure a more equitable distribution of power benefits in any modernized Treaty arrangement.

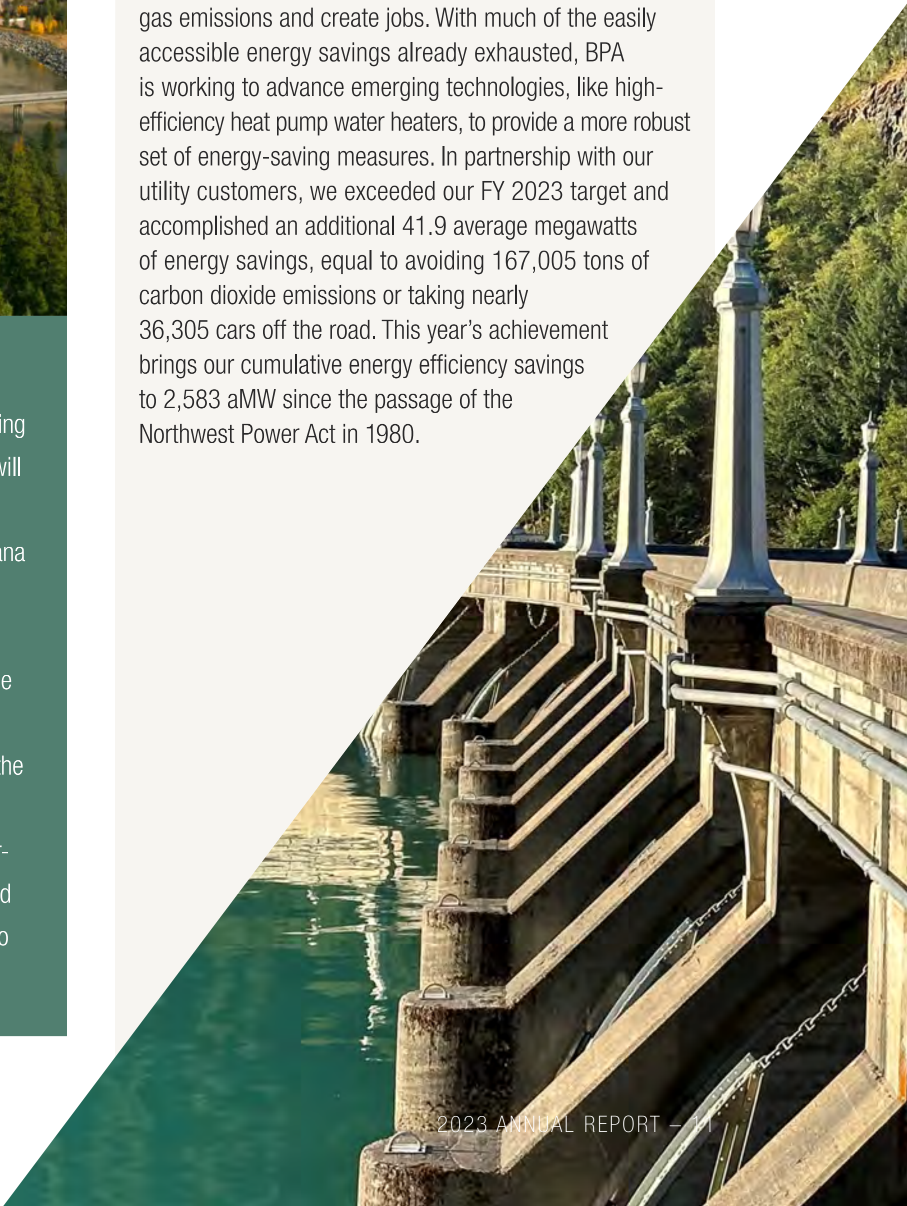


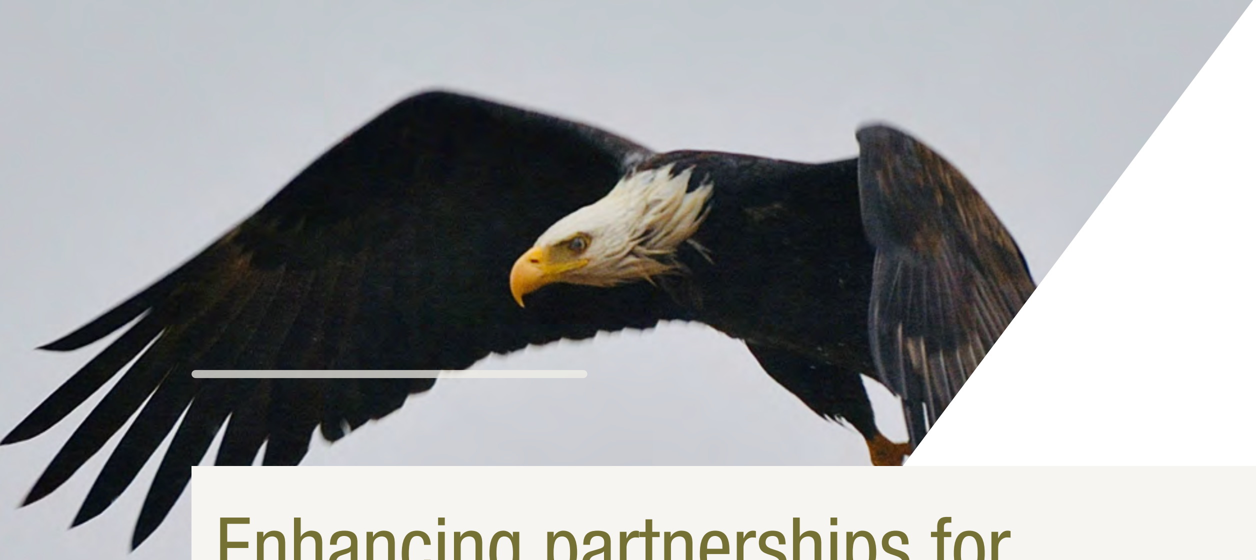
LIBBY DAM GETS A BOOST

BPA and the U.S. Army Corps of Engineers are upgrading Libby Dam through a cost-effective investment that will improve the plants' efficiency and enhance generating flexibility. The 600 MW Kootenai River project in Montana will add a sixth generating unit, taking advantage of existing space inside the powerhouse and using components that were procured and put into storage decades ago. In addition to increasing the dam's generating capacity, reliability and revenue potential, the sixth unit will help maintain water flow requirements during critical periods and enable improved spill operations that benefit sturgeon. On track to be completed in 2026, the project exemplifies BPA's commitment to investing in the right projects at the right time.

We also heard significant feedback on several challenging issues that must be resolved as we navigate state renewable energy requirements, emerging energy markets and other industry changes that make this undertaking more complex than ever before. We are committed to finding solutions that meet our customers' needs while working within the framework of BPA's statutes.

Bonneville also remains committed to achieving cost-effective energy efficiency — one of the most affordable ways to meet growing energy demand, reduce greenhouse gas emissions and create jobs. With much of the easily accessible energy savings already exhausted, BPA is working to advance emerging technologies, like high-efficiency heat pump water heaters, to provide a more robust set of energy-saving measures. In partnership with our utility customers, we exceeded our FY 2023 target and accomplished an additional 41.9 average megawatts of energy savings, equal to avoiding 167,005 tons of carbon dioxide emissions or taking nearly 36,305 cars off the road. This year's achievement brings our cumulative energy efficiency savings to 2,583 aMW since the passage of the Northwest Power Act in 1980.





Enhancing partnerships for fish and wildlife

BPA remains committed to enhancing conditions for fish and wildlife and taking other actions to mitigate the impacts of the development and operation of the FCRPS — a goal best achieved through strong regional partnerships.

Following years of regional discussions and negotiations centered on tribes' interests, in FY 2023 BPA and other federal agencies and departments entered a landmark agreement with the Confederated Tribes of the Colville Reservation, the Coeur d'Alene Tribe and the Spokane Tribe of Indians. BPA will provide $200 million over 20 years for the tribes' projects to reintroduce salmon above Chief Joseph and Grand Coulee dams. This commitment recognizes the cultural significance of salmon for tribes, and will build on the successful work already begun by the Upper Columbia United Tribes through their multi-phase implementation plan.

The agreement also recognizes the multi-faceted nature of BPA's mission and strikes a balance that will allow us to continue delivering on all of our public responsibilities. It secures the vital role of the Columbia River System as a reliable, affordable power source for millions of Northwest citizens, while providing cost-certainty for electric ratepayers.

As part of the agreement, we will also implement separate long-term funding agreements with the Spokane and Coeur d'Alene tribes. BPA's long-term fish and wildlife funding agreements provide firm commitments to hydro, habitat and hatchery actions. Through these agreements and in collaboration with our partners, BPA has delivered tangible benefits to salmon and other fish and wildlife species throughout the Northwest.

BY THE NUMBERS:

In FY 2023, BPA and its partners:

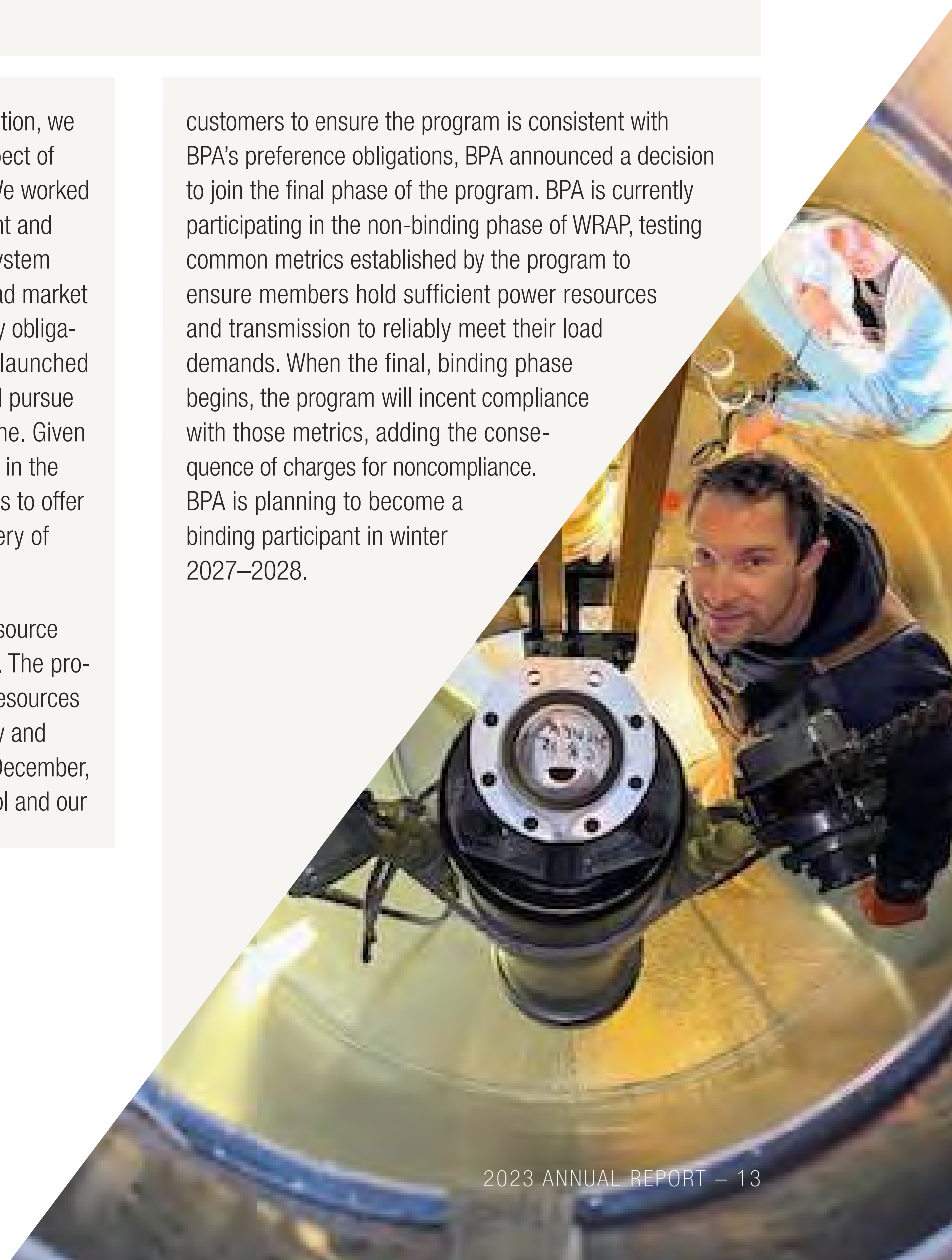
- Preserved or protected 44,516 acres and 614 stream miles through land acquisitions and improvements.
- Restored 6,735 acres and 76 stream miles of habitat for fish.
- Released 19.4 million juvenile hatchery fish.

Fostering market evolution and regional coordination

BPA is using its experience in the Western Energy Imbalance Market to inform its decision on whether to join one of two day-ahead markets that are emerging in the West.

With the majority of the West moving in this direction, we know these markets will impact almost every aspect of BPA's business, regardless of our participation. We worked diligently in FY 2023 to influence the development and implementation of the California Independent System Operator's and Southwest Power Pool's day-ahead market options, ensuring they will work with our statutory obligations and meet our customers' needs. We also launched a public process to determine whether we should pursue joining one of these markets, and if so, which one. Given that more than 90% of power sales are arranged in the day-ahead timeframe, a day-ahead market stands to offer significant opportunities to enhance BPA's delivery of affordable, reliable power.

In a separate, coordinated effort, the Western Resource Adequacy Program continues to make progress. The program is designed to ensure there are adequate resources and the associated transmission to deliver energy and meet capacity needs during all critical hours. In December, after working closely with the Western Power Pool and our customers to ensure the program is consistent with BPA's preference obligations, BPA announced a decision to join the final phase of the program. BPA is currently participating in the non-binding phase of WRAP, testing common metrics established by the program to ensure members hold sufficient power resources and transmission to reliably meet their load demands. When the final, binding phase begins, the program will incent compliance with those metrics, adding the consequence of charges for noncompliance. BPA is planning to become a binding participant in winter 2027–2028.



A new era for transmission

One of BPA's most pressing priorities is the advancement of transmission objectives that support our customers' needs for services related to growing power demand, resilience and decarbonization goals. We launched the Evolving Grid initiative to update customers and stakeholders on our efforts to lead this grid transformation.

As part of the Evolving Grid, BPA has announced the intent to pursue more than $2 billion in transmission projects. These projects will help customers in Oregon and Washington keep pace with state clean energy requirements that are driving them to acquire a significant amount of additional renewable resources, most of which are being built on the east side of the Cascades, replacing thermal generation on the west side. In addition, these projects will support economic development in the Pacific Northwest, which has become an attractive commercial location for data centers and other industries.

Meeting the tremendous need for transmission will require cooperation across the entire Western Interconnection to craft solutions on a broader scale and scope. BPA spearheaded an effort to bring together other utilities, planning organizations and regulators to develop solutions across a larger footprint and a longer planning horizon compared to current regional efforts. Specifically, this effort addresses the gap that exists in coordinated planning beyond the 10-year timeframe that NorthernGrid typically examines. Coordinated through the Western Power Pool, this effort will leverage existing transmission planning processes to facilitate expedient results.

Under the umbrella of Evolving Grid, we are reforming our process for managing skyrocketing requests for generation interconnections. This year we held an extensive public process to seek customer comment on tariff changes to enable process reforms. Our intent is to shift from a first-come/first served process that studies requests individually in the order received, to a first-ready/first-served cluster study approach for large generator interconnection requests. After successful settlement discussions, BPA announced in September that we will propose adoption of the settlement in the TC-25 Tariff Proceeding. This is an important step in our efforts to more efficiently process the increasing volume of requests for service as utilities seek to serve rising power demand and meet renewable energy goals.

As the region grows, technology evolves and threats change, BPA needs to adapt to continue safely and reliably operating the transmission system. Updating our facilities with resilience in mind is a critical part of that evolution. We are revitalizing the Ross Complex in Vancouver, Washington — the hub of Transmission Services — to provide operational efficiencies and modern infrastructure that will allow BPA to usher in a new era. As part of the redevelopment project, we completed the new Technical Services Building, on time and under budget. The new facility includes equipment to test, diagnose and repair the communications and control network that gives BPA dispatchers real-time visibility and control of the agency's transmission grid, further improving our ability to recover from a catastrophic event.

We also maintained our strong record of reliable transmission service. While the Northwest had another active wildfire season, BPA experienced very few grid impacts. We continued to implement our Wildfire Mitigation Strategy, and I'm confident our work in the areas of vegetation management and asset management have directly contributed to our ability to preserve safety and reliability.

The federal grid fared well through extreme weather this year, including the August heat wave for which we were well-prepared. Transmission's proactive actions included coordinating with neighboring utilities and the reliability coordinator, and restricting maintenance to keep as many lines in service as possible. By maximizing the grid's capacity, Transmission Services directly enabled the agency to serve record peak summer loads.

WORKING TOGETHER TOWARD A BRIGHTER FUTURE

As we look ahead to FY 2024 and begin implementing a new set of strategic objectives, Bonneville recognizes that achieving our goals and delivering on our mission requires a careful balance among many beneficiaries and partners. I look forward to building on the strong, collaborative relationships that have contributed to BPA's success. By continuing to work together, BPA will meet the evolving needs of our customers and advance the Pacific Northwest's clean energy future. Ultimately, our collective efforts touch the lives of millions of people who count on us for low-cost, reliable and environmentally responsible energy. It is our privilege to serve the region and support the health, safety and livelihoods of so many Northwest citizens.

John Hairston Jr., Administrator and Chief Executive Officer

A LONG-TERM PLAN OF SERVICE FOR SOUTHEAST IDAHO CUSTOMERS

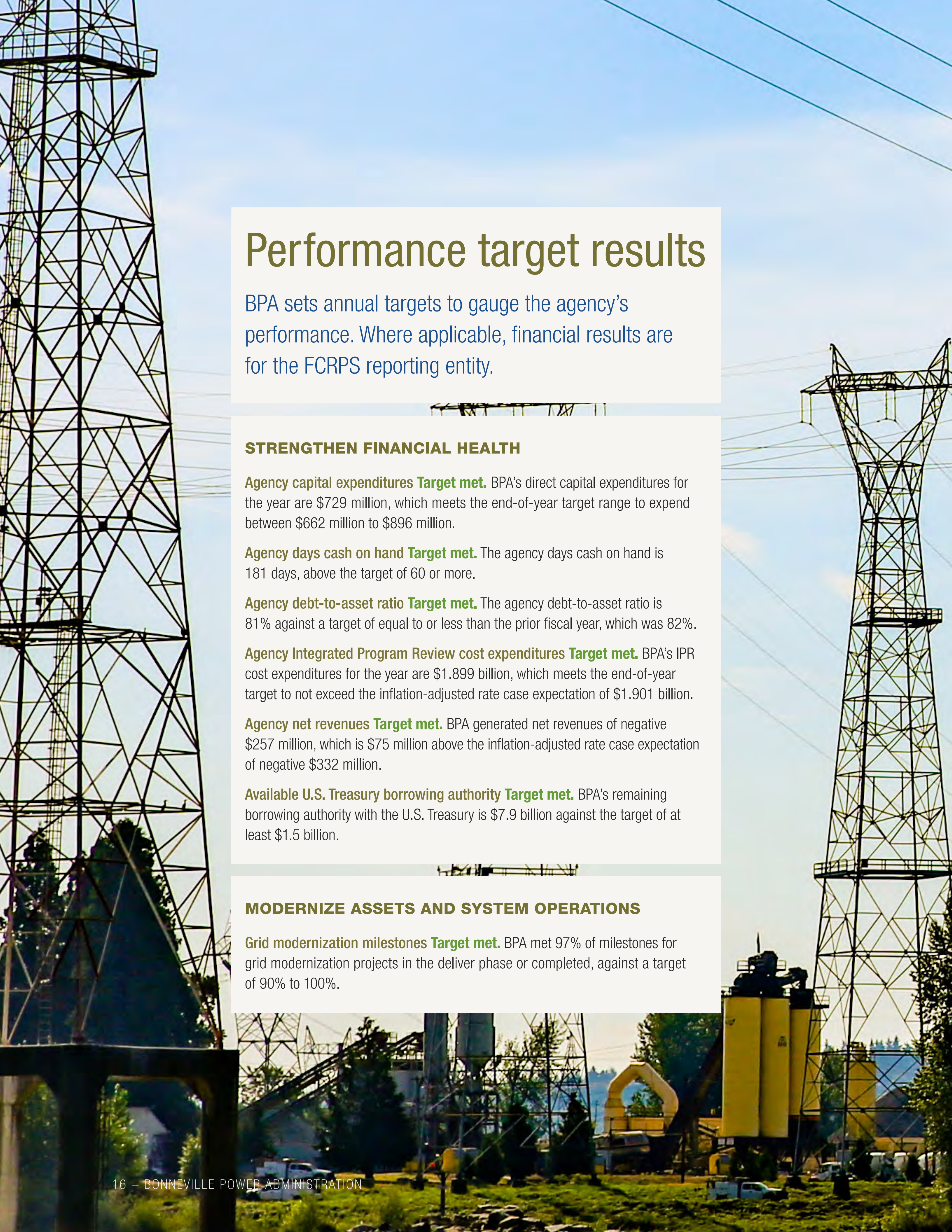
BPA resolved a lengthy process to find a cost-effective, long-term solution to serving customers in southeast Idaho who don't have direct access to BPA's transmission grid. In FY 2023 we entered an agreement with Idaho Power and PacifiCorp to purchase transmission service over the Boardman-to-Hemingway transmission line they are constructing. Compared to the interim arrangement to serve our southeast Idaho customers, this agreement is expected to deliver $720 million in savings to BPA ratepayers over 30 years. BPA opted not to become a part owner in the line, an option we previously considered, in favor of this much more economical option. This is another great example of BPA's ongoing commitment to investing in the right assets at the right time.

SUSTAINABLE SOLUTIONS FOR A RELIABLE, AFFORDABLE GRID

Sustainability and resilience are inextricably linked, with the shared goal to protect people, assets and the environment in uncertain, sometimes extreme conditions.

To help embed sustainability into everything BPA does, the agency's Sustainability Office — with leadership from an executive committee — fosters employee engagement and intra-agency coordination, and addresses federal mandates on sustainability and climate resilience.

The new Technical Services Building, completed in FY 2023, exemplifies BPA's sustainability and resilience objectives. This mission-critical building is designed to withstand seismic activity while using building materials and construction methods that reduce environmental impacts. This facility also meets high standards for energy and water conservation, provides a healthy indoor environment with superior air filtration, and offers electric vehicle charging stations for government vehicles. Its exterior is also enhanced with an irrigation-free landscape and pollinator-friendly vegetation.



Performance target results

BPA sets annual targets to gauge the agency's performance. Where applicable, financial results are for the FCRPS reporting entity.

STRENGTHEN FINANCIAL HEALTH

Agency capital expenditures Target met. BPA's direct capital expenditures for the year are $729 million, which meets the end-of-year target range to expend between $662 million to $896 million.

Agency days cash on hand Target met. The agency days cash on hand is 181 days, above the target of 60 or more.

Agency debt-to-asset ratio Target met. The agency debt-to-asset ratio is 81% against a target of equal to or less than the prior fiscal year, which was 82%.

Agency Integrated Program Review cost expenditures Target met. BPA's IPR cost expenditures for the year are $1.899 billion, which meets the end-of-year target to not exceed the inflation-adjusted rate case expectation of $1.901 billion.

Agency net revenues Target met. BPA generated net revenues of negative $257 million, which is $75 million above the inflation-adjusted rate case expectation of negative $332 million.

Available U.S. Treasury borrowing authority Target met. BPA's remaining borrowing authority with the U.S. Treasury is $7.9 billion against the target of at least $1.5 billion.

MODERNIZE ASSETS AND SYSTEM OPERATIONS

Grid modernization milestones Target met. BPA met 97% of milestones for grid modernization projects in the deliver phase or completed, against a target of 90% to 100%.

PROVIDE COMPETITIVE POWER PRODUCTS AND SERVICES

Federal hydro forced outage factor Target not met. BPA's forced outage factor for hydropower generation facilities, reflecting the percentage of hours within the period the asset was not available to run due to an unplanned event, was 5.0%, above the target of 4.7% or less.

Columbia Generating Station availability factor Target met. Columbia's availability factor, measured from July 1, 2022, to June 30, 2023, was 98.8%, above the target of 93% or higher.

MEET TRANSMISSION CUSTOMER NEEDS EFFICIENTLY AND RESPONSIVELY

System average interruption frequency index – low voltage (<200-kV) Target met. BPA's frequency of annualized unplanned line outages on low-voltage lines was 0.26, below the target of 0.51 outages per line or less.

System average interruption frequency index – high voltage (≥200-kV) Target met. BPA's frequency of annualized unplanned line outages on high-voltage lines was 0.28, below the target of 0.5 outages per line or less.

System average interruption duration index – low voltage (<200-kV) Target met. BPA's duration of annualized unplanned line outages on low-voltage lines was 134.25 minutes per line, below the target of 307.17 minutes or less.

System average interruption duration index – high voltage (≥200-kV) Target met. BPA's duration of annualized unplanned line outages on high-voltage lines was 114.49 minutes per line, below the target of 234.03 minutes or less.

VALUE PEOPLE AND DELIVER RESULTS

Incident frequency rate Target met. BPA recorded an incident frequency rate of 0.7 per 200,000 hours worked, below the ceiling of 0.9.

Safety corrective actions Target met. BPA completed 89.2% of safety corrective actions, above the target of 80%.

Financial plan progress update

BPA's 2022 Financial Plan is a guiding framework for decision-making that outlines objectives to sustain the agency's financial strength. The following section describes BPA's progress toward each objective.

OBJECTIVE 1: COST-MANAGEMENT DISCIPLINE

To help achieve the lowest possible power and transmission rates consistent with sound business principles, BPA set the goal of holding program costs at or below the rate of inflation through 2028. For the BP-22 rate period, program costs subject to the Integrated Program Review were set at or below the rate of inflation. BPA has continued seeking cost savings and managing actual costs consistent with the expenditure forecasts set in the IPR. However, actual inflation has been much higher than forecast in IPR, impacting mission-critical work. BPA used proceeds from the exceptional FY 2022 performance to nominally increase FY 2023 budgets to fund high-priority work primarily affected by higher inflation. For FY 2023, the second year of the BP-22 rate period, program costs were $1.899 billion, $2 million below the inflation-adjusted budget target of $1.901 billion.

BPA focused on two primary metrics for capital investments — budget execution and work completed — and began reporting on progress toward these metrics in FY 2023. Capital execution ended at 94%, or $729 million, of the agency KPI target, well within the target range of $662 million to $896 million. Results for work completed were mixed. Power exceeded its work completed target by placing 23 assets in service, above the target of 21 assets. While transmission did complete a substantial body of work, including prioritized customer work and exceeding planned completion on certain types of assets, it missed one of three sub-metrics due to global supply chain delays, system and outage constraints, and internal and external resource constraints.

OBJECTIVE 2: BUILD FINANCIAL RESILIENCY

Three distinct areas of focus comprise BPA's objective of building financial resiliency: operational liquidity, measured by days cash on hand; leverage, measured by debt-to-asset ratio; and debt capacity, measured by available borrowing authority.

BPA's operational liquidity comes primarily from financial reserves and, as a secondary measure, a short-term line of credit from the U.S. Treasury. To support BPA's financial reserves, BPA has set the goal of maintaining a minimum of 60 days cash on hand for each business unit. The Financial Reserves Policy includes adjustment mechanisms to help achieve this target, and contains both lower and upper thresholds for days cash on hand. The upper threshold includes a two-tiered test, which if passed triggers the Reserves Distribution Clause (RDC). The RDC can be enacted through either a rate reduction or other high value purposes, such as additional payment of debt.

At the end of FY 2023, agency days cash on hand was 181 days, with both Power and Transmission above the upper threshold of 120 days. Because both the agency and both business units are above the upper thresholds, and the RDC amount is greater than $5 million, the Power and Transmission RDCs have triggered for FY 2024 application. The Power RDC amount is $285 million and the Transmission RDC amount is $130 million. The administrator will make the final decision on how to allocate the RDCs in the first quarter of FY 2024.

Another goal to measure liquidity is maintaining a 97.5% annual Treasury payment probability. This goal ensures a very high likelihood of meeting all payment obligations, including the last payment of the fiscal year to the U.S. Treasury. This goal was met in FY 2023 with the $1.02 billion payment being made on time and in full to the U.S. Treasury.

BPA uses the debt-to-asset ratio to evaluate financial leverage. BPA's goal is to achieve a debt-to-asset ratio of no greater than 60% by 2040 for each business unit. The Sustainable Capital Financing Policy calls for the use of revenue financing as a standard financing tool to help BPA achieve its debt-to-asset ratio goal while remaining focused on maintaining competitive rates. At the end of FY 2023, BPA's debt-to-asset ratio was 81%, a 1% decrease from FY 2022. While the current long-term forecast shows both business units are meeting the 60% by 2040 goal, it is expected that the recently approved evolving grid projects may delay Transmission's trajectory toward this goal, all else being equal.

To evaluate debt capacity, BPA has set a goal of preserving $1.5 billion of U.S. Treasury borrowing authority, and the 2022 Financial Plan established a framework for how we assess access to borrowing authority. In late 2021, the Infrastructure Investment and Jobs Act was signed into law, providing a permanent increase of $10 billion to BPA's Treasury borrowing authority, with $6 billion available immediately and the remaining $4 billion available at the start of FY 2028, bringing the total up to $17.7 billion in 2028. As of Sept. 30, 2023, BPA had used $5.8 billion of the current $13.7 billion cap, leaving $7.9 billion of available financing from the U.S. Treasury. This far exceeds the Financial Plan goal. BPA does not expect borrowing authority constraints for the foreseeable future, but monitoring long-term borrowing authority access, along with prudent debt management and financing practices, remain important focus areas. Together, these will ensure $1.5 billion of borrowing authority is preserved at all times to meet operational and capital liquidity needs now and into the future.

OBJECTIVE 3: INDEPENDENT FINANCIAL HEALTH ASSESSMENT

BPA's goal is to maintain high investment-grade credit ratings on BPA-backed nonfederal bonds from all three ratings agencies. All three major ratings agencies (Moody's, Fitch and S&P) continue to rate BPA-backed bonds as high investment-grade.

In June 2023, Moody's upgraded its rating to Aa1. Moody's cited the upgrade was supported by the $10 billion increase to BPA's Treasury borrowing authority, BPA's updated financial plan that incorporates reducing leverage to no more than 60% by 2040, and resolution of the federal debt ceiling issue.

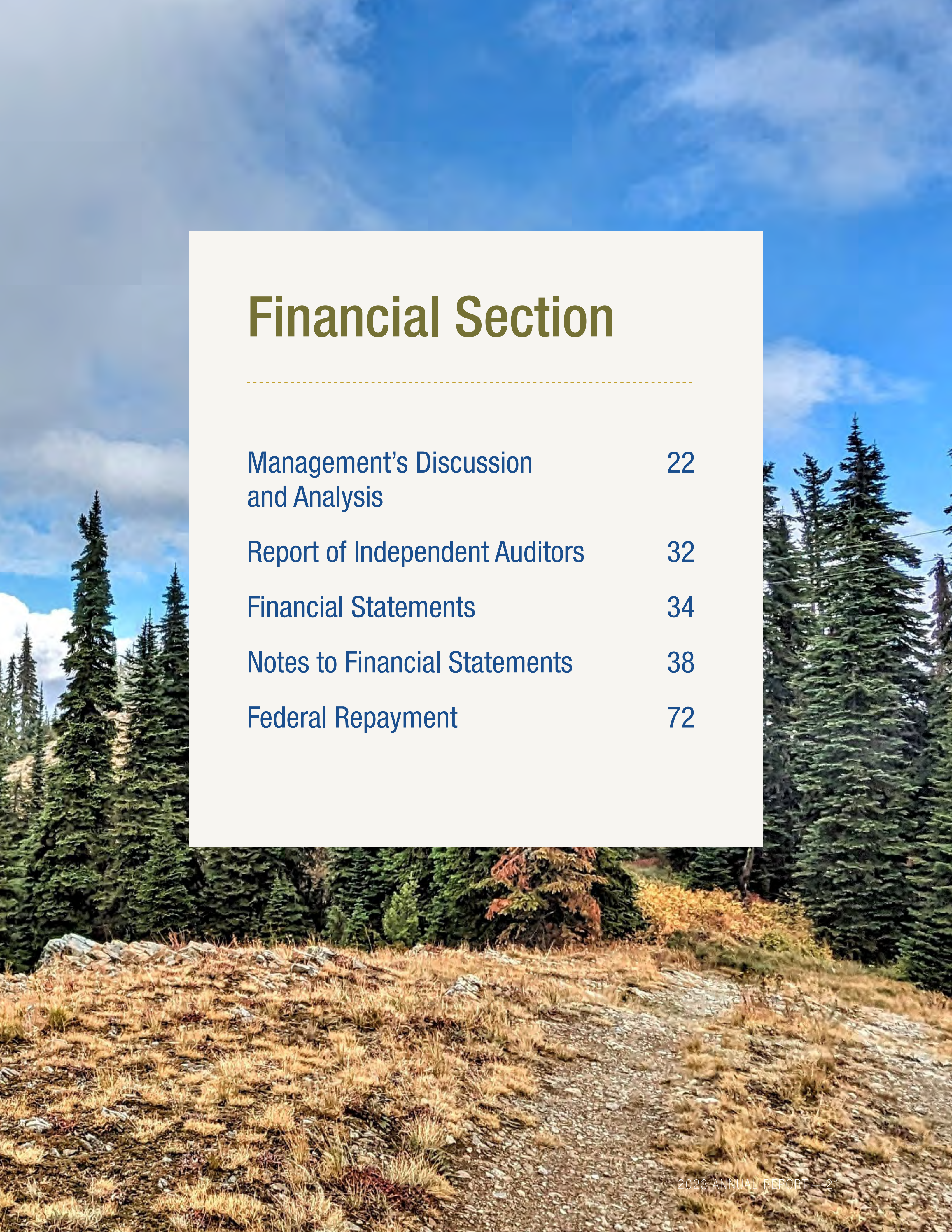
BPA's ratings are:

Moody's: Aa1

S&P: AA-

Fitch: AA

Full credit rating reports are available under Investor Relations at *www.bpa.gov/about/finance/investor-relations.*



Financial Section

Management's Discussion and Analysis

General

The Federal Columbia River Power System (FCRPS) financial statements combine the accounts of the Bonneville Power Administration (BPA) with the accounts of the Pacific Northwest generating facilities of the U.S. Army Corps of Engineers (USACE) and the Bureau of Reclamation (Reclamation). The FCRPS combined financial statements also include the operations and maintenance costs of the U.S. Fish and Wildlife Service for the Lower Snake River Compensation Plan facilities. Consolidated with BPA is a variable interest entity (VIE) of which BPA is the primary beneficiary, and from which BPA leases certain transmission facilities. The FCRPS fiscal year is from October 1 to September 30.

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. Preference customers are the largest customer group to which BPA sells power. BPA's current power sales agreements with preference customers are in effect through fiscal year 2028. 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 (GAAP) 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 (MD&A) is unaudited and may contain 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 laws, regulations and policies and the application of the laws; 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 and the Effect of Regulations

Background

BPA is committed to cost-based rates, and public and regional preference in its marketing of power. BPA sets its rates as low as possible consistent with sound business principles and the full recovery of all of its costs, including timely repayment of the federal investment in the FCRPS.

Under BPA's U.S. Treasury payment probability standard, BPA establishes rates sufficient to maintain a level of financial reserves and achieve a 97.5% annual probability of making all of BPA's scheduled U.S. Treasury payments during the two-year rate period. (For the definition of financial reserves, see the Liquidity and Capital Resources section in this MD&A.)

Rates for Fiscal Years 2022–2023

Rates for the two year BP-22 rate period began on Oct. 1, 2021, and concluded Sept. 30, 2023. When compared to the BP-20 rate period, the final average power rate decrease was 2.5%, and the final weighted average transmission rate increase was 5.4%.

As with the 2020-2021 rate period, power and transmission rates in the BP-22 rate period also included rate adjustment mechanisms, such as a Cost Recovery Adjustment Clause (CRAC), Financial Reserves Policy (FRP) Surcharge and a Reserves Distribution Clause (RDC), that BPA employs if certain financial conditions occur. As defined in the BP-22 rate case, if business line financial reserves and agency financial reserves are above their respective upper thresholds, and the RDC amount is greater than $5 million, the BPA Administrator shall consider the above-threshold financial reserves for debt reduction, incremental capital investment, rate reduction through a Power Dividend Distribution, distribution to customers, or any other Power-specific purposes determined by the BPA Administrator.

Based upon fiscal year 2022 financial results and year-end reserves for risk levels for both Power and Transmission Services, the RDC occurred for application to fiscal year 2023 power and transmission rate levels. The Power RDC Amount was $500 million and the Transmission RDC was $63.1 million. In December 2022, the BPA Administrator determined that the Transmission RDC Amount would be applied towards a combination of rate reduction and to offset forecasted cost pressures in the current and subsequent rate period. Of the total $63.1 million Transmission RDC Amount, $33.8 million was used to fund forecasted cost increases in fiscal year 2023 (that were anticipated to exceed the cost levels assumed when establishing current rates), $16.4 million was used to support the proposal to hold BP-24 transmission rates at the levels adopted in the BP-22 rate proceeding, and $12.9 million was used to reduce fiscal year 2023 transmission rates through a Transmission Dividend Distribution, which resulted in a downward adjustment of certain transmission rates from December 2022 through September 2023. As of Sept. 30, 2023, BPA recorded a reduction to Transmission Services revenue of $12.9 million.

In January 2023, the Administrator released BPA's final decision regarding the Power RDC Amount for application to fiscal year 2023 rate levels. Of the total $500 million Power RDC Amount, $350 million was used to reduce fiscal year 2023 power rates through a Power Dividend Distribution, which resulted in a credit applied to December 2022 through September 2023 customer bills. To satisfy this commitment, BPA recorded a reduction to Power Services revenue of $350 million through Sept. 30, 2023. In addition, the BPA Administrator determined that $100 million would be available for debt reduction or revenue financing of capital expenditures (with any amount not used to reduce debt or revenue finance left as financial reserves to support BPA's liquidity and/or increase the probability of a 2023 Power RDC Amount). During fiscal year 2023, $50 million was used for debt reduction and $50 million was held as financial reserves to support BPA's liquidity. An additional $50 million will be used to fund high-priority non-recurring fish and wildlife maintenance needs on an accelerated basis (in advance of when such expenditures were originally expected to be made). Expenditure of this $50 million began in fiscal year 2023 and will continue over the next several fiscal years. At this time, BPA expects the $50 million to be fully expended by the end of fiscal year 2027.

Based on the amount of financial reserves available for risk that were attributed to Power Services and BPA at the end of fiscal year 2021, a Power RDC in the amount of $13.7 million occurred for application to fiscal year 2022 power rate levels. In December 2021, the Administrator determined that the entire amount would be used to reduce fiscal year 2022 power rate levels for the remainder of the fiscal year through a Power Dividend Distribution by applying a credit to December 2021 through September 2022 customer bills. To satisfy this commitment, BPA recorded a reduction to Power Services revenue of $13.7 million through Sept. 30, 2022.

Rates for Fiscal Years 2024–2025

To establish rates for fiscal years 2024 and 2025, BPA concluded the BP-24 rate proceeding in July 2023 by releasing the Administrator's Final Record of Decision and Final Proposal. Rates went into effect on Oct. 1, 2023, and will be effective through Sept. 30, 2025, assuming final approval by the Federal Energy Regulatory Commission (FERC). 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. BPA held power and transmission rates flat when compared to the prior BP-22 rate period.

As with the 2022-2023 rate period, power and transmission rates in the BP-24 rate period will also include other rate adjustment mechanisms, such as the CRAC, FRP Surcharge and RDC, which BPA employs if certain financial conditions occur.

Based on fiscal year 2023 financial results and year-end reserves for risk levels for both Power and Transmission Services, an RDC will occur for application in fiscal year 2024. The Power RDC is $285 million and the Transmission RDC is $130 million. It is expected that BPA's Administrator will determine the implementation of these Power and Transmission RDC Amounts by Dec. 15, 2023, with application of most RDC actions likely to occur between December and September of fiscal year 2024. As of Sept. 30, 2023, no liability has been accrued for the RDC.

Slice

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 respective Slice percentages 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. The aggregate amount of Slice that BPA sold in fiscal years 2023 and 2022 was 22.4% of the system. The Slice percentage for fiscal year 2024 will be 19.7%.

Results of Operations

Operating revenues

A comparison of FCRPS operating revenues follows for the fiscal years ended Sept. 30, 2023, and 2022:

(Millions of dollars)	Fiscal Year 2023	Fiscal Year 2022	Revenue Increase (Decrease)	% Change
Sales				
Consolidated sales				
Power gross sales	$ 2,873.2	$ 3,494.7	$ (621.5)	(18) %
Transmission	1,097.2	1,070.4	26.8	3
Bookouts (Power)	(93.8)	(62.6)	(31.2)	50
Consolidated sales	3,876.6	4,502.5	(625.9)	(14)
Other revenues				
Power	53.7	54.6	(0.9)	(2)
Transmission	55.3	47.5	7.8	16
Other revenues	109.0	102.1	6.9	7
Sales	3,985.6	4,604.6	(619.0)	(13)
U.S. Treasury credits	262.3	116.9	145.4	124
Total operating revenues	$ 4,247.9	$ 4,721.5	$ (473.6)	(10)

Total operating revenues decreased $473.6 million when compared to fiscal year 2022. Sales of Power and Transmission services, including other revenues and the effect of bookouts, decreased $619 million.

Power Services gross sales decreased $621.5 million.

- Surplus power sales, including revenue from derivative instruments settled with physical deliveries, decreased $343.5 million. This decrease was mainly driven by lower streamflows and drier weather leading to less water available for power generation when compared to fiscal year 2022.
- Firm power sales decreased $278 million. The change in firm power sales relates to the previously described Power RDC, which reduced fiscal year 2023 firm sales by $350 million. The fiscal year 2022 RDC was $13.7 million, leading to a net decrease of $336.3 million when compared to the prior fiscal year. Partially offsetting this decrease is a $58.3 million increase primarily due to colder-than-average weather from November to April of fiscal year 2023 increasing load shaping and demand revenues, and higher loads for the composite product.
- January through July 2023 runoff volume at The Dalles Dam was 80 million acre feet (maf), a decrease of 26 maf from the same period in 2022. The volume of runoff measured at The Dalles Dam is one of several indicators of the amount of electricity the hydropower system can produce. The full fiscal year 2023 volume finished at 100 maf, a decrease of 37 maf from fiscal year 2022 and below the historical average (1929-2018) of 134 maf.
- Gross power sales decreased to 46,420,376 megawatt-hours in fiscal year 2023 from 89,327,455 megawatt-hours in fiscal year 2022.

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 offset each other, netting to zero. These offsetting transactions' dollar values reduce 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.

Transmission Services revenues increased $26.8 million primarily due to increases in network integration and point-to-point revenues driven by new server loads, cold weather and new customers. The increases in network integration and point-to-point revenues also led to higher revenues for scheduling, system control and dispatch.

Other transmission revenues increased $7.8 million primarily due to reimbursable work with external parties, which is higher due to large generator interconnection and line and load interconnection work performed in fiscal year 2023. Customers fund these projects in advance, and an equivalent amount of reimbursable expenses offsets reimbursable revenues.

U.S. Treasury credits for fish and wildlife mitigation increased $145.4 million primarily due to higher volumes of replacement power purchases at higher market prices when compared to fiscal year 2022. Through the fiscal year, BPA records anticipated U.S. Treasury credits earned through the reporting period. BPA calculates and records the annual U.S. Treasury credits earned at fiscal year-end. For additional information regarding U.S. Treasury credits, see Note 2, Revenue Recognition, in the fiscal year 2023 Notes to Financial Statements.

Operating expenses

A comparison of FCRPS operating expenses follows for the fiscal years ended Sept. 30, 2023, and 2022:

(Millions of dollars)	Fiscal Year 2023	Fiscal Year 2022	Expense Increase (Decrease)	% Change
Operations and maintenance	$ 2,328.0	$ 2,195.8	$ 132.2	6 %
Purchased power	977.0	358.7	618.3	172
Depreciation, amortization and accretion	848.9	841.0	7.9	1
Total operating expenses	$ 4,153.9	$ 3,395.5	$ 758.4	22

Total operating expenses increased $758.4 million when compared to fiscal year 2022.

Operations and maintenance expense increased $132.2 million, primarily because of the following factors:

- $40 million increase to Columbia Generating Station costs. This increase was largely due to fiscal year 2023 being a refueling year. Refueling occurs biennially, most recently in fiscal year 2021, and refueling and maintenance expenses are higher in refueling years.
- $32.1 million increase in USACE and Reclamation expenses primarily due to increased labor costs.
- $22.9 million increase in conservation purchases due to increased work performed in fiscal year 2023.
- $11.1 million increase to Fish and Wildlife Program expenses due to greater amounts of work performed when compared to the same period of fiscal year 2022.
- $9.2 million increase related to reimbursable work with external parties. This increase is primarily due to an increase in large generator interconnection and line and load interconnection work performed in fiscal year 2023.
- $6.2 million increase related to the annual settlement paid to the Confederated Tribes of the Colville Reservation. The current year payment is based upon, in part, prior year output at Grand Coulee Dam and Power Services gross sales. Higher than average flows at Grand Coulee Dam and high net secondary revenues experienced in fiscal year 2022 led to an increase in the annual payment made in fiscal year 2023.
- $4.2 million increase related to Transmission System Development Planning and Analysis due to increases in the amount of work performed when compared to the same period of fiscal year 2022.
- $6.5 million net increase to various other Transmission, Power and Enterprise Services program costs primarily due to increases in personnel costs.

Purchased power expense, including the effects of bookouts, increased $618.3 million primarily due to the following factors:

- $585.2 million increase in power purchases due to dry conditions and lower water available for power generation, which resulted in an increased amount of power purchases during times of high market prices. Additionally, cold weather experienced through the first and second quarters of fiscal year 2023 led to an increase in power purchases when compared to the prior fiscal year.
- $33 million increase related to water storage agreements with BC Hydro, an electric utility owned by the Province of British Columbia. Yearly fluctuations in water levels, river operations and storage plans, particularly at certain dams in and near Canada, affect the amounts owed to or from BC Hydro.

Depreciation, amortization and accretion increased $7.9 million primarily due to the following factors:

- $10.7 million increase in depreciation due to increased utility plant assets in service.
- $4.3 million decrease in amortization primarily driven by a $9.1 million decrease in regulatory asset amortization due to asset retirements in fiscal year 2023. Partially offsetting this decrease was a $5.1 million increase related to Columbia Generating Station amortization due to capital additions.

Interest expense and other income, net

A comparison of FCRPS interest expense and other income, net follows for the fiscal years ended Sept. 30, 2023, and 2022:

(Millions of dollars)	Fiscal Year 2023	Fiscal Year 2022	Expense Increase (Decrease)	% Change
Interest expense	$ 448.4	$ 417.7	$ 30.7	7 %
Allowance for funds used during construction	(42.0)	(24.9)	(17.1)	69
Interest income	(69.4)	(10.6)	(58.8)	NM*
Other, net	14.0	(20.3)	34.3	(169)
Total interest expense and other income, net	$ 351.0	$ 361.9	$ (10.9)	(3)

*The percentage change is not meaningful.

Total interest expense and other income, net decreased $10.9 million when compared to fiscal year 2022.

Interest expense increased $30.7 million related to Borrowings from U.S. Treasury, primarily because of higher interest rates on existing variable rate debt in fiscal year 2023.

Allowance for funds used during construction increased $17.1 million due to higher rates and Construction work in progress balances when compared to fiscal year 2022.

Interest income increased $58.8 million primarily due to higher interest rates received on short-term investments in U.S. Treasury securities.

Other, net resulted in a net expense increase of $34.3 million primarily due to the following factors:

- $31 million net expense related to the “Boardman to Hemingway (B2H) with Transfer Service” transaction in March 2023. This net expense represents the derecognition of BPA’s existing B2H asset and the recognition of new financial receivable assets (recorded as Deferred charges and other), which have been adjusted to reflect the time value of money and other project risks of completion. For additional information regarding this transaction see Other Operational Matters, Boardman to Hemingway with Transfer Service, in this Management’s Discussion and Analysis.
- $5 million net gain from debt extinguishment associated with Borrowings from U.S. Treasury. BPA recorded no gain or loss on debt extinguishment during fiscal year 2022.
- $6.1 million income reduction related to the nonfederal nuclear decommissioning and site restoration trust funds. Of this decrease, $3 million represents the change in realized gains/losses when

compared to the same period of fiscal year 2022. The remaining $3.1 million represents a decrease in dividends received on investments held in the trust funds.

Other Operational Matters

Energy Northwest line of credit activity

In December 2022, Energy Northwest borrowed approximately $48 million under an existing short-term borrowing arrangement to pay a portion of the interest coupon payment allocable to unamortized bond premiums related to certain outstanding bonds for Columbia Generating Station and terminated nuclear facilities Projects 1 and 3. In May 2023, Energy Northwest used a portion of the proceeds from a long-term bond issuance to repay this $48 million.

Additionally, in June 2023, Energy Northwest borrowed approximately $27 million under an existing short-term borrowing arrangement to pay principal related to certain maturing bonds for Columbia Generating Station. Energy Northwest repaid this amount in September 2023 using funds provided by BPA from a portion of the $50 million identified under the 2022 Power RDC as available for debt reduction.

BPA has financial responsibility for meeting all costs of Energy Northwest's Projects 1 and 3, including debt service costs of bonds and other financial instruments, even though these projects have been terminated.

Boardman to Hemingway with Transfer Service

In March 2023, BPA executed a set of contracts designed to serve preference customers in southeast Idaho in a firm, reliable, cost-effective and long-term manner. In connection with these contracts, BPA transferred its 24.24% permitting interest share in the proposed Boardman to Hemingway (B2H) transmission line to Idaho Power Company (IPC). Taking into account the time value of money and project risks, the permitting interest transfer resulted in a $27.9 million asset reduction to Deferred charges and other, and a corresponding $27.9 million non-cash net loss recorded to Other, net. Additionally, BPA paid IPC a $10 million security payment which, once adjusted for time value of money, resulted in a $7 million asset increase to Deferred charges and other, and a $3 million loss recorded to Other, net. BPA expects to receive approximately $31 million, plus interest, from IPC over 10 years beginning 10 years after IPC builds and energizes the B2H transmission line and also reaches service thresholds as defined in the aforementioned March 2023 contracts. Additionally, upon energization BPA expects to recover the $10 million security payment from IPC. For further information about this transaction, see Note 7, Deferred charges and other, in the fiscal year 2023 Notes to Financial Statements.

Phase 2 Implementation Plan (P2IP) Settlement Agreement

In September 2023, the United States (including BPA and other federal partners) and certain Upper Columbia River tribes signed the P2IP settlement agreement to fund efforts to test the feasibility of, and ultimately reintroduce salmon in blocked habitats in the Upper Columbia River Basin. Per terms of the agreement, BPA will provide $10 million per year, beginning in fiscal year 2024 for the 20-year duration of the agreement, for a total of $200 million (adjusted for inflation). As of Sept. 30, 2023, BPA recorded the undiscounted amount of approximately $253 million related to this liability. BPA also recorded a corresponding $253 million regulatory asset representing the BPA Administrator's decision to defer expense recognition to future rate periods beginning in fiscal year 2026. For further information about this transaction, see Note 5, Effects of Regulation, and Note 11, Deferred credits and other in the fiscal year 2023 Notes to Financial Statements.

Liquidity and Capital Resources

Cash and cash equivalents and financial reserves

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 other items such as a Financial Reserves Policy Surcharge and a Cost Recovery Adjustment Clause (CRAC). The Surcharge and CRAC are rate mechanisms BPA can use to adjust rates once each fiscal year if certain financial conditions exist. 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. Over time, BPA intends to borrow such deferred borrowing amounts from U.S. Treasury.

BPA's financial reserves decreased $107.1 million during fiscal year 2023:

(Millions of dollars)	As of Sept. 30, 2023	As of Sept. 30, 2022	Increase (Decrease)	% Change
Cash and cash equivalents	$ 2,037.9	$ 1,663.0	$ 374.9	23 %
Short-term investments in U.S. Treasury securities	—	500.7	(500.7)	100
	2,037.9	2,163.7	(125.8)	(6)
Less: Cash and cash equivalents held by USACE and Reclamation	556.1	475.2	80.9	17
Add: Deferred borrowing	245.5	145.9	99.6	68
BPA financial reserves balance	$ 1,727.3	$ 1,834.4	$ (107.1)	(6)

Three-year capital forecast

Planned capital expenditures for the FCRPS over the next three fiscal years for utility plant and for fish and wildlife assets, recorded as regulatory assets, are shown below. Where applicable, the amounts include estimates for capitalized indirect, overhead and interest costs. Actual capital expenditures may differ materially from these estimates based upon a number of factors, including environmental and cultural resource requirements, project lead times, resource availability, outages, dependencies associated with other projects and other factors. Amounts in the table below do not include investments projected by Energy Northwest for Columbia Generating Station.

(Millions of dollars)	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026
Transmission assets	$ 694	$ 654	$ 626
Federal system hydro generation assets	231	286	292
Fish and wildlife	42	41	29
IT and other assets	23	22	25
Total annual capital forecast	$ 990	$ 1,003	$ 972

Access to capital

BPA makes capital investments to support its multifaceted responsibilities to the region. BPA's primary source of financing for its capital program is its ability to borrow from the U.S. Treasury, which is limited and discussed in the section below. In attempts to assure continued funding necessary for critical infrastructure improvements, BPA has expanded its options over the years. These options include nonfederal debt financing and refinancing, lease-purchases, the power prepay program, reserves and revenue financing, and asset management strategies to more rigorously prioritize proposed capital investments. The USACE and Reclamation also receive congressional appropriations to finance certain hydropower-related capital investments. BPA's repayment obligation begins when those capital investments are completed and placed into service by USACE and Reclamation.

BPA borrowing authority from the U.S. Treasury

BPA is currently authorized by Congress to issue and sell bonds to the U.S. Treasury and have outstanding at any one time up to $13.7 billion aggregate principal amount of bonds. Beginning in fiscal year 2028, an additional $4 billion of U.S. Treasury borrowing authority will be available. 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 million. Use of the facility is counted within the $13.7 billion overall limit. For capital programs, the related U.S. Treasury debt is term limited depending on the facilities financed: 50 years for USACE 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 Sept. 30, 2023, BPA had $5.78 billion of bonds outstanding to the U.S. Treasury and $7.92 billion in remaining U.S. Treasury borrowing authority.

Regional Cooperation Debt

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. The first phase of this effort focused on reducing the weighted-average interest rate and maturity of BPA's overall debt portfolio.

In fiscal year 2021, BPA entered the second phase of the Regional Cooperation Debt program. This phase is focused on replenishing BPA's U.S. Treasury borrowing authority or directly funding capital expenditures. This phase of the Regional Cooperation Debt program utilizes the issuance of new bonds by Energy Northwest to refinance outstanding bonds shortly before their maturities when substantial principal repayments are due. In addition, bonds issued under phase two may fund a portion of interest payments related to outstanding Energy Northwest bonds. Freed-up amounts in the BPA Fund from these actions will be used to either pay off certain bonds issued by BPA to the U.S. Treasury or to directly fund capital expenditures.

BPA estimates that Energy Northwest may potentially issue up to $2.60 billion in aggregate future Regional Cooperation Debt phase two bonds in fiscal years 2024 through 2030.

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 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 in fiscal year 2023 included the Port of Morrow, Oregon and the Idaho Energy Resources Authority, an independent public instrumentality of the state of Idaho. With the fiscal year 2022 increase in U.S. Treasury borrowing authority and further revenue financing, BPA's need to rely on the Lease-Purchase Program to finance new capital investments has been reduced from prior years. In the future, should the need arise, BPA could continue to fund certain transmission infrastructure projects with lease-purchase arrangements with third parties. For additional information regarding the Lease-Purchase Program, see Note 8, Debt and Appropriations, in the fiscal year 2023 Notes to Financial Statements.

U.S. Treasury payment

BPA made its U.S. Treasury payment of $1.02 billion for fiscal year 2023, the 40th consecutive year in which BPA made its scheduled payment on time and in full.

(Millions of dollars)	Fiscal Year 2023	Fiscal Year 2022
Scheduled payment		
Principal	$ 315.0	$ 348.6
Interest	218.2	193.9
Irrigation assistance	13.5	17.1
Other FCRPS costs	48.9	45.4
Scheduled payment	595.6	605.0
Advanced principal payment	425.7	345.6
Total Treasury payment	$ 1,021.3	$ 950.6

The fiscal year 2023 payment included an unscheduled advance payment of $425.7 million. This was made possible by additional cash in the Bonneville Fund becoming available primarily as a result of the second phase of the Regional Cooperation Debt Program and the fiscal year 2022 Power RDC.

Critical Accounting Policies

Regulatory accounting

BPA's rates are designed to recover its cost of service. In connection with the rate-setting process, certain current costs or credits may be included in rates for recovery or refund over future periods. Under those circumstances, regulatory assets or liabilities are recorded in accordance with authoritative guidance for regulated operations. Such costs or credits are amortized during the periods they are scheduled in rates.

In order to apply regulatory accounting, an entity must have the statutory authority to establish rates that recover all costs, and rates so established must be charged to and collected from customers. If BPA's rates should become market-based, BPA would review any deferred costs and revenues for possible recognition in the Combined Statement of Revenues and Expenses in that period. Since BPA's rates are not structured to provide a rate of return, regulatory assets are recovered at cost without an additional rate of return. Amortization of these assets and liabilities is reflected in the Combined Statements of Revenues and Expenses.

Revenues

BPA has elected to apply the right-to-invoice practical expedient to FCRPS rate-regulated revenues from power and transmission services. Amounts invoiced correspond directly with the value to the customers for energy or services provided by the FCRPS reporting entities. Therefore, revenues from power and transmission sales, which includes billed and estimated unbilled amounts, are recognized over time upon the delivery of energy or services to the customers. Operating revenues include estimates for unbilled power and transmission services that were delivered but not billed by the end of the fiscal year. Accrued unbilled revenues are estimated from forecasts based on multiple factors including streamflows, seasonality, weather, changes in electricity prices, and customer load and usage patterns. Consequently, the amount of accrued unbilled revenues can vary significantly from period to period.

Report of Independent Auditors

To the Administrator of the
Bonneville Power Administration
United States Department of Energy

Opinion

We have audited the accompanying combined financial statements of the Federal Columbia River Power System (the "Company"), which comprise the combined balance sheets as of September 30, 2023 and 2022, and the related combined statements of revenues and expenses and of cash flows for the years then ended, including the related notes (collectively referred to as the "combined financial statements").

In our opinion, the accompanying combined financial statements present fairly, in all material respects, the financial position of the Company as of September 30, 2023 and 2022, and the results of its operations and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (US GAAS). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Combined Financial Statements section of our report. We are required to be independent of the Company and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Combined Financial Statements

Management is responsible for the preparation and fair presentation of the combined financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of combined financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the combined financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for one year after the date the combined financial statements are available to be issued.

Auditors' Responsibilities for the Audit of the Combined Financial Statements

Our objectives are to obtain reasonable assurance about whether the combined financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with US GAAS will

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always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the combined financial statements.

In performing an audit in accordance with US GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the combined financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the combined financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the combined financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

PricewaterhouseCoopers LLP

November 1, 2023

PricewaterhouseCoopers LLP, 805 SW Broadway, Suite 800, Portland, OR 97205
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Federal Columbia River Power System
Combined Balance Sheets
As of September 30

(Millions of Dollars)

	2023	2022
Assets		
Utility plant and nonfederal generation		
Completed plant	$ 21,674.7	$ 21,300.0
Accumulated depreciation	(8,316.0)	(7,994.8)
Net completed plant	13,358.7	13,305.2
Construction work in progress	1,733.1	1,316.7
Net utility plant	15,091.8	14,621.9
Nonfederal generation	3,380.0	3,404.6
Net utility plant and nonfederal generation	18,471.8	18,026.5
Current assets		
Cash and cash equivalents	2,037.9	1,663.0
Short-term investments in U.S. Treasury securities	-	500.8
Accounts receivable, net of allowance	84.7	41.7
Accrued unbilled revenues	282.7	458.2
Materials and supplies, at average cost	121.0	109.4
Prepaid expenses	67.9	49.0
Total current assets	2,594.2	2,822.1
Other assets		
Regulatory assets	4,272.4	4,452.2
Nonfederal nuclear decommissioning trusts	479.5	414.6
Deferred charges and other	222.0	237.2
Total other assets	4,973.9	5,104.0
Total assets	$ 26,039.9	$ 25,952.6

The accompanying notes are an integral part of these financial statements.

Federal Columbia River Power System
Combined Balance Sheets
As of September 30

(Millions of Dollars)

	2023	2022
Capitalization and Liabilities		
Capitalization and long-term liabilities		
Accumulated net revenues	**$ 5,589.1**	$ 5,859.6
Debt		
Federal appropriations	**1,597.6**	1,640.9
Borrowings from U.S. Treasury	**5,584.8**	5,384.7
Nonfederal debt	**6,885.6**	6,901.4
Total capitalization and long-term liabilities	**19,657.1**	19,786.6
Commitments and contingencies (See Note 14 to 2023 Audited Financial Statements)		
Current liabilities		
Debt		
Borrowings from U.S. Treasury	**199.0**	294.0
Nonfederal debt	**505.5**	468.5
Accounts payable and other	**885.0**	725.4
Total current liabilities	**1,589.5**	1,487.9
Other liabilities		
Regulatory liabilities	**1,543.2**	1,565.6
IOU exchange benefits	**1,299.2**	1,514.0
Asset retirement obligations	**1,015.1**	964.3
Deferred credits and other	**935.8**	634.2
Total other liabilities	**4,793.3**	4,678.1
Total capitalization and liabilities	**$ 26,039.9**	$ 25,952.6

The accompanying notes are an integral part of these financial statements.

Federal Columbia River Power System
Combined Statements of Revenues and Expenses
For the Years Ended September 30

(Millions of Dollars)

	2023	2022	2021
Operating revenues			
Sales	**$ 3,985.6**	$ 4,604.6	$ 3,727.8
U.S. Treasury credits	**262.3**	116.9	95.2
Total operating revenues	**4,247.9**	4,721.5	3,823.0
Operating expenses			
Operations and maintenance	**2,328.0**	2,195.8	2,152.4
Purchased power	**977.0**	358.7	248.2
Depreciation, amortization and accretion	**848.9**	841.0	826.7
Total operating expenses	**4,153.9**	3,395.5	3,227.3
Net operating revenues	**94.0**	1,326.0	595.7
Interest expense and other income, net			
Interest expense	**448.4**	417.7	427.3
Allowance for funds used during construction	**(42.0)**	(24.9)	(25.9)
Interest income	**(69.4)**	(10.6)	(1.5)
Other, net	**14.0**	(20.3)	(202.0)
Total interest expense and other income, net	**351.0**	361.9	197.9
Net (expenses) revenues	**(257.0)**	964.1	397.8
Accumulated net revenues, beginning of year	**5,859.6**	4,912.6	4,537.0
Irrigation assistance	**(13.5)**	(17.1)	(22.2)
Accumulated net revenues, end of year	**$ 5,589.1**	$ 5,859.6	$ 4,912.6

The accompanying notes are an integral part of these financial statements.

Federal Columbia River Power System
Combined Statements of Cash Flows
For the Years Ended September 30
(Millions of Dollars)

	2023	2022	2021
Cash flows from operating activities			
Net (expenses) revenues	**$ (257.0)**	$ 964.1	$ 397.8
Adjustments to reconcile net revenues to cash provided by operations:			
Depreciation, amortization and accretion	**848.9**	841.0	826.7
Boardman to Hemingway non-cash net loss	**27.9**	-	-
Other	**(20.4)**	(13.4)	(8.2)
Changes in:			
Receivables and unbilled revenues	**132.5**	(180.3)	30.0
Materials and supplies	**(11.6)**	0.1	(2.4)
Prepaid expenses	**(18.9)**	(9.5)	(3.1)
Accounts payable and other	**329.1**	334.1	465.6
Regulatory assets and liabilities	**(217.2)**	(7.4)	(291.2)
IOU exchange benefits	**(214.8)**	(208.2)	(188.2)
Nonfederal nuclear decommissioning trusts	**(60.0)**	105.3	(105.5)
Other assets and liabilities	**237.4**	(49.0)	25.9
Net cash provided by operating activities	**775.9**	1,776.8	1,147.4
Cash flows from investing activities			
Investment in utility plant, including AFUDC	**(851.9)**	(693.8)	(623.8)
Proceeds from sale of utility plant	**3.2**	13.2	2.0
U.S. Treasury securities:			
Purchases	**(250.0)**	(1,250.0)	-
Maturities	**750.0**	750.0	-
Deposits to nonfederal nuclear decommissioning trusts	**(4.9)**	(4.7)	(4.3)
Lease-purchase trust funds:			
Deposits to	**-**	-	(19.6)
Receipts from	**-**	-	27.1
Net cash used for investing activities	**(353.6)**	(1,185.3)	(618.6)
Cash flows from financing activities			
Federal appropriations:			
Proceeds	**80.5**	43.1	119.4
Repayment	**(123.8)**	(5.0)	(49.1)
Borrowings from U.S. Treasury:			
Proceeds	**722.0**	744.0	741.0
Repayment	**(616.9)**	(694.2)	(760.7)
Nonfederal debt:			
Proceeds	**-**	-	6.6
Repayment	**(160.4)**	(208.5)	(225.9)
Debt extinguishment costs	**-**	-	(1.5)
Customers:			
Net advances for construction	**84.2**	20.3	42.3
Repayment of funds used for construction	**(20.1)**	(21.0)	(17.5)
Irrigation assistance	**(13.5)**	(17.1)	(22.2)
Net cash used for financing activities	**(48.0)**	(138.4)	(167.6)
Net increase in cash, cash equivalents and restricted cash	**374.3**	453.1	361.2
Cash, cash equivalents and restricted cash at beginning of year	**1,671.8**	1,218.7	857.5
Cash, cash equivalents and restricted cash at end of year	**$ 2,046.1**	$ 1,671.8	$ 1,218.7
Less: Restricted cash at end of year, reported in Deferred charges and other	**8.2**	8.8	10.8
Cash and cash equivalents at end of year	**$ 2,037.9**	$ 1,663.0	$ 1,207.9
Supplemental disclosures:			
Cash paid for interest, net of amount capitalized	**$ 404.2**	$ 396.4	$ 384.4
Significant noncash investing and financing activities:			
Nonfederal debt increase	**$ 674.9**	$ 705.6	$ 1,577.0
Nonfederal debt decrease	**$ (489.9)**	$ (507.4)	$ (1,288.2)
Nonfederal debt cost of issuance	**$ (3.4)**	$ (3.0)	$ (6.6)
Federal appropriations decrease	**$ -**	$ -	$ (11.5)

The accompanying notes are an integral part of these financial statements.

Notes to Financial Statements

1. Summary of Significant Accounting Policies

ACCOUNTING PRINCIPLES

Combination of entities

The Federal Columbia River Power System (FCRPS) financial statements combine the accounts of the Bonneville Power Administration (BPA) with the accounts of the Pacific Northwest generating facilities of the U.S. Army Corps of Engineers (USACE) and the Bureau of Reclamation (Reclamation). The FCRPS combined financial statements also include the operations and maintenance costs of the U.S. Fish and Wildlife Service for the Lower Snake River Compensation Plan (USFWS LSRCP) facilities. Consolidated with BPA is a variable interest entity (VIE) of which BPA is the primary beneficiary and from which BPA leases certain transmission facilities. (See Note 8, Debt and Appropriations, and Note 9, Variable Interest Entities.)

BPA is a separate and distinct entity within the U.S. Department of Energy; the USACE is part of the U.S. Department of Defense; and Reclamation and U.S. Fish and Wildlife Service are part of the U.S. Department of the Interior. Each of the combined entities is separately managed, but the facilities are operated as an integrated power system with the financial results combined as the FCRPS. BPA is a self-funding federal power marketing administration that purchases, transmits and markets power for the FCRPS. While the costs of USACE, Reclamation and USFWS LSRCP projects serve multiple purposes, only the power portion of total project costs are assigned to the FCRPS through cost allocation processes. All intracompany and intercompany accounts and transactions have been eliminated from the FCRPS financial statements.

FCRPS financial statements are prepared in accordance with generally accepted accounting principles (GAAP) of the United States of America. FCRPS financial statements also reflect the Uniform System of Accounts (USoA) as prescribed for electric public utilities by the Federal Energy Regulatory Commission (FERC). FCRPS accounting policies also reflect other specific legislation and directives issued by U.S. government agencies. All U.S. government properties and income are tax exempt.

Use of estimates

The preparation of FCRPS financial statements in conformity with GAAP 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 FCRPS financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Rates and regulatory authority

BPA establishes separate power and transmission rates in accordance with several statutory directives. Rates proposed by BPA are subject to an extensive formal hearing process, after which they are submitted by BPA and reviewed by FERC. FERC's review is based on BPA statutes that include a requirement that rates must be sufficient to ensure repayment of the federal investment in the FCRPS over a reasonable number of years after first meeting BPA's other costs. After the final FERC approval, BPA's rates may be reviewed by the United States Court of Appeals for the Ninth Circuit (Ninth Circuit Court) if challenged by parties involved in the rate proceedings. Petitions seeking such review must be filed within 90 days of the final FERC approval. The Ninth Circuit Court may either confirm or reject a rate proposed by BPA. BPA's rates are not structured to provide a rate of return on its assets. Rates for the two year BP-22 rate period began on Oct. 1, 2021, and concluded on Sept. 30, 2023. On Oct. 1, 2023, new rates for fiscal years 2024-2025 went into effect.

In accordance with authoritative guidance for regulated operations, certain costs or credits may be included in rates for recovery or refund over a future period and are recorded as regulatory assets or liabilities. (See Note 5, Effects of Regulation.)

Utility plant

Utility plant is stated at original cost and includes federal system hydro generation assets (i.e., Pacific Northwest generating facilities of the USACE and Reclamation) as well as transmission and other assets. The costs of substantial additions, major replacements and substantial betterments are capitalized. Costs include direct labor and materials; payments to contractors; indirect charges for engineering, supervision and certain overhead items; and an allowance for funds used during construction (AFUDC). Maintenance, repairs and replacements of items determined to be less than major units of property are charged as incurred to Operations and maintenance in the Combined Statements of Revenues and Expenses. When utility plant is retired, the original cost and any net proceeds from the disposition are charged to accumulated depreciation. (See Note 3, Utility Plant and Nonfederal Generation.)

Depreciation, amortization and accretion

Depreciation of the original cost of generation plant is computed using straight-line methods based on estimated average service lives of the various classes of property. For transmission plant, depreciation of original cost and estimated net cost of removal is computed primarily on the straight-line group life method based on estimated average service lives of the various classes of property. Periodically BPA conducts a depreciation study on transmission and general plant assets. BPA updates depreciation rates based on updated asset lives and net salvage, which considers cost of removal and salvage proceeds. The estimated net cost of removal is included in depreciation expense. (See Note 3, Utility Plant and Nonfederal Generation.)

In the event removal costs associated with transmission plant are expected to exceed salvage proceeds, a reclassification of this negative salvage is made from accumulated depreciation to a regulatory liability. As actual removal costs are incurred, the associated regulatory liability is reduced. (See Note 5, Effects of Regulation.)

Amortization expense relates to nonfederal generation assets, certain regulatory assets and finance lease right-of-use assets. (For further discussion see Note 3, Utility Plant and Nonfederal Generation; Note 5, Effects of Regulation and Note 4, Leases.)

Accretion expense is recorded throughout the fiscal year in connection with a periodic increase to the Columbia Generating Station (CGS) asset retirement obligation (ARO) liability to reflect the passage of time.

Allowance for funds used during construction

AFUDC represents the estimated cost of interest on financing the construction of new assets. AFUDC is calculated based on the construction work in progress balance and on Lease-Purchase Program trust fund balances held for construction purposes. (See Note 7, Deferred Charges and Other.) AFUDC is charged to the capitalized cost of the utility plant asset and is a reduction of Interest expense and other income, net in the Combined Statements of Revenues and Expenses.

AFUDC is capitalized at one rate for construction funded substantially by BPA and at another rate for USACE and Reclamation construction funded by congressional appropriations. (See Note 3, Utility Plant and Nonfederal Generation.) The BPA rate is determined based on the weighted-average cost of borrowing for certain types of debt and deferred credits that are related to BPA construction activity. The rate for appropriated funds is provided at the beginning of each year to BPA by the U.S. Treasury.

Nonfederal generation

BPA is party to long-term contracts for BPA to acquire all of the generating capability of Energy Northwest's CGS nuclear power plant and Lewis County PUD's (Public Utility District's) Cowlitz Falls Hydroelectric Project. CGS is a nonfederal nuclear power plant owned and operated by Energy Northwest, a joint operating agency of the state of Washington. The current license termination dates for CGS and the Cowlitz Falls Project are in December 2043 and May 2036, respectively. BPA has acquired the output of the Cowlitz Falls Project through June 30, 2032. These contracts require BPA to meet all of the facilities' operating, maintenance and debt service costs. Operations and maintenance expense for these projects are recognized based upon annual total project cash funding requirements, which vary from year to year.

Nonfederal generation assets on the Combined Balance Sheets are amortized on a straight-line basis through their respective license termination dates, with the amortization expense included in Depreciation, amortization and accretion in the Combined Statements of Revenues and Expenses. As of Sept. 30, 2023, and 2022, the CGS Nonfederal generation asset also includes approximately $98 million of prepaid nuclear fuel purchased by Energy Northwest that management anticipates CGS will begin using in 2030. Future amortization expense is expected to occur over the years in which the fuel will be used.

Cash and cash equivalents

Cash amounts for the FCRPS include cash and cash equivalents in the Bonneville Power Administration Fund (Bonneville Fund) within the U.S. Treasury and cash from certain unexpended appropriations of the USACE and Reclamation related to the FCRPS. As of Sept. 30, 2023, and 2022, cash amounts also include cash held in a margin account with BPA's financial futures broker, which BPA could access within one day. Cash equivalents in the Bonneville Fund consist of investments in non-marketable market-based special securities issued by the U.S. Treasury with original maturities of 90 days or less at the date of investment. The carrying value of cash and cash equivalents approximates fair value.

Investments in U.S. Treasury securities

BPA participates in the U.S. Treasury's Federal Investment Program, which provides investment services to federal government entities that have funds on deposit with the U.S. Treasury and statutory authority to invest those funds. Investments of the funds are generally restricted to U.S. Treasury market-based special securities and are informed by prevailing rates of interest for various short-term or longer-term investments.

Investments in U.S. Treasury securities are carried at amortized cost, which approximates fair value, and reflect the ability and intent to hold the securities to maturity. The fair value measurements of investments in U.S. Treasury securities are considered Level 2 in the fair value hierarchy as defined by the accounting guidance for fair value measurements and disclosures. (See Note 13, Fair Value Measurements.)

Concentrations of credit risks

General credit risk

Financial instruments that potentially subject the FCRPS to concentrations of credit risk consist primarily of BPA accounts receivable. Credit risk relates to the loss that might occur as a result of counterparty non-performance.

BPA's accounts receivable are spread across a diverse group of customers throughout the western United States and Canada, and include consumer-owned utilities (COUs), investor-owned utilities (IOUs), power marketers, wind generators and others. BPA's accounts receivable exposure is generally from large and stable counterparties and does not represent a significant concentration of credit risk. During fiscal years 2023, 2022 and 2021, BPA experienced no material losses as a result of any customer defaults or bankruptcy filings.

BPA mitigates credit risk by reviewing counterparties for creditworthiness, establishing credit limits and monitoring credit exposure. To further manage credit risk, BPA obtains credit support, such as letters of credit, parental guarantees, and cash in the form of prepayments, deposits or escrow funds, from some counterparties. BPA monitors counterparties for changes in financial condition and regularly updates credit reviews. (See Note 12, Risk Management and Derivative Instruments.)

Allowance for doubtful accounts

Management reviews accounts receivable to determine if any receivable will potentially be uncollectible. The allowance for doubtful accounts includes amounts estimated through an evaluation of specific customer accounts, based upon the best available facts and circumstances of customers that may be unable to meet their financial obligations, and a reserve for all other customers based on historical experience. The allowance is not material to the financial statements.

Derivative instruments

Derivative instruments consist primarily of forward electricity contracts and are measured at fair value and recognized on the Combined Balance Sheets as either Deferred charges and other or as Deferred credits and other. Changes in fair value are deferred as either Regulatory assets or Regulatory liabilities on the Combined Balance Sheets in accordance with regulated operations accounting guidance. Recognition of these contracts in the Combined Statements of Revenues and Expenses occurs in Sales or Purchased power when the contracts settle. BPA elects the normal purchases and normal sales exception under derivatives and hedging accounting guidance for certain contracts that require physical delivery, are expected to be used or sold in the normal course of business and meet the derivative accounting definition of a capacity contract. The FCRPS does not apply hedge accounting. (See Note 12, Risk Management and Derivative Instruments.)

Fair value

Carrying amounts of current assets and current liabilities approximate fair value based on the short-term nature of these instruments. Fair value measurements are applied to certain financial assets and liabilities and to determine fair value disclosures in accordance with GAAP. When developing fair value measurements, it is BPA's policy to use quoted market prices whenever available or to maximize the use of observable inputs and minimize the use of unobservable inputs when quoted market prices are not available. Fair values are primarily developed using industry standard models that consider various inputs including quoted forward prices for commodities, time value, volatility factors, current market and contractual prices for underlying instruments, market interest rates and yield curves, and credit spreads, as well as other relevant economic measures. (See Note 12, Risk Management and Derivative Instruments and Note 13, Fair Value Measurements.)

Operating revenues and net revenues

Sales include estimated unbilled revenues. (See Note 2, Revenue Recognition.) Net revenues over time are committed to payment of operational obligations, including debt for both operating and non-operating nonfederal projects, debt service on bonds BPA issues to the U.S. Treasury, the repayment of federal appropriations for the FCRPS, and the payment of certain irrigation costs.

U.S. Treasury credits

U.S. Treasury credits represent nonpower-related costs that BPA recovers from the U.S. Treasury in accordance with certain laws. (See Note 2, Revenue Recognition.)

Purchased power

Purchased power expense represents wholesale power purchases that are meant to augment the FCRPS resource pool to meet loads and obligations. In addition, this expense includes the costs of certain water storage agreements between BPA and third parties. Purchased power excludes operations and maintenance expenses associated with CGS and the Cowlitz Falls Hydroelectric Project, and with certain contracts for renewable resources that BPA management considers part of the FCRPS resource pool.

Interest expense

Interest expense includes interest associated with nonfederal debt related to operating or terminated nonfederal generation assets, bonds issued by BPA to the U.S. Treasury, the unpaid balance of federal appropriations scheduled for repayment, and other nonfederal debt and certain liabilities. In addition, interest expense includes the amortization of bond premiums, discounts and costs of issuance. Reductions to interest expense include the amortization of a capitalization adjustment regulatory liability. (See Note 5, Effects of Regulation.)

Interest income

Interest income includes interest earnings on market-based special securities in the Bonneville Fund and interest earnings from other sources.

Other, net

Other, net primarily includes dividend income and realized gains and losses associated with the nonfederal nuclear decommissioning trusts for CGS. In addition, gains and losses incurred because of early debt extinguishment are recorded to this caption. In fiscal year 2023, Other, net also includes $31 million net non-cash expense related to the “Boardman to Hemingway (B2H) with Transfer Service” transaction in March 2023. For further information on the B2H transaction, see Note 7, Deferred Charges and Other. In fiscal year 2021, Other, net also included $20 million related to the amortization of Energy Northwest Projects 1 and 4 site restoration regulatory liability. This treatment was consistent with the BP-20 rate case.

Residential Exchange Program

In order to provide residential and small farm customers of qualifying regional utilities, primarily IOUs, access to power benefits from the FCRPS, Congress established the Residential Exchange Program (REP) in Section 5(c) of The Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power Act). Whenever a Pacific Northwest electric utility offers to sell power to BPA at the utility’s average system cost of resources, BPA purchases such power and offers, in exchange, to sell an equivalent amount of power at BPA’s priority firm exchange rate to the utility for resale to that utility’s residential and small farm consumers. REP costs are forecast for each year of the rate period and included in the revenue requirement for establishing BPA’s power rates. REP costs are recognized when incurred and are included in Operations and maintenance in the Combined Statements of Revenues and Expenses.

In fiscal year 2011, BPA signed the 2012 Residential Exchange Program Settlement Agreement (2012 REP Settlement Agreement), resolving disputes related to the REP. The 2012 REP Settlement Agreement provided for fixed “Scheduled Amounts” payable to the IOUs through fiscal year 2028. (See Note 10, Residential Exchange Program.)

Pension and other postretirement benefits

Federal employees associated with the operation of the FCRPS participate in either the Civil Service Retirement System or the Federal Employees Retirement System. Employees may also participate after retirement in the Federal Employees Health and Benefit Program and the Federal Employees Group Life Insurance Program. All such postretirement systems and programs are sponsored by the U.S. Office of Personnel Management; therefore, the FCRPS financial statements do not include accumulated plan assets or liabilities related to the administration of such programs. As part of BPA’s scheduled payment each year to the U.S. Treasury for bonds and other purposes, BPA makes contributions to cover the estimated annual unfunded portion of FCRPS pension and postretirement benefits. These contribution amounts are paid to the U.S. Treasury and are recorded as Operations and maintenance in the Combined Statements of Revenues and Expenses during the year to which the payment relates.

SUBSEQUENT EVENTS

Management has performed an evaluation of events and transactions for potential FCRPS recognition or disclosure through Nov. 1, 2023, which is the date the financial statements were issued.

2. Revenue Recognition

DISAGGREGATED REVENUE

Years ended Sept. 30 - millions of dollars	2023	2022	2021
Sales			
Power			
Firm	$ 1,817.0	$ 2,095.0	$ 2,122.7
Surplus[1]	962.4	1,337.0	561.2
Transmission	1,097.2	1,070.4	966.1
Other[2]	109.0	102.2	77.8
Sales	$ 3,985.6	$ 4,604.6	$ 3,727.8
U.S. Treasury credits[3]	262.3	116.9	95.2
Total operating revenues[4]	$ 4,247.9	$ 4,721.5	$ 3,823.0

[1] Surplus revenue includes $227.9 million, $575.2 million, and $226.4 million of derivative commodity contracts and related operational hedging activity for fiscal years 2023, 2022 and 2021, respectively, which are not considered revenue from contracts with customers under ASC 606. For further information, see additional disclosure below.
[2] Other revenue includes $42.6 million, $41.7 million and $22.7 million for fiscal years 2023, 2022 and 2021, respectively, that are not classified as revenue from contracts with customers under ASC 606. For further information, see additional disclosure below.
[3] U.S. Treasury credits are not classified as revenue from contracts with customers under ASC 606. For further information, see additional disclosure below.
[4] Revenue from contracts with customers was $3,715.1 million, $3,987.7 million and $3,478.7 million for fiscal years 2023, 2022 and 2021, respectively.

SALES

A substantial majority of FCRPS revenues is from rate-regulated sales of power and transmission products and services. All revenues are from contracts with customers except for U.S. Treasury credits, derivatives and certain other revenues as shown in the table above. BPA establishes rates for its power and transmission services in a formal rate proceeding. The power and transmission rate schedules and general rate schedule provisions establish the rates, billing determinants, and rate provisions applicable to all BPA power and transmission contracts. Charges for services specified in the rate schedules and their provisions represent the amount billed by BPA for the goods or services used and purchased by its customers.

BPA has elected to apply the right-to-invoice practical expedient to FCRPS rate-regulated revenues from power and transmission services. Amounts invoiced correspond directly with the value to the customers for energy or services provided by the FCRPS reporting entities. Therefore, revenue from power and transmission sales, which includes billed and estimated unbilled amounts, is recognized over time upon the delivery of energy or services to the customers. The customers receive and benefit from the value of power and transmission at the time of delivery. Payments for amounts billed by BPA are generally due from customers within 20 days of billing. There are no material significant financing components.

"Firm" power consists of energy, capacity, or both, that is guaranteed to be available to the customer at all times during the period covered by a contract, except by reason of certain uncontrollable forces or service interruption provisions. The Northwest Power Act obligates BPA to meet a utility customer's firm consumer load net of the customer's resources used to serve its load. In addition, BPA sells firm power to other federal agencies and to a limited number of direct service industries within the region for their direct consumption. The vast majority of firm power sold by BPA in fiscal years 2023, 2022 and 2021 was to preference customers, which make long-term power purchases from BPA at cost-based rates to meet their retail loads in the region. Preference customers are qualifying public utility districts, municipalities, consumer-owned electric cooperatives, and tribal utilities within the region. BPA's current power sales agreements with preference customers are in effect through fiscal year 2028.

"Surplus" power consists of energy and capacity that can be provided on an hourly or other short-term basis that is surplus to meeting certain firm loads as defined in the Northwest Power Act. BPA often describes the sale of surplus power as secondary sales. Most surplus power is sold to Pacific Northwest and California markets under short-term power sales that allow for flexible negotiated prices, or under longer-term contracts. The availability of surplus power depends primarily on precipitation and reservoir storage levels, performance of the Columbia Generating Station, BPA's firm power load obligations and other factors. Secondary revenues from the sale of surplus power are highly variable and depend on market conditions and the resulting prices. Amounts disclosed are net of bookouts, which occur when sales and purchases are scheduled with the same counterparty on the same path for the same hour.

Also included within Surplus sales are revenues from derivative commodity contracts in scope of ASC 815, Derivatives and Hedging, which are not considered revenue from contracts with customers under ASC 606. Derivative revenues are reported net of bookouts and primarily source from certain secondary power contracts that involve derivative instruments. (For further information on derivatives, see Note 1, Summary of Significant Accounting Policies, and Note 12, Risk Management and Derivative Instruments.)

"Transmission" revenues consist primarily of revenue for the transmission of power on BPA's network within and through the BPA service area. Point-to-point long-term contracts exceeding one year comprise the majority of network revenues and allow customers to move energy on a firm basis from a point of receipt to a point of delivery. In addition, Network Integration Transmission Service delivers power to load within BPA's balancing authority area and is a significant component of transmission revenues. Revenue from ancillary services and the Southern Intertie also comprise a significant portion of transmission revenues. Ancillary services ensure transmission grid reliability and include items such as scheduling, dispatch, balancing reserves and other services. The Southern Intertie is a system of transmission lines used primarily to transmit power between the Pacific Northwest and California. Nearly all intertie revenue is from long-term contracts exceeding one year in duration. Transmission customers include entities that buy and sell non-federal power in the region, in-region purchasers of federal power, generators, power marketers and utilities that seek to transmit power into, out of or through the region.

"Other" revenues source primarily from the sales of power and other services or items by Reclamation and USACE. In particular, Reclamation sells power to certain Pacific Northwest irrigation districts. Other revenues also include reimbursable revenues associated with work performed for BPA customers. Reimbursable revenues are offset by an equivalent amount of reimbursable expenses.

Also included within other revenues are the following types of revenue not with customers: leasing fees that BPA receives as the lessor of certain fiber optic cables and other assets; revenue from deferred project revenue funded in advance, which is recognized over the life of the corresponding transmission assets once placed in service; and realized gains on financial futures contracts. (See Note 11, Deferred Credits and Other for further information on deferred project revenue funded in advance.)

U.S. TREASURY CREDITS

U.S. Treasury credits represent BPA's recovery of certain nonpower-related costs from the U.S. Treasury in accordance with certain laws. The primary U.S. Treasury credit is the 4(h)(10)(C) credit provided for in the Northwest Power Act. This Act requires BPA to recover the nonpower portion of expenditures—set at 22.3%—that BPA makes for fish and wildlife protection, mitigation and enhancement. Through Section 4(h)(10)(C), the Northwest Power Act ensures that the costs of mitigating these impacts are allocated between the power-related and other purposes of the federal hydroelectric projects of the FCRPS. Power-related costs are recovered in BPA's rates. U.S. Treasury credits are reported as a component of Operating revenues in the Combined Statements of Revenues and Expenses.

As part of its annual payment to the U.S. Treasury, BPA applies the U.S. Treasury credits earned each fiscal year against various categories of payment obligations. For example, BPA may apply U.S. Treasury credits against interest expense or liabilities such as borrowings from U.S. Treasury and federal appropriations.

CONTRACT BALANCES

As of Sept. 30 — millions of dollars	2023	2022
Receivable assets		
Accounts receivable, net of allowance	$ 84.7	$ 41.7
Accrued unbilled revenues	282.7	458.2
Contract liabilities		
Customer prepaid power purchases	$ 139.2	$ 163.0
Third AC Intertie capacity agreements	82.6	86.1
Unearned revenue from customer deposits	66.0	37.8
Revenue recognized during the fiscal year from amounts included in contract liabilities at the beginning of the year	$ 94.6	$ 105.4

Accounts receivable and accrued unbilled revenues source primarily from contracts with customers.

Contract liabilities represent an entity's unsatisfied performance obligation to transfer goods or services to a customer from which the entity has received consideration. The contract liability amounts in the table above show expected future revenues to be recorded as power is delivered (for customer prepaid power purchases), over the estimated life of transmission assets placed in service (for Third AC Intertie capacity agreements), or as expenditures are incurred (for unearned revenue from customer deposits). These contract liabilities have no variable consideration and require little or no significant judgment in revenue recognition. The average contract term varies by customer and type and may span several years. (See Note 8, Debt and Appropriations, for further information on customer prepaid power purchases, and Note 11, Deferred Credits and Other, for further information on Third AC Intertie capacity agreements and unearned revenue from customer deposits.)

3. Utility Plant and Nonfederal Generation

As of Sept. 30 — millions of dollars		2023		2022	2023 Estimated average service lives
Completed plant					
Federal system hydro generation assets	$	10,337.3	$	10,171.3	75 years
Transmission assets		11,230.0		11,023.7	51 years
Other assets		107.4		105.0	8 years
Completed plant	$	21,674.7	$	21,300.0	
Accumulated depreciation					
Federal system hydro generation assets	$	(4,139.2)	$	(4,002.2)	
Transmission assets		(4,126.6)		(3,939.0)	
Other assets		(50.2)		(53.6)	
Accumulated depreciation	$	(8,316.0)	$	(7,994.8)	
Construction work in progress					
Federal system hydro generation assets	$	588.5	$	532.7	
Transmission assets		1,118.7		754.5	
Other assets		25.9		29.5	
Construction work in progress	$	1,733.1	$	1,316.7	
Nonfederal generation	$	3,380.0	$	3,404.6	
Net utility plant and nonfederal generation	$	18,471.8	$	18,026.5	

Allowance for funds used during construction

Fiscal year	2023	2022	2021
BPA rate	3.0%	2.4%	2.6%
Appropriated rate	3.6%	0.1%	0.1%

Amounts accrued in Accounts payable and other on the Combined Balance Sheets for Construction work in progress assets were approximately $122 million, $93 million, and $92 million as of Sept. 30, 2023, 2022, and 2021, respectively.

4. Leases

An arrangement contains a lease if a lessee has the right to control an identified asset for a period of time in exchange for consideration. At contract inception, management determines whether an arrangement contains a lease and lease classification, if applicable. At the lease commencement date, lease right-of-use (ROU) assets and lease liabilities are recorded based upon the present value of lease payments over the lease term, including initial direct costs, if any. If a contract provides an implicit rate, it is used to determine the present value of future lease payments. If a contract does not provide an implicit rate, management uses the incremental borrowing rate available at lease commencement. Operating lease ROU assets include any lease payments made at or before the commencement date and exclude lease incentives.

Certain lease arrangements contain renewal or early termination options. If management is reasonably certain to exercise these options, they are included in the calculation of the ROU asset and lease liability by incorporating the option into the lease term. Certain renewal options include an adjustment to future lease cost based upon various factors, such as pre-determined percentage increases, the Consumer Price Index, or other methods. Management has also elected to account for arrangements with lease and non-lease components as a single lease component.

Operating leases are primarily for office spaces and leased vehicles. Operating lease terms range from one to 36 years. Finance leases are primarily for transmission lines and equipment. Finance lease terms range from one to 64 years. There were no material lessor arrangements as of Sept. 30, 2023, and 2022.

The following table provides supplemental balance sheet information related to leases:

As of Sept. 30 — millions of dollars	Financial Statement Line Item	2023	2022
Operating leases			
ROU assets	Deferred charges and other	$ 91.4	$ 98.3
Short-term lease liability	Accounts payable and other	16.4	31.6
Long-term lease liability	Deferred credits and other	75.0	66.7
Finance leases			
ROU assets	Completed plant	$ 99.1	$ 95.8
Short-term lease liability	Nonfederal debt	4.9	7.3
Long-term lease liability	Nonfederal debt	99.5	93.8

The following table provides supplemental expense information related to total lease costs:

Years ended Sept. 30 — millions of dollars	Financial Statement Line Item	2023	2022	2021
Operating lease cost[1]	Operations and maintenance	$ 18.7	$ 18.6	$ 19.0
Finance lease cost:				
Amortization of ROU assets	Depreciation, amortization and accretion	5.2	4.5	3.7
Interest on lease liabilities	Interest expense	5.1	5.1	5.0
Total lease costs		$ 29.0	$ 28.2	$ 27.7

[1]Includes variable lease costs, which were immaterial for the fiscal years ended Sept. 30, 2023, 2022 and 2021.

	Weighted-average remaining lease term	Weighted-average discount rate
Operating leases	6.7 years	2.6%
Finance leases	47.1 years	4.9%

The following table provides supplemental cash flow information related to leases:

Years ended Sept. 30 - millions of dollars	2023	2022	2021
Cash paid for amounts included in the measurement of lease liabilities			
Operating cash outflows:			
Operating lease payments	$ 18.7	$ 18.6	$ 19.0
Interest on finance leases	5.1	5.1	5.0
Financing cash outflows:			
Principal payments on finance lease	4.4	3.8	2.9
Right-of-use assets obtained in exchange for new lease obligations			
Operating leases	9.3	3.0	13.4
Finance leases	8.2	7.0	11.9

The following table provides maturities of operating lease liabilities:

As of Sept. 30 - millions of dollars	2023
2024	$ 18.6
2025	16.0
2026	15.3
2027	11.8
2028	11.4
2029 and thereafter	27.0
Total undiscounted lease liabilities	$ 100.1
Less: Amounts representing interest	8.7
Total lease liabilities	$ 91.4

See Note 8, Debt and Appropriations, for finance lease maturity analysis.

5. Effects of Regulation

Regulatory assets include the following items:

REGULATORY ASSETS

As of Sept. 30 — millions of dollars	2023	2022
Terminated nuclear facilities	$ 1,425.4	$ 1,495.8
IOU exchange benefits	1,299.2	1,514.0
Columbia River Fish Mitigation	745.2	766.1
Phase 2 Implementation Plan (P2IP) Settlement Agreement	252.8	—
Fish and wildlife measures	213.5	233.9
Trojan decommissioning and site restoration	92.9	77.3
Decommissioning and site restoration	75.7	124.8
Conservation measures	48.3	81.3
Spacer damper replacement program	46.0	46.8
Terminated I-5 Corridor Reinforcement Project	26.0	52.0
Legal claims and settlements	22.0	22.0
Federal Employees' Compensation Act	17.8	18.9
Other	3.6	4.1
Terminated hydro facilities	2.2	4.2
Derivative instruments	1.8	11.0
Total	$ 4,272.4	$ 4,452.2

"**Terminated nuclear facilities**" consist of amounts to be recovered in future rates to satisfy the nonfederal debt for Energy Northwest Projects 1 and 3. These assets are amortized to depreciation, amortization and accretion through 2043, as established in the rate case.

"**IOU exchange benefits**" reflect amounts to be recovered in rates through 2028 for the IOU exchange benefits liability incurred as part of the 2012 REP Settlement Agreement. These amounts are amortized to operations and maintenance expense. (See Note 10, Residential Exchange Program.)

"**Columbia River Fish Mitigation**" is the cost of research and development for fish bypass facilities funded through appropriations since 1989 in accordance with the Energy and Water Development Appropriations Act of 1989, Public Law 100-371. Through fiscal year 2021, these costs were recovered in rates over 75 years and amortized to depreciation, amortization and accretion expense. Beginning in fiscal year 2022, these costs are no longer deferred and are instead recorded as operations and maintenance expense when incurred. In addition, beginning in fiscal year 2022 the amortization period for remaining deferred amounts has changed from 75 years to 50 years as stated in the BP-22 rate case.

"**Phase 2 Implementation Plan (P2IP) Settlement Agreement**" represents the deferral of expenses related to the P2IP settlement agreement signed in September 2023. BPA expects that these costs will be recovered through future rates and will be amortized to depreciation, amortization and accretion expense beginning in fiscal year 2026. The amortization period will be determined prior to the BP-26 rate proposal. (For further information on the P2IP transaction, see Note 11, Deferred Credits and Other.)

"**Fish and wildlife measures**" consist of deferred fish and wildlife project expenses to be recovered in future rates. These costs are amortized to depreciation, amortization and accretion expense over a period of 15 years.

"**Trojan decommissioning and site restoration**" reflects the amount to be recovered in future rates for funding the asset retirement obligation (ARO) liability related to the former Trojan nuclear facility. This amount equals the associated liability. (See Note 6, Asset Retirement Obligations.)

"**Decommissioning and site restoration**" represents unrealized losses in the nonfederal nuclear decommissioning trust assets for the Columbia Generating Station. (See Note 6, Asset Retirement Obligations.)

"**Conservation measures**" consist of the costs of deferred energy conservation measures to be recovered in future rates. These costs are amortized to depreciation, amortization and accretion expense over periods of 12 or

20 years. BPA deferred certain costs of energy conservation measures through fiscal year 2015 and, beginning with fiscal year 2016, began recording such costs as operations and maintenance expense when incurred.

"**Spacer damper replacement program**" consists of costs to replace deteriorated spacer dampers on certain transmission lines and are recovered in future rates under the Spacer Damper Replacement Program. These costs are amortized to depreciation, amortization and accretion expense over a period of 25 or 30 years.

"Terminated I-5 Corridor Reinforcement Project" consists of the costs to be recovered in future rates for preliminary construction and related activities for the former I-5 Corridor Reinforcement Project. These costs are amortized to depreciation, amortization and accretion expense through 2024, as established in the rate case.

"**Legal claims and settlements**" reflect amounts to be recovered in future rates to satisfy accrued liabilities related to legal claims and settlements. These costs will be recovered and amortized to operations and maintenance expense over a period to be established during future rate cases.

"**Federal Employees' Compensation Act**" reflects the actuarial estimated amount of future payments for current recipients of BPA's worker compensation benefits. This amount equals the associated liability, and related expenses are recorded to operations and maintenance expense as payments are made. (See Note 11, Deferred Credits and Other.)

"**Terminated hydro facilities"** consist of the amounts to be recovered in future rates to satisfy nonfederal debt for the Northern Wasco Hydro Project, for which BPA ceased its participation as recipient of the project's electric power. These assets are amortized to depreciation, amortization and accretion through 2025, as established in the rate case. (See Note 8, Debt and Appropriations.)

"**Derivative instruments**" reflect the unrealized losses from BPA's derivative portfolio. These amounts are deferred over the corresponding underlying contract delivery months. (See Note 12, Risk Management and Derivative Instruments.)

Regulatory liabilities include the following items:

REGULATORY LIABILITIES

As of Sept. 30 — millions of dollars	2023	2022
Capitalization adjustment	$ 822.9	$ 887.8
Accumulated plant removal costs	666.2	621.0
Derivative instruments	51.5	55.4
Other	2.6	1.4
Total	$ 1,543.2	$ 1,565.6

"**Capitalization adjustment**" is the difference between the outstanding balance of federal appropriations, plus $100 million, before and after refinancing under the BPA Refinancing Section of the Omnibus Consolidated Rescissions and Appropriations Act of 1996, 16 U.S.C. 838(l). Consistent with treatment in BPA's power and transmission rate cases, this adjustment is amortized over a 40-year period through fiscal year 2036. Amortization of the capitalization adjustment as a reduction to interest expense was $64.9 million each year for fiscal years 2023, 2022 and 2021.

"**Accumulated plant removal costs**" represent a liability for amounts previously collected through rates as part of depreciation expense. The liability increases as depreciation expense is incurred and is reduced as actual costs of removal, net of proceeds, are incurred. (See Note 1, Summary of Significant Accounting Policies.)

"**Derivative instruments**" reflect the unrealized gains from BPA's derivative portfolio. These amounts are deferred over the corresponding underlying contract delivery months. (See Note 12, Risk Management and Derivative Instruments.)

6. Asset Retirement Obligations

Asset retirement obligations include the following items:

As of Sept. 30 — millions of dollars	2023	2022
CGS decommissioning and site restoration	$ 921.8	$ 884.3
Trojan decommissioning	92.9	77.3
Energy Northwest Projects 1 and 4 site restoration	0.4	2.7
Total	$ 1,015.1	$ 964.3

AROs represent the legal obligations associated with the future retirement of certain tangible, long-lived assets. FCRPS AROs are recognized based on the estimated fair value of the dismantlement and restoration costs, primarily associated with the retirement of the Columbia Generating Station. BPA also has AROs for a 30% share of the former Trojan nuclear power plant decommissioning activities and for certain Energy Northwest-related site restoration activities. ARO liabilities are adjusted for any revisions, expenditures and the passage of time.

As of Sept. 30 — millions of dollars	2023	2022	2021
Beginning Balance	$ 964.3	$ 929.2	$ 890.7
Activities:			
Accretion	40.2	38.6	37.1
Expenditures	(5.5)	(6.1)	(8.2)
Revisions	16.1	2.6	9.6
Ending Balance	$ 1,015.1	$ 964.3	$ 929.2

Based on agreements in place, BPA directly funds Eugene Water and Electric Board’s 30% share of the former Trojan nuclear power plant decommissioning activities that consist of long-term operation and decommissioning of the Independent Spent Fuel Storage Installation (ISFSI). BPA funds these costs through current rates, with the expenses included in Operations and maintenance in the Combined Statements of Revenues and Expenses. Trojan decommissioning primarily relates to the storage of spent nuclear fuel through 2059 at the former nuclear plant site. Decommissioning of the ISFSI and final site restoration activities is not expected to occur before 2059, which is the year the Nuclear Regulatory Commission (NRC) extended the fuel storage license through. In fiscal year 2023, BPA management revised the estimate for the ARO liability by $14.9 million. This change in estimate was driven by increases in expected annual ISFSI operation costs primarily due to additional personnel and construction-related expenses. A $14.9 million increase to Regulatory assets on the Combined Balance Sheets offset the increased ARO liability in fiscal year 2023.

Based on a prior settlement agreement with the DOE, BPA receives an annual reimbursement for certain costs related to monitoring the spent nuclear fuel. BPA reduces operations and maintenance expense when it receives the reimbursement, which was $1.8 million, $1.5 million, and $1.6 million in fiscal years 2023, 2022, and 2021, respectively.

The FCRPS also has tangible long-lived assets such as federal hydro projects and transmission assets without an associated ARO because no legal obligation exists to remove these assets.

NONFEDERAL NUCLEAR DECOMMISSIONING TRUSTS

As of Sept. 30 — millions of dollars	2023		2022	
	Amortized cost	Fair value	Amortized cost	Fair value
Equity securities	$ 442.4	$ 396.1	$ 439.4	$ 337.8
Debt securities	95.9	66.4	82.5	59.3
Cash and cash equivalents	17.0	17.0	17.5	17.5
Total	$ 555.3	$ 479.5	$ 539.4	$ 414.6

These assets are trust fund account balances, primarily for CGS decommissioning and site restoration costs, but also for site restoration at Energy Northwest Projects 1 and 4, which terminated prior to completion. The fair value of the trust fund balances for CGS decommissioning and site restoration costs as of Sept. 30, 2023, and 2022 were $462.5 million and $397.1 million, respectively. The investment securities in the CGS decommissioning and site restoration trust fund accounts comprise both equity and debt securities and are recorded at fair value in accordance with applicable accounting guidance. Equity securities include both domestic and international index mutual funds. Debt securities are classified as available-for-sale and include bond mutual funds that hold inflation-protected securities. The trust fund balances for the site restoration at Energy Northwest Projects 1 and 4 were $17 million and $17.5 million, respectively. The site restoration fund for Energy Northwest Projects 1 and 4 is invested in a money market fund that is considered cash and cash equivalents.

External trust fund accounts for decommissioning and site restoration costs for CGS are funded monthly, with these contributions recorded as an increase to the trust fund asset. The CGS decommissioning trust fund account was established to provide for decommissioning at the end of the project's operations in accordance with NRC requirements. The NRC requires that this period be no longer than 60 years from the time the plant ceases operations. Decommissioning funding requirements for CGS are based on a 2019 site-specific decommissioning study for CGS and the current license termination date, which is in December 2043. The CGS trust fund accounts are funded and managed by BPA in accordance with NRC requirements and site certification agreements.

Unrealized gains and losses are recorded to a regulatory liability or regulatory asset, respectively. Realized gains and losses for CGS are recorded to Other, net in the Combined Statements of Revenues and Expenses and were considered when establishing rates for fiscal years 2021 through 2023. Realized gains reported for fiscal years 2023, 2022 and 2021 were $0.1 million, $2.9 million, and $164.1 million, respectively.

Contribution payments to the CGS trust fund accounts for fiscal years 2023, 2022 and 2021 were $4.9 million, $4.7 million and $4.3 million, respectively. Based on current estimates, BPA and Energy Northwest have no obligation to make further payments into the site restoration fund for Energy Northwest Projects 1 and 4.

7. Deferred Charges and Other

Deferred Charges and Other include the following items:

As of Sept. 30 — millions of dollars	2023	2022
Operating leases	$ 91.4	$ 98.3
Derivative instruments	51.5	55.4
Lease-Purchase trust funds	35.7	34.0
Water storage agreements	14.7	—
Transmission line-related receivables	10.4	—
Spectrum Relocation Fund	8.2	8.8
Cloud computing arrangements	6.2	7.8
Other	3.9	4.6
Funding agreements	—	28.3
Total	$ 222.0	$ 237.2

"**Operating leases**" represent right-of-use assets that are amortized to operations and maintenance expense over the term of the related leases. (See Note 4, Leases.)

"**Derivative instruments**" represent unrealized gains from BPA's derivative portfolio, which primarily includes physical power purchase and sale transactions.

"**Lease-Purchase trust funds**" are investments held in separate trust accounts outside the Bonneville Fund for the construction of leased transmission assets, the use of which BPA has acquired under lease-purchase agreements. The amounts held in trust are also used in part for debt service payments during the construction period and include an investment fund mainly for future principal and interest debt service payments. (See Note 8, Debt and Appropriations.) Interest income and realized and unrealized gains or losses on amounts held in trust for construction are recorded as AFUDC. Interest income and gains and losses on other trust balances are recorded as either income or expense in the period when earned. At the time of debt extinguishment, unspent trust funds under a particular transaction are used to repay the related lease-purchase debt and associated debt extinguishment costs for that transaction.

The Lease-Purchase trust funds are primarily comprised of held-to-maturity fixed-income investments and cash and cash equivalents.

Investments classified as held-to-maturity were $19.1 million and $19.2 million as of Sept. 30, 2023 and 2022, and are recorded at amortized cost. The fair value of held-to-maturity investments exceeded amortized cost by approximately $1 million and $2 million as of Sept. 30, 2023, and 2022, respectively. Unrealized gains comprise the difference between amortized cost and fair value for both years. Held-to-maturity investments as of Sept. 30, 2023, mature in November 2030.

As of Sept. 30, 2023, and 2022, trust balances also included cash and cash equivalents of $14 million and $14.7 million, respectively.

Investments classified as available-for-sale were $2.6 million and $0.1 million at Sept. 30, 2023, and 2022, respectively. These investments are held for construction purposes and are stated at fair value based on quoted market prices. The fair value of these investments approximates amortized cost, with immaterial unrealized and realized gains or losses recorded during fiscal years 2023, 2022, and 2021. Available-for-sale investments as of Sept. 30, 2023, mature in October and November 2023. (See Note 13, Fair Value Measurements.)

"**Water storage agreements**" represent amounts owed to BPA by BC Hydro, an electric utility owned by the Province of British Columbia. Yearly fluctuations in water levels, river operations and storage plans, particularly at certain dams in and near Canada, affect the amounts owed to or from BC Hydro. The final annual amount is invoiced based on August 31 ending balances.

"**Transmission line-related receivables**" represent the receivable assets recorded in relation to the March 2023 Boardman to Hemingway with Transfer Service transaction, in which BPA transferred its 24.24% permitting interest share in the proposed Boardman to Hemingway transmission line to Idaho Power Company (IPC). Taking into account the time value of money and project risks, the permitting interest transfer resulted in a $3.4 million financial asset and a corresponding non-cash gain recorded to Other, net related to the sale.

Additionally, BPA paid IPC a $10 million security payment which, once adjusted for the time value of money, resulted in a $7 million deferred asset increase, and a $3 million loss recorded to Other, net.

BPA expects to receive approximately $31 million, plus interest, from IPC over 10 years beginning 10 years after IPC builds and energizes the B2H transmission line and also reaches service thresholds as defined in the aforementioned March 2023 contracts. Additionally, upon energization BPA expects to recover the $10 million security payment from IPC.

“**Spectrum Relocation Fund**” was created to reimburse certain federal agencies such as BPA for the costs of replacing radio communication equipment displaced as a result of radio band frequencies no longer available to the affected federal agencies. These amounts previously received from the U.S. Treasury are held as restricted cash in the Bonneville Fund for the sole purpose of constructing replacement assets. These amounts are the only source of restricted cash reported on the Combined Statements of Cash Flows.

“**Cloud computing arrangements**” represent the capitalized implementation costs incurred in a cloud computing arrangement that is a service contract. These costs are amortized to operations and maintenance expense over the terms of the respective contracts once placed in service.

“**Funding agreements**” represent deferred costs associated with BPA’s contractual obligations to determine the feasibility of certain joint transmission projects. In March 2023, BPA wrote off $31.4 million of deferred costs to Other, net, in connection with the Boardman to Hemingway with Transfer Service transaction. For more information on this transaction, see Transmission line-related receivables in this table.

8. Debt and Appropriations

As of Sept. 30 — millions of dollars		2023		2022	
	Terms	Carrying Value	Weighted-Average Interest Rate	Carrying Value	Weighted-Average Interest Rate
Nonfederal debt					
Nonfederal generation:					
Columbia Generating Station	0.9 – 6.8% through 2042	$ 3,381.9	4.5%	$ 3,295.9	4.5%
Cowlitz Falls Hydro Project	4.0 – 5.3% through 2032	52.0	5.5	56.4	5.5
Terminated nonfederal generation:					
Nuclear Project 1	0.9 – 5.0% through 2042	837.5	4.8	824.1	4.7
Nuclear Project 3	2.9 – 5.0% through 2042	970.6	4.9	950.3	4.9
Northern Wasco Hydro Project	5.0% through 2024	3.6	5.0	5.3	5.0
Lease-Purchase Program:					
Lease-purchase liability	2.2 – 3.7% through 2046	1,766.8	2.8	1,838.3	2.8
NIFC debt	5.4% through 2034	119.1	5.4	119.0	5.4
Finance lease liability	0.6 – 6.9% through 2087	104.4	4.9	101.1	5.0
Other financial liability	3.4% through 2043	16.0	3.4	16.5	3.4
Customer prepaid power purchases	4.3 – 4.6% through 2028	139.2	4.5	163.0	4.5
Total Nonfederal debt		$ 7,391.1	4.2%	$ 7,369.9	4.2%
Federal debt and appropriations					
Borrowings from U.S. Treasury	0.4 – 5.9% through 2053	$ 5,783.8	3.4%	$ 5,678.7	3.0%
Federal appropriations	1.4 – 4.4% through 2073	1,123.9	3.2	1,242.9	3.3
Federal appropriations (not scheduled for repayment)		473.7	n/a	398.0	n/a
Total Federal debt and appropriations		$ 7,381.4	3.4%	$ 7,319.6	3.1%
Total debt and appropriations		$ 14,772.5	3.8%	$ 14,689.5	3.6%

NONFEDERAL DEBT

Nonfederal generation and Terminated nonfederal generation

As described in Note 1, Summary of Significant Accounting Policies, Nonfederal generation section, BPA is party to long-term contracts for BPA to acquire all of the generating capability of Energy Northwest's Columbia Generating Station and, through June 2032, all of Lewis County PUD's Cowlitz Falls Hydroelectric Project. Under certain agreements, BPA also has financial responsibility for meeting all costs of Energy Northwest's Projects 1 and 3, including debt service costs of bonds and other financial instruments issued for the projects, even though these projects have been terminated. BPA is also required by a "Settlement and Termination Agreement" between BPA and Northern Wasco PUD to pay amounts equal to annual debt service on certain bonds of the Northern Wasco Hydro Project. Under the Settlement and Termination Agreement, BPA ceased its participation in this project.

Cowlitz Falls Hydroelectric Project debt of $52 million is callable, in whole or in part, at Lewis County PUD's option with the approval of BPA, at 100% of the principal amount plus accrued interest.

BPA recognizes certain expenses for these nonfederal generation and terminated nonfederal generation projects based on annual total project cash funding requirements, which include interest expense and operating and maintenance expense. BPA recognized operating and maintenance expense for these projects of $327 million, $287.4 million and $319.4 million in fiscal years 2023, 2022 and 2021, respectively, which is included in Operations and maintenance in the Combined Statements of Revenues and Expenses. On the Combined Balance Sheets, related assets for CGS and the Cowlitz Falls Hydroelectric Project are included in Nonfederal generation. Related assets for terminated nonfederal generation are included in Regulatory assets. (See Note 5, Effects of Regulation.)

During fiscal years 2023 and 2022, BPA recorded gains of $0 and $2.2 million when certain Energy Northwest debt was extinguished via the issuance of long-term debt. BPA recorded no such gains during fiscal year 2021.

Energy Northwest debt of $3.24 billion is callable, in whole or in part, at Energy Northwest's option with the approval of BPA, on call dates between July 2024 and July 2033 at 100% of the principal amount.

As of Sept. 30, 2023, and 2022, Energy Northwest could borrow $110 million under a line-of-credit borrowing arrangement with a banking institution. As of Sept. 30, 2023, and 2022, Energy Northwest had no amounts outstanding on this line of credit.

Lease-Purchase Program

Under the Lease-Purchase Program, BPA has incurred financial liabilities for lease-purchase transactions with certain third-party entities. These transactions are primarily with the Port of Morrow, a port district located in Morrow County, Oregon, and the Idaho Energy Resources Authority (IERA), an independent public instrumentality of the State of Idaho, for transmission facilities, including lines, substations and general plant assets. These financial liabilities are paid from the rental payments made by BPA. The facilities are not security for the payment of these obligations. The lease-purchase agreements contain provisions that allow BPA to purchase the related assets at any time during each lease term for a bargain purchase price plus the value of the related outstanding debt instrument.

Under the Lease-Purchase Program, BPA consolidates one special purpose corporation, Northwest Infrastructure Financing Corporation, or NIFC. (See Note 9, Variable Interest Entities.) As of Sept. 30, 2023, and 2022, the NIFC had $119.6 million of bonds outstanding, including debt issuance costs. The rental payments from BPA are pledged to the payment of the debt, but the facilities do not secure the debt. The NIFC bonds are reported as NIFC debt and are subject to redemption by NIFC, in whole or in part, at any date, at the higher of the principal amount of the bonds or the present value of the bonds discounted using the U.S. Treasury rate plus a premium of 12.5 basis points.

On the Combined Balance Sheets, the Lease-Purchase liability and NIFC debt are included in Nonfederal debt. The related assets are included in Utility plant and in Deferred charges and other for unspent funds held in trust accounts outside the Bonneville Fund.

Finance lease liability

Included among this liability are finance lease agreements for transmission lines and equipment. The related assets are recorded as completed plant. For additional information regarding finance leases, see Note 4, Leases.

Other financial liability

This agreement is with a transmission customer. BPA is deemed the accounting owner of the assets, which are included in Utility plant on the Combined Balance Sheets. The agreement contains provisions that allow BPA to purchase the related assets at any time during the contract term, with ownership transferring to BPA at the end of the term.

Customer prepaid power purchases

During fiscal year 2013, BPA entered into agreements with four regional COUs for the advance payment of portions of their power purchases. Under this program, customers purchased prepaid power in blocks through fiscal year 2028. For each block purchased, BPA repays the prepayment, with interest, as monthly fixed credits on the customers' power bills.

In March 2013, BPA received $340 million representing $474.3 million in scheduled credits for blocks purchased by customers. BPA accounts for the prepayment proceeds as a financing transaction and reports the value of the obligations associated with the fixed credits as a prepayment liability. Interest expense is recognized using a weighted-average effective interest rate of 4.5%. The prepaid liability is reduced and the credits are applied as power is delivered through fiscal year 2028.

FEDERAL DEBT AND APPROPRIATIONS

Borrowings from U.S. Treasury

BPA is authorized by Congress to issue and sell bonds to the U.S. Treasury and to have outstanding at any time up to $13.70 billion aggregate principal amount of bonds. Beginning in fiscal year 2028, an additional $4.00 billion of U.S. Treasury borrowing authority will be available. Of the $13.70 billion in borrowing authority currently available, $1.25 billion is available for electric power conservation and renewable resources, including capital investment at the FCRPS hydroelectric facilities owned by the USACE and Reclamation, and $12.45 billion is available for BPA's transmission capital program and to implement BPA's authorities under the Northwest Power Act. Of the total U.S. Treasury borrowing authority available at any one time ($13.70 billion through fiscal year 2027 and $17.70 billion beginning in fiscal year 2028), $750 million can be issued to finance Northwest Power Act-related expenses. The interest on BPA's outstanding bonds is set at rates comparable to rates on debt issued by other comparable federal government institutions at the time of issuance. Bonds can be issued with call options.

As of Sept. 30, 2023, and 2022, no bonds outstanding were related to Northwest Power Act expenses.

As of Sept. 30, 2023, $495.2 million of variable-rate bonds are callable by BPA at par value on their interest repricing dates, which occurs every three or six months. The remaining $5.29 billion of bonds are callable by BPA at a premium or discount, which is calculated based on the current government agency rates for the remaining term to maturity at the time the bonds are called. As of Sept. 30, 2022, $626.1 million of variable-rate bonds were outstanding.

In fiscal year 2023, BPA called $322.9 million of bonds it had previously issued to the U.S. Treasury. As a result, BPA recognized a net gain of $5 million to Other, net in the Combined Statements of Revenues and Expenses. BPA recorded no such gains or losses during fiscal years 2022 and 2021.

Federal appropriations

Federal appropriations reflect the responsibility that BPA has to repay the U.S. Treasury for congressionally appropriated amounts in the FCRPS. Federal appropriations repayment obligations consist of the remaining unpaid power portion of USACE and Reclamation capital investments funded through congressional appropriations. These include appropriations for the Columbia River Fish Mitigation program as allocated to the power purpose of the USACE's FCRPS hydroelectric projects. BPA's repayment obligation begins when capital investments are completed and placed into service, unless directed otherwise by specific legislation.

BPA is obligated to establish rates to repay appropriations for federal generation and transmission plant investments within a specified repayment period, which is the reasonably expected service life of the facilities, not to exceed 50 years. Federal appropriations may be repaid early without penalty at their par value (i.e., carrying value for federal appropriations) as part of BPA's payment to the U.S. Treasury. BPA repaid appropriations earlier than their due dates in fiscal years 2023 and 2022. BPA establishes schedules for the repayment of federal appropriations when it establishes its power and transmission rates. These schedules can change depending on whether appropriations have been prepaid or deferred. Interest on appropriated amounts begins accruing when the related assets are placed into service, unless repayment obligation is deferred by specific legislation.

As of Sept. 30 — millions of dollars	Maturing Nonfederal debt excluding finance leases	Future minimum lease payments under finance leases	Borrowings from U.S. Treasury	Federal appropriations	Total
2024	$ 557.0	$ 10.0	$ 199.0	$ —	$ 766.0
2025	654.0	9.5	144.0	—	807.5
2026	580.2	7.8	127.0	—	715.0
2027	527.5	7.1	175.0	—	709.6
2028	677.4	6.9	299.8	—	984.1
2029 and thereafter	4,720.7	170.3	4,839.0	1,597.6	11,327.6
Total	$ 7,716.8	$ 211.6	$ 5,783.8	$ 1,597.6	$ 15,309.8
Less: Executory costs	2.7	—	—	—	2.7
Less: Amount representing interest	714.8	107.2	—	—	822.0
Less: Unamortized debt issuance cost	16.1	—	—	—	16.1
Plus: Unamortized premiums	303.5	—	—	—	303.5
Present value of debt	7,286.7	104.4	5,783.8	1,597.6	14,772.5
Less: Current portion	500.6	4.9	199.0	—	704.5
Long-term debt	$ 6,786.1	$ 99.5	$ 5,584.8	$ 1,597.6	$ 14,068.0

FAIR VALUE OF DEBT AND APPROPRIATIONS

See Note 13, Fair Value Measurements, for a comparison of carrying value to fair value for debt. Due to the current par value call provision on BPA's federal appropriations, the fair value of BPA's federal appropriations is equal to the carrying value. This call provision allows BPA to prepay appropriations repayment obligations without premiums or a mark-to-market adjustment.

9. Variable Interest Entities

A VIE is an entity that does not have sufficient equity at risk to finance its activities without additional financial support or whose equity investors lack characteristics of a controlling financial interest. An enterprise that has a controlling interest is known as the VIE's primary beneficiary and is required to consolidate the VIE.

Management reviews executed lease-purchase agreements with nonfederal entities for VIE accounting impacts. BPA has determined that NIFC is a VIE and that BPA is the primary beneficiary of NIFC. As such, this entity is consolidated. The key factors in this determination are BPA's ability to take contractual actions that significantly impact the economic, commercial and operating activities of NIFC and BPA's obligation to absorb losses that could be significant to NIFC. Additionally, BPA's lease-purchase agreement with NIFC obligates BPA to absorb the operational and commercial risks, and thus potentially significant benefits or losses associated with the underlying transmission facilities. BPA also has exclusive use and control of the facilities during the lease period and has indemnified NIFC for all construction and operating risks associated with its transmission facilities.

Amounts related to NIFC include Lease-Purchase trust funds and other assets of $20.6 million and $20.5 million and Nonfederal debt of $119.1 and $119 million as of Sept. 30, 2023, and 2022, respectively. BPA has also entered into lease-purchase agreements with Port of Morrow and IERA, which are nonfederal entities. These entities are governmental and, in accordance with VIE accounting guidance, are therefore not consolidated into the FCRPS financial statements. (See Note 8, Debt and Appropriations.)

BPA has entered into power purchase agreements with wind farm-related VIEs, which, because of their pricing arrangements, provide that BPA absorb commodity price risk from the perspective of the counterparty entities. However, BPA management has concluded that in no instance does BPA have the power to control the most significant operating and maintenance activities of these entities. Therefore, BPA is not the primary beneficiary and does not consolidate these entities. Additionally, BPA does not provide, and does not plan to provide, any additional financial support to these entities beyond what BPA is contractually obligated to pay. Thus, BPA has no exposure to loss on contracts with these VIEs. Expenses related to VIEs for which BPA is not the primary beneficiary were $9.5 million, $16.5 million and $20.6 million in fiscal years 2023, 2022 and 2021, respectively. These expenses were recorded to operations and maintenance as BPA management considers the related purchases to be part of the FCRPS resource pool.

10. Residential Exchange Program

BACKGROUND

In 1981 and as provided in the Northwest Power Act, BPA began to implement the Residential Exchange Program (REP) through various contracts with eligible regional utility customers. BPA's implementation of the REP has been the subject of various litigations and settlement agreements.

REP SCHEDULED AMOUNTS

As of Sept. 30 — millions of dollars		
2024	$	273.6
2025		273.6
2026		286.1
2027		286.1
2028		286.1
Subtotal of annual payments		1,405.5
Less: Discount for present value		106.3
IOU exchange benefits	$	1,299.2

2012 RESIDENTIAL EXCHANGE PROGRAM SETTLEMENT AGREEMENT

Beginning in April 2010, over 50 litigants and other regional parties entered into mediation to resolve numerous disputes over the REP. In fiscal year 2011 the parties reached a final settlement agreement – the 2012 Residential Exchange Program Settlement Agreement (2012 REP Settlement Agreement). As a result of the settlement, BPA recorded an associated long-term IOU exchange benefits liability and corresponding regulatory asset of $3.07 billion. Under the 2012 REP Settlement Agreement, the IOUs' REP benefits were determined for fiscal years 2012 - 2028 (also referred to herein as Scheduled Amounts). The Scheduled Amounts started at $182.1 million for fiscal year 2012 and increase over time to $286.1 million for fiscal year 2028. As provided in the 2012 REP Settlement Agreement, the Scheduled Amounts are established for each IOU based on the IOU's average system cost, its residential exchange load and BPA's applicable Priority Firm Exchange rate. The Scheduled Amounts total $4.07 billion over the 17-year period through fiscal year 2028, with remaining Scheduled Amounts as of Sept. 30, 2023, totaling $1.41 billion. Amounts recorded of $1.30 billion at Sept. 30, 2023, represent the present value of future cash outflows for these IOU exchange benefits.

11. Deferred Credits and Other

Deferred Credits and Other include the following items:

As of Sept. 30 — millions of dollars	2023	2022
Interconnection agreements	$ 248.3	$ 203.8
Phase 2 Implementation Plan (P2IP) Settlement Agreement	242.8	—
Deferred project revenue funded in advance	144.8	141.5
Third AC Intertie capacity agreements	82.6	86.1
Operating leases	75.0	66.7
Unearned revenue from customer deposits	66.0	37.8
Service deposits	48.2	58.1
Federal Employees’ Compensation Act	17.8	18.9
Fiber optic leasing fees	5.9	6.4
Other	2.6	3.9
Derivative instruments	1.8	11.0
Total	$ 935.8	$ 634.2

“**Interconnection agreements**” are advances for requested new network upgrades and interconnections. These advances accrue interest and will be returned as cash or credits against future transmission service on the new or upgraded lines.

“**Phase 2 Implementation Plan (P2IP) Settlement Agreement**” represents the undiscounted long-term portion of future payments to be made to certain Upper Columbia River tribes as agreed to in the P2IP Settlement Agreement signed in September 2023. Per the terms of the agreement, BPA will provide $10 million per year, beginning in fiscal year 2024 for the 20-year duration of the agreement, for a total of $200 million (adjusted for inflation). These funds are to be used to test the feasibility of, and ultimately reintroduce salmon in blocked habitats in the Upper Columbia River Basin. The Settlement Agreement became effective in October 2023 upon the dismissal of the related tribal litigation.

“Deferred project revenue funded in advance” consists of third-party advances received where BPA will own the resulting transmission assets. The balance is amortized as other revenue not with customers over the life of the assets, so that the balance prevents any stranded costs in case of impairment as prescribed by the transmission rate process.

“**Third AC Intertie capacity agreements**” reflect unearned revenue from customers related to the Third AC Intertie transmission line capacity project. Revenue is recognized over an estimated 51-year life of the related assets, which are generally added and retired each year. (See Note 2, Revenue Recognition.)

“**Operating leases**” consists of long-term lease liabilities. (See Note 4, Leases.)

“**Unearned revenue from customer deposits**” consists of advances received from customers for projects or studies undertaken at their request. Revenue is recognized as expenditures are incurred. (See Note 2, Revenue Recognition.)

“**Service deposits**” reflect required deposits for BPA products or services. The majority of these amounts are expected to be returned to the customer after a period of service. In certain cases, the deposits are considered prepayments, in which case they are recognized as revenue as per terms of the contract.

“**Federal Employees’ Compensation Act**” reflects the actuarial estimated amount of future payments for current recipients of BPA’s worker compensation benefits.

“**Fiber optic leasing fees**” reflect unearned revenue related to the leasing of fiber optic cables. BPA recognizes revenue over the lease terms, which extend through 2024. (See Note 2, Revenue Recognition.)

“**Derivative instruments**” reflect the unrealized loss of the derivative portfolio, which primarily includes physical power purchase and sale transactions.

12. Risk Management and Derivative Instruments

BPA is exposed to various forms of market risks related to commodity prices and volumes, counterparty credit and interest rates. Non-performance risk, which includes credit risk, is described in Note 13, Fair Value Measurements. BPA has formal risk management processes in place to manage agency risks, including the use of derivative instruments. The following sections describe BPA's exposure to and management of certain risks.

RISK MANAGEMENT

Due to the operational risk posed by fluctuations in river flows and electricity market prices, net revenues that result from underlying surplus or deficit energy positions are inherently uncertain. BPA's Risk Oversight Committee has responsibility for the oversight of market risk and determines the transactional risk policy and control environment at BPA. Through simulation and analysis of the hydro supply system, experienced business and risk managers install market price risk measures to capture additional market-related risks, including credit and event risk.

COMMODITY PRICE RISK AND VOLUMETRIC RISK

BPA has exposure to commodity price risk through fluctuations in electricity market prices that affect the value of energy bought and sold. Volumetric risk is the uncertainty of energy production from the hydro system. The combination of the two results in net revenue uncertainty. BPA routinely models commodity price risk and volumetric risk through parametric calculations, Monte Carlo simulations and general market observations to derive net revenues at risk, mark-to-market valuations, value at risk and other metrics as appropriate. These metrics capture the uncertainty around single point forecasts in order to monitor changes in the revenue risk profile from changes in market price, market price volatility and forecasted hydro generation. BPA measures and monitors the output of these methods on a regular basis. In order to mitigate revenue uncertainty that is beyond BPA's risk tolerance, BPA enters into short-term and long-term purchase and sale contracts by using instruments such as forwards, futures, swaps, and options.

CREDIT RISK

Credit risk relates to the loss that might occur as a result of counterparty non-performance. BPA mitigates credit risk by reviewing counterparties for creditworthiness, establishing credit limits and monitoring credit exposure. To further manage credit risk, BPA obtains credit support, such as letters of credit, parental guarantees, and cash in the form of prepayments, deposits or escrow funds, from some counterparties. BPA monitors counterparties for changes in financial condition and regularly updates credit reviews. BPA uses scoring models, publicly available financial information and external ratings from major credit rating agencies to determine appropriate levels of credit for its counterparties.

During fiscal year 2023, BPA experienced no material losses as a result of any customer defaults or bankruptcy filings. As of Sept. 30, 2023, BPA had $66 million in credit exposure related to purchase and sale contracts after taking into account netting rights. Of this $66 million, $61.6 million was related to investment grade counterparties and $4.3 million was related to sub-investment grade counterparties who provided letters of credit. The letters of credit serve as a guarantee arrangement and mitigate BPA's credit risk exposure to these counterparties.

INTEREST RATE RISK

BPA has the ability to issue variable rate bonds to the U.S. Treasury. BPA may manage the interest rate risk presented by variable rate U.S. Treasury debt by holding U.S. Treasury security investments with a similar maturity profile. Such investments may earn interest that is correlated, but typically lower than, the interest rate paid on U.S. Treasury variable rate debt.

DERIVATIVE INSTRUMENTS

Commodity Contracts

BPA's forward electricity contracts are eligible for the normal purchases and normal sales exception if they require physical delivery, are expected to be used or sold by BPA in the normal course of business and meet the derivative accounting definition of capacity described in the derivatives and hedging accounting guidance. Transactions for which BPA has elected the normal purchases and normal sales exception are not recorded at fair value in the financial statements. Recognition of these contracts in Sales or Purchased power in the Combined Statements of Revenues and Expenses occurs when the contracts are delivered and settled.

For derivative instruments recorded at fair value, BPA offsets unrealized gains and losses as Regulatory assets and Regulatory liabilities on the Combined Balance Sheets. Realized gains and losses are included in Sales and Purchased power in the Combined Statements of Revenues and Expenses when the contracts are delivered and settled.

When available, quoted market prices or prices obtained through external sources are used to measure a contract's fair value. For contracts without available quoted market prices, fair value is determined based on internally developed modeled prices. (See Note 13, Fair Value Measurements.)

As of Sept. 30, 2023, the derivative commodity contracts recorded at fair value totaled 3.8 million megawatt hours (MWh), gross basis, with delivery months extending to September 2024.

On the Combined Balance Sheets, BPA reports net fair value amounts of derivative instruments subject to a master netting arrangement (excluding contracts designated as normal purchases or normal sales) in accordance with ASC 210 and 815. In the event of default or termination, contracts with the same counterparty are offset and net settle through a single payment. BPA does not offset cash collateral against recognized derivative instruments with the same counterparty under the master netting arrangements.

If reported gross, BPA's derivative position would have resulted in assets of $51.9 million and $56.5 million, and liabilities of $2.2 million and $12.1 million as of Sept. 30, 2023, and 2022, respectively. (See Note 5, Effects of Regulation.)

13. Fair Value Measurements

BPA applies fair value measurements and disclosures accounting guidance to certain assets and liabilities including assets held in trust funds, commodity derivative instruments, debt and other items. BPA maximizes the use of observable inputs and minimizes the use of unobservable inputs when measuring fair value. Fair value is based on actively quoted market prices, if available. In the absence of actively quoted market prices, BPA seeks price information from external sources, including broker quotes and industry publications. If pricing information from external sources is not available, BPA uses forward price curves derived from internal models based on perceived pricing relationships to major trading hubs.

BPA also utilizes the following fair value hierarchy, which prioritizes the inputs to valuation techniques used to measure fair value, into three broad levels:

Level 1 – Quoted prices (unadjusted) in active markets for identical assets and liabilities that BPA has the ability to access at the measurement date. Instruments categorized in Level 1 primarily consist of financial instruments such as exchange-traded financial futures, fixed income investments, equity mutual funds and money market funds.

Level 2 – Inputs other than quoted prices included within Level 1 that are either directly or indirectly observable for the asset or liability, including quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in inactive markets, inputs other than quoted prices that are observable for the asset or liability, and inputs that are derived from observable market data by correlation or other means. Instruments categorized in Level 2 include certain non-exchange traded commodity derivatives and certain agency, corporate and municipal securities as part of the Lease-Purchase trust funds investments. Fair value for certain non-exchange traded derivatives is based on forward exchange market prices and broker quotes adjusted and discounted. Lease-Purchase trust funds investments are based on a market input evaluation pricing methodology using a combination of observable market data such as current market trade data, reported bid/ask spreads, and institutional bid information.

Level 3 – Unobservable inputs for the asset or liability, including situations where there is little, if any, market activity for the asset or liability.

The fair value hierarchy gives the highest priority to quoted prices in active markets (Level 1) and the lowest priority to unobservable data (Level 3). In some cases, the inputs used to measure fair value might fall in different levels of the fair value hierarchy. The lowest level input that is significant to a fair value measurement in its entirety determines the applicable level in the fair value hierarchy. Assessing the significance of a particular input to the fair value measurement in its entirety requires judgment, considering factors specific to the asset or liability.

BPA includes non-performance risk when calculating fair value measurements. This includes a credit risk adjustment based on the credit spreads of BPA’s counterparties when in an unrealized gain position. BPA’s assessment of non-performance risk is generally derived from the credit default swap market and from bond market credit spreads. The impact of the credit risk adjustments for all outstanding derivatives was immaterial to the fair value calculation at Sept. 30, 2023, and 2022. There were no transfers between Level 2 and Level 3 during fiscal years 2023 and 2022.

ASSETS AND LIABILITIES MEASURED AT FAIR VALUE ON A RECURRING BASIS

As of Sept. 30, 2023 — millions of dollars

	Level 1	Level 2	Level 3	Total
Assets				
Nonfederal nuclear decommissioning trusts				
Equity securities	$ 396.1	$ —	$ —	$ 396.1
Debt securities	66.4	—	—	66.4
Cash and cash equivalents	17.0	—	—	17.0
Lease-Purchase trust funds				
U.S. government obligations	—	2.6	—	2.6
Derivative instruments [1]				
Commodity contracts	0.1	40.3	11.1	51.5
Transmission line-related receivables	—	—	10.4	10.4
Total	$ 479.6	$ 42.9	$ 21.5	$ 544.0
Liabilities				
Derivative instruments [1]				
Commodity contracts	$ —	$ (1.8)	$ —	$ (1.8)
Total	$ —	$ (1.8)	$ —	$ (1.8)

As of Sept. 30, 2022 — millions of dollars

	Level 1	Level 2	Level 3	Total
Assets				
Nonfederal nuclear decommissioning trusts				
Equity securities	$ 337.8	$ —	$ —	$ 337.8
Debt securities	59.3	—	—	59.3
Cash and cash equivalents	17.5	—	—	17.5
Lease-Purchase trust funds				
U.S. government obligations	—	0.1	—	0.1
Derivative instruments [1]				
Commodity contracts	4.0	37.9	13.5	55.4
Total	$ 418.6	$ 38.0	$ 13.5	$ 470.1
Liabilities				
Derivative instruments [1]				
Commodity contracts	$ —	$ (10.0)	$ (1.0)	$ (11.0)
Total	$ —	$ (10.0)	$ (1.0)	$ (11.0)

[1] Derivative instruments assets and liabilities are included in Deferred charges and other and Deferred credits and other, respectively, on the Combined Balance Sheets. See Note 12, Risk Management and Derivative Instruments for more information related to BPA's risk management strategy and use of derivative instruments.

Commodity contracts assets and liabilities classified as Level 3 consist of instruments for which fair value is derived using one or more significant inputs that are not observable for the entire term of the instrument. These instruments consist of power contracts measured at fair value on a recurring basis using the California-Oregon Border (COB) forward price curves. They include power contracts delivering to illiquid trading points or contracts without available market transactions for the entire delivery period. Forward prices are considered a key component to contract valuations. All valuation pricing data is generated internally by BPA's risk management organization.

Quantitative information regarding the only significant unobservable input used in the measurement of Level 3 commodity contract assets and liabilities is presented below:

	Fair Value		Valuation Technique	Significant Unobservable Input	Range (per MWh)		
	Assets[1]	Liabilities[1]			Low	High	Weighted Average
	(in millions)						
As of Sept. 30, 2023							
Physical forward power contracts	$ 11.1	$ —	Discounted cash flow	Electricity forward price	$ 48.1	$ 183.8	$ 124.3
As of Sept. 30, 2022							
Physical forward power contracts	$ 13.5	$ (1.0)	Discounted cash flow	Electricity forward price	$ 36.2	$ 180.3	$ 112.0

[1] The valuation techniques, unobservable inputs and ranges are the same for asset and liability positions.

The significant unobservable input listed above is used by the risk management organization to construct the fair value through the use of available market prices, broker quotes and bid/offer spreads. In periods where market prices or broker quotes are not available, the risk management organization derives monthly prices by applying seasonal shaping based on historical broker quotes and spreads. Long-term prices are derived from internally developed or commercial models with both internal and external data inputs. BPA management believes this approach maximizes the use of pricing information from external sources and is currently the best option for valuation. Significant increases or decreases in the inputs would result in significantly higher or lower fair value measurements.

Forward power prices are influenced by, among other factors, the price of natural gas, seasonality, hydro forecasts, expectations of demand growth, and planned changes in the regional generating plants.

Transmission line-related receivables classified as Level 3 consist of a set of contracts executed between BPA and IPC governing the Purchase, Sale and Security provisions related to the transfer of BPA's permitting interest share in the proposed Boardman-to-Hemingway transmission line to IPC. (For further information on this transaction, see Note 7, Deferred Charges and Other.) These contracts determine whether, when and how much of BPA's contributions towards project security, initial design and permitting will be returned to BPA.

Significant unobservable inputs related to the Transmission line-related receivable asset are the occurrence of certain contingent contractual provisions and the energization of the underlying transmission line. These assessments result in expectations concerning specific future cash flows, which are currently estimated to occur between 2026 and 2046.

The following table presents the changes in the assets and liabilities measured at fair value on a recurring basis and included in the Level 3 fair value category.

As of Sept. 30 — millions of dollars	2023	2022
Beginning Balance	$ 12.5	$ (15.2)
Changes in unrealized gains (losses)[1]	(1.4)	27.7
Transmission line-related receivables additions	10.4	—
Ending Balance	$ 21.5	$ 12.5

[1] Unrealized gains and losses are included in Regulatory assets and Regulatory liabilities on the Combined Balance Sheets. Realized gains and losses are included in Sales and Purchased power, respectively, in the Combined Statements of Revenues and Expenses.

DEBT

As of Sept. 30 — millions of dollars	2023		2022	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Nonfederal Debt				
Nonfederal generation:				
Columbia Generating Station	$ 3,381.9	$ 3,229.6	$ 3,295.9	$ 3,182.8
Cowlitz Falls Project	52.0	56.4	56.4	61.6
Terminated nonfederal generation:				
Nuclear Project 1	837.5	832.6	824.1	832.7
Nuclear Project 3	970.6	987.1	950.3	995.0
Northern Wasco Hydro Project	3.6	3.6	5.3	5.4
Lease-Purchase Program:				
Lease-purchase liability	1,766.8	1,372.2	1,838.3	1,475.3
NIFC debt	119.1	118.7	119.0	125.6
Other financial liability	16.0	8.5	16.5	9.0
Customer prepaid power purchases	139.2	139.2	163.0	163.0
Federal debt				
Borrowings from U.S. Treasury	$ 5,783.8	$ 4,756.6	$ 5,678.7	$ 4,907.9

The fair value measurements described above are considered Level 2 in the fair value hierarchy.

The fair value of Nonfederal debt, excluding Other financial liability and Customer prepaid power purchases, is primarily based on a market input evaluation pricing methodology using a combination of market observable data such as current market trade data, reported bid/ask spreads and institutional bid information.

The fair value of Other financial liability is based upon discounted future cash flows using estimated interest rates for similar debt that could have been issued at Sept. 30, 2023, and 2022.

The opportunity to participate in the Customer prepaid power purchase program was made to a subset of BPA's power customers with repayment terms through billing credits extending to fiscal year 2028. Management believes that the customer prepaid power purchases are specific to BPA's operating environment and are nontransferable. As a result, the carrying value of customer prepaid power purchases is equal to its fair value.

The fair value of Borrowings from U.S. Treasury is based on discounted future cash flows using interest rates for similar debt that could have been issued at Sept. 30, 2023, and 2022.

The table above does not include Finance lease liabilities, a component of BPA's nonfederal debt. See Note 8, Debt and Appropriations, for the full carrying value of BPA's debt portfolio.

14. Commitments and Contingencies

INTEGRATED FISH AND WILDLIFE PROGRAM

The Northwest Power Act directs BPA to protect, mitigate and enhance fish and wildlife and their habitats to the extent they are affected by the federal hydroelectric projects on the Columbia River and its tributaries from which BPA markets power. BPA makes expenditures and incurs other costs for fish and wildlife protection and mitigation that are consistent with the purposes of the Northwest Power Act and the Pacific Northwest Power and Conservation Council's Columbia River Basin Fish and Wildlife Program. In addition, certain fish and wildlife species that inhabit the Columbia River Basin are listed under the Endangered Species Act (ESA) as threatened or endangered. BPA makes expenditures and incurs other costs related to power purposes to comply with the ESA and implement certain biological opinions (BiOp) prepared by the National Oceanic and Atmospheric Administration Fisheries Service and the U.S. Fish and Wildlife Service in furtherance of the ESA (including results from the Columbia River System Operations (CRSO) Environmental Impact Statement). BPA's total commitment including timing of payments under the Northwest Power Act, ESA and BiOp, including CRSO Environmental Impact Statement impacts, is not fixed or determinable.

As of Sept. 30, 2023, BPA has long-term fish and wildlife agreements with estimated contractual commitments of $649.3 million, which are likely to result in future expenses or regulatory assets. These agreements will expire at various dates through fiscal year 2027 and include the Columbia Basin Fish Accords extension agreements, which are described below.

BPA and its federal partners, USACE and Reclamation, have signed extension agreements with current Accords partners, namely certain states and tribes, to extend the Columbia Basin Fish Accords through Sept. 30, 2025. The Accords and associated BPA funding commitments facilitate implementation of projects that provide BPA with legal compliance actions under applicable laws, including the Northwest Power Act and Endangered Species Act, and that benefit Columbia River Basin fish and wildlife. The extension agreements commit approximately $409 million for fish and wildlife protection and mitigation, which will result in future expenses or regulatory assets.

IRRIGATION ASSISTANCE

Scheduled distributions

Years ended Sept. 30 — millions of dollars		
2024	$	8.3
2025		13.2
2026		20.7
2027		6.4
2028		11.6
2029 through 2045		174.7
Total	$	234.9

As directed by law, BPA is required to establish rates sufficient to make distributions to the U.S. Treasury for original construction costs of certain Pacific Northwest irrigation projects for which the costs have been determined to be beyond the irrigators' ability to pay. These irrigation distributions do not specifically relate to power generation. In establishing power rates, particular statutory provisions guide the assumptions that BPA makes as to the amount and timing of such distributions. Accordingly, these distributions are not considered to be regular operating costs of the power program and are treated as distributions from accumulated net revenues when paid. Future irrigation assistance payments are scheduled to total $234.9 million over a maximum of 66 years since the time the irrigation facilities were completed and placed in service. BPA is required by the Grand Coulee Dam - Third Powerplant Act to demonstrate that reimbursable costs of the FCRPS will be returned to the U.S. Treasury from BPA within the period prescribed by law. BPA is required to make a similar demonstration for the costs of irrigation projects to the extent the costs have been determined to be beyond the irrigators’ ability to repay. These requirements are met by conducting power repayment studies including schedules of distributions at the proposed rates to demonstrate repayment of principal within the allowable repayment period. Irrigation assistance excludes $40.3 million for Teton Dam, which failed prior to completion and for which BPA has no obligation to repay.

FIRM PURCHASE POWER COMMITMENTS

Years ended Sept. 30 — millions of dollars		
2024	$	49.9
2025		47.5
2026		44.5
Total	$	141.9

BPA periodically enters into long-term commitments to purchase power for future delivery. When BPA forecasts a resource shortage, based on its planned contractual obligations for a period and the historical water record for the Columbia River basin, BPA takes a variety of operational and business steps to cover a potential shortage including entering into power purchase commitments. Additionally, under BPA's current Tiered Rates Methodology and its current Regional Dialogue power sales contracts, BPA's customers may request that BPA meet their power requirements in excess of the Rate Period High Water Mark load under their contract. For these Above High Water Mark load requests, BPA may meet such requests by entering into power purchase commitments.

The preceding table includes firm purchase power agreements that are currently in place to assist in meeting expected future obligations under BPA’s current long-term power sales contracts. Included are three purchases to meet load obligations in Idaho. Power purchase agreements to satisfy load obligations in Idaho utilize variable pricing. Variable pricing arrangements are based on the current market price of energy on the date of delivery. The expenses associated with the Idaho purchases were $74.9 million, $7.6 million and $83.7 million for fiscal years 2023, 2022 and 2021, respectively. BPA has several other purchase agreements with wind-powered and other generating facilities that are not included in the preceding table as payments are based on the variable amount of future energy generated and as there are no minimum payments required.

ENERGY EFFICIENCY PROGRAM

BPA is required by the Northwest Power Act to meet the net firm power load requirements of its customers in the Pacific Northwest. BPA is authorized to help meet its net firm power load through the acquisition of electric conservation. BPA makes available a portfolio of initiatives and infrastructure support activities to its customers to ensure the conservation targets established in the Northwest Power and Conservation Council’s then-current Power Plan are achieved. The Council released the 2021 Northwest Power Plan in fiscal year 2022. These initiatives and activities are often executed via conservation commitments made by BPA to its customers through agreements with utility customers and contractors that provide support in the way of energy efficiency program research, development and implementation. The timing of the payments under these commitments is not fixed or determinable, and these agreements will expire at various dates through fiscal year 2028. Conservation-related expenses are recorded to operations and maintenance expense as incurred.

1989 ENERGY NORTHWEST LETTER AGREEMENT

In 1989, BPA agreed with Energy Northwest that, in the event any participant shall be unable for any reason, or shall fail or refuse, to pay to Energy Northwest any amount due from such participant under its net billing agreement for which a net billing credit or cash payment to such participant has been provided by BPA, BPA will be obligated to pay the unpaid amount in cash directly to Energy Northwest. As of Sept. 30, 2023, and 2022, no amounts have been accrued related to this agreement.

NUCLEAR INSURANCE

BPA is a member of Nuclear Electric Insurance Limited (NEIL), a mutual insurance company established to provide insurance coverage for nuclear power plants. The insurance policies purchased from NEIL by BPA for CGS include: 1) Primary Property and Decontamination Liability Insurance; 2) Excess Property, Excess Decontamination Liability and Decommissioning Liability Insurance; and 3) NEIL I Accidental Outage Insurance.

Under each insurance policy, BPA could be subject to a retrospective premium assessment in the event that a member-insured loss exceeds reinsurance and reserves held by NEIL. The maximum assessment for the Primary Property and Decontamination Liability Insurance policy is $19.3 million. For the Excess Property, Excess Decontamination Liability and Decommissioning Liability Insurance policy, the maximum assessment is $7.1 million. For the NEIL I Accidental Outage Insurance policy, the maximum assessment is $5.7 million.

Additionally, in the event of a nuclear accident resulting in public liability losses exceeding $450 million under the Nuclear Regulatory Commission's indemnity for public liability coverage under the Price-Anderson Act, BPA could be subject to a retrospective assessment of up to $165.9 million limited to $24.7 million per incident within one calendar year. Assessments would be included in BPA's costs and recovered through rates. As of Sept. 30, 2023, there have been no assessments payable by BPA under any of these events.

ENVIRONMENTAL MATTERS

From time to time there are sites for which BPA, the USACE or Reclamation may be identified as potential responsible parties. Costs associated with cleanup of sites are not expected to be material to the FCRPS financial statements. As such, no material liability has been recorded.

INDEMNIFICATION AGREEMENTS

BPA, USACE and Reclamation have provided indemnifications of varying scope and terms in contracts with customers, vendors, lessors, trustees, and other parties with respect to certain matters including, but not limited to, losses arising out of particular actions taken on behalf of the FCRPS, certain circumstances related to Energy Northwest Projects, and in connection with lease-purchases. Because of the absence of a maximum obligation in the provisions, management is not able to reasonably estimate the overall maximum potential future payments. Based on historical experience and current evaluation of circumstances, management believes that as of Sept. 30, 2023, the likelihood is remote that the FCRPS would incur any significant costs with respect to such indemnities. No liability has been recorded in the financial statements with respect to these indemnification provisions.

RESERVES DISTRIBUTION CLAUSE

The Reserves Distribution Clause (RDC) is a rate adjustment mechanism that triggers if reserves for risk levels exceed certain cash on hand targets at September 30 for Power Services or Transmission Services. Terms of the RDC are discussed in the BP-24 and BP-22 rate cases, which state that the BPA Administrator shall consider amounts for investment in business-line specific purposes including debt reduction, incremental capital investment, rate reduction, or other Power- or Transmission-specific purposes determined by the Administrator.

Based on fiscal year 2023 financial results and year-end reserves for risk levels for both Power and Transmission Services, an RDC is expected to occur for application in fiscal year 2024. BPA's Administrator will determine final amounts and use of the fiscal year 2024 Power and Transmission RDC by Dec. 15, 2023, with application of most RDC actions likely to occur between December and September of fiscal year 2024. As of Sept. 30, 2023, no liability has been accrued for the RDC.

Based upon fiscal year 2022 financial results and year-end reserves for risk levels for both Power and Transmission Services, an RDC occurred for application to fiscal year 2023 power and transmission rate levels. Final determination of the amounts and use of the fiscal year 2023 Power and Transmission RDC occurred during fiscal year 2023, and application of most RDC actions occurred between December and September of fiscal year 2023. As of Sept. 30, 2022, no liability had been accrued for the RDC.

LITIGATION

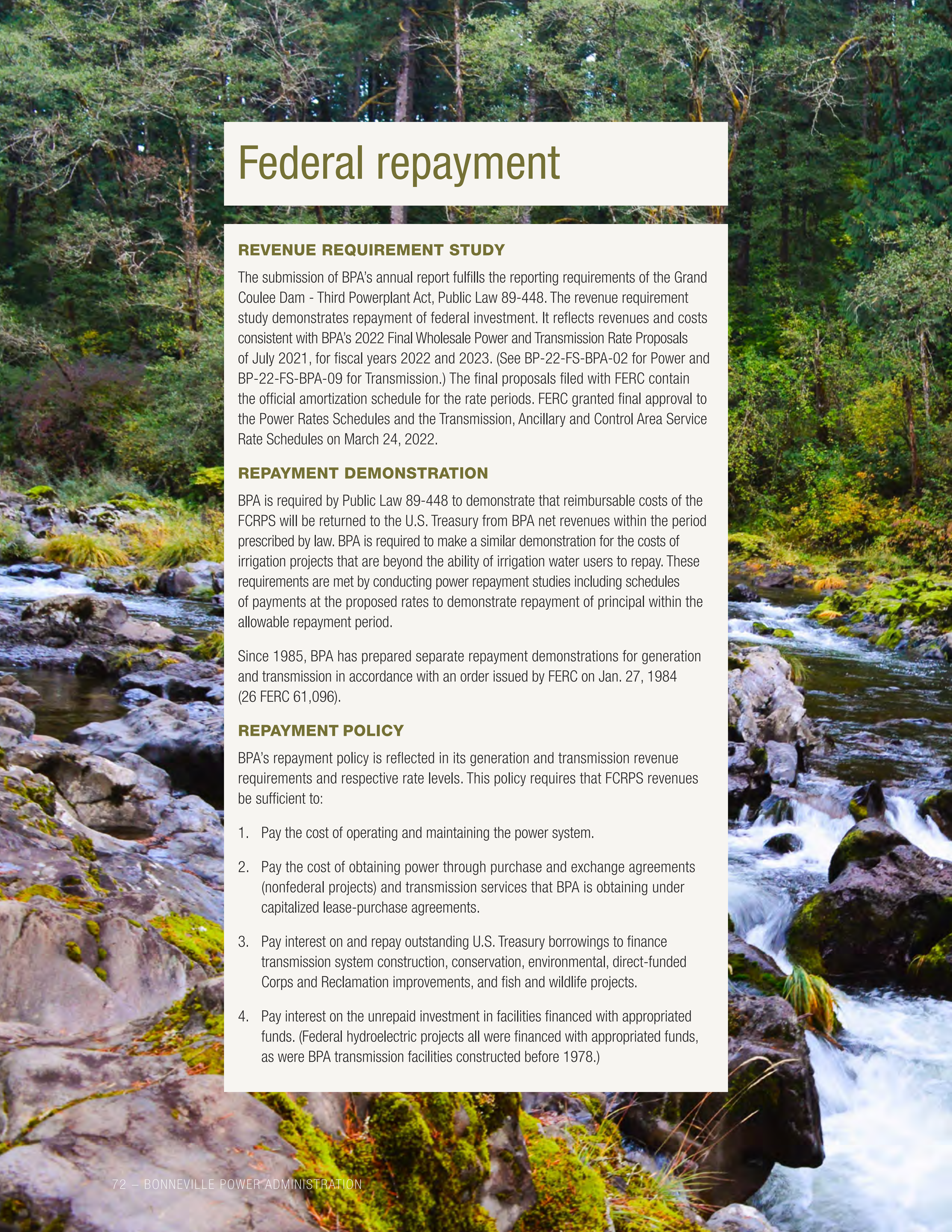
Rates

BPA's rates are frequently the subject of litigation. Most of the litigation typically involves claims that BPA's rates are inconsistent with statutory directives, are not supported by substantial evidence in the record, or are arbitrary and capricious. It is the opinion of BPA's general counsel that if any rate were to be rejected, the remedy accorded would be a remand to BPA to establish a new rate. BPA's flexibility in establishing rates could be restricted by the rejection of a BPA rate, depending on the grounds for the rejection. BPA is unable to predict, however, what new rate it would establish if a rate were rejected. If BPA were to establish a rate that was lower than the rejected rate, a petitioner may be entitled to a refund in the amount overpaid; however, BPA is required by law to set rates to meet all of its costs. Thus, it is the opinion of BPA's general counsel that BPA may be required to increase its rates to seek to recover the amount of any such refunds, if needed.

Other

The FCRPS may be affected by various other claims, actions and complaints, including claims regarding litigation under the Endangered Species Act, which may include BPA as a named party. Certain of these cases may involve material amounts including operational changes at FCRPS federal dams that may restrict hydroelectric generation. Management is unable to predict whether the FCRPS will avoid adverse outcomes in these legal matters.

Judgments and settlements are included in FCRPS costs and recovered through rates. As of Sept. 30, 2023, no material liability has been recorded for the above legal matters.



Federal repayment

REVENUE REQUIREMENT STUDY

The submission of BPA's annual report fulfills the reporting requirements of the Grand Coulee Dam - Third Powerplant Act, Public Law 89-448. The revenue requirement study demonstrates repayment of federal investment. It reflects revenues and costs consistent with BPA's 2022 Final Wholesale Power and Transmission Rate Proposals of July 2021, for fiscal years 2022 and 2023. (See BP-22-FS-BPA-02 for Power and BP-22-FS-BPA-09 for Transmission.) The final proposals filed with FERC contain the official amortization schedule for the rate periods. FERC granted final approval to the Power Rates Schedules and the Transmission, Ancillary and Control Area Service Rate Schedules on March 24, 2022.

REPAYMENT DEMONSTRATION

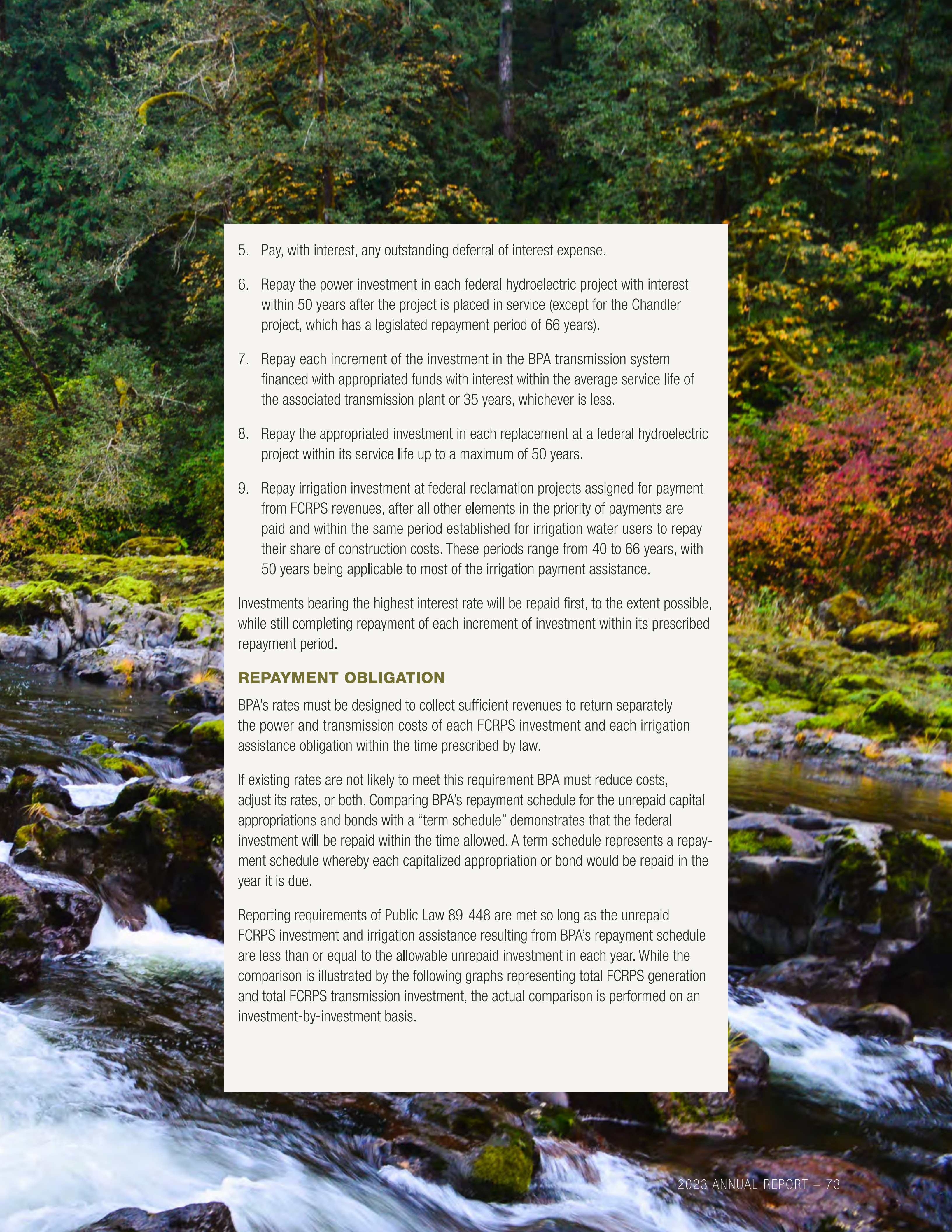
BPA is required by Public Law 89-448 to demonstrate that reimbursable costs of the FCRPS will be returned to the U.S. Treasury from BPA net revenues within the period prescribed by law. BPA is required to make a similar demonstration for the costs of irrigation projects that are beyond the ability of irrigation water users to repay. These requirements are met by conducting power repayment studies including schedules of payments at the proposed rates to demonstrate repayment of principal within the allowable repayment period.

Since 1985, BPA has prepared separate repayment demonstrations for generation and transmission in accordance with an order issued by FERC on Jan. 27, 1984 (26 FERC 61,096).

REPAYMENT POLICY

BPA's repayment policy is reflected in its generation and transmission revenue requirements and respective rate levels. This policy requires that FCRPS revenues be sufficient to:

1. Pay the cost of operating and maintaining the power system.
2. Pay the cost of obtaining power through purchase and exchange agreements (nonfederal projects) and transmission services that BPA is obtaining under capitalized lease-purchase agreements.
3. Pay interest on and repay outstanding U.S. Treasury borrowings to finance transmission system construction, conservation, environmental, direct-funded Corps and Reclamation improvements, and fish and wildlife projects.
4. Pay interest on the unrepaid investment in facilities financed with appropriated funds. (Federal hydroelectric projects all were financed with appropriated funds, as were BPA transmission facilities constructed before 1978.)



5. Pay, with interest, any outstanding deferral of interest expense.
6. Repay the power investment in each federal hydroelectric project with interest within 50 years after the project is placed in service (except for the Chandler project, which has a legislated repayment period of 66 years).
7. Repay each increment of the investment in the BPA transmission system financed with appropriated funds with interest within the average service life of the associated transmission plant or 35 years, whichever is less.
8. Repay the appropriated investment in each replacement at a federal hydroelectric project within its service life up to a maximum of 50 years.
9. Repay irrigation investment at federal reclamation projects assigned for payment from FCRPS revenues, after all other elements in the priority of payments are paid and within the same period established for irrigation water users to repay their share of construction costs. These periods range from 40 to 66 years, with 50 years being applicable to most of the irrigation payment assistance.

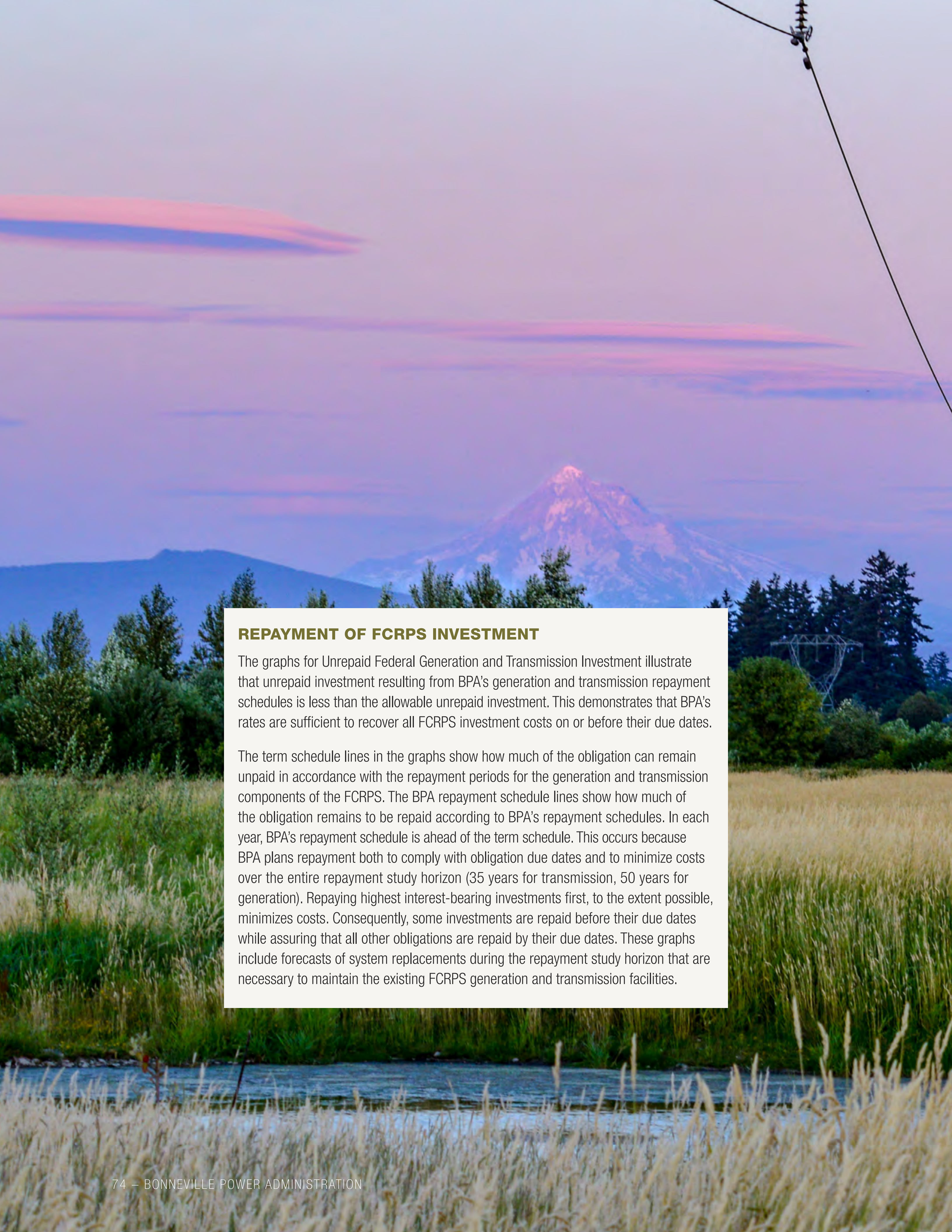
Investments bearing the highest interest rate will be repaid first, to the extent possible, while still completing repayment of each increment of investment within its prescribed repayment period.

REPAYMENT OBLIGATION

BPA's rates must be designed to collect sufficient revenues to return separately the power and transmission costs of each FCRPS investment and each irrigation assistance obligation within the time prescribed by law.

If existing rates are not likely to meet this requirement BPA must reduce costs, adjust its rates, or both. Comparing BPA's repayment schedule for the unrepaid capital appropriations and bonds with a "term schedule" demonstrates that the federal investment will be repaid within the time allowed. A term schedule represents a repayment schedule whereby each capitalized appropriation or bond would be repaid in the year it is due.

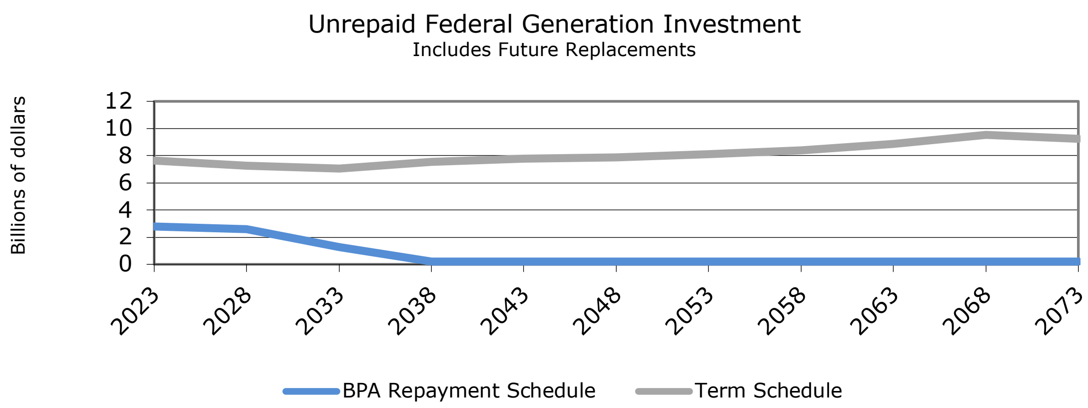
Reporting requirements of Public Law 89-448 are met so long as the unrepaid FCRPS investment and irrigation assistance resulting from BPA's repayment schedule are less than or equal to the allowable unrepaid investment in each year. While the comparison is illustrated by the following graphs representing total FCRPS generation and total FCRPS transmission investment, the actual comparison is performed on an investment-by-investment basis.

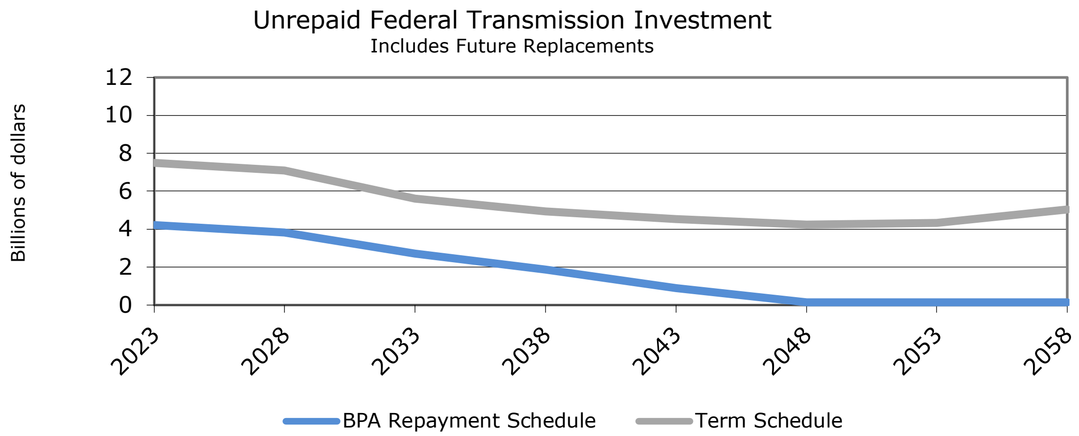


REPAYMENT OF FCRPS INVESTMENT

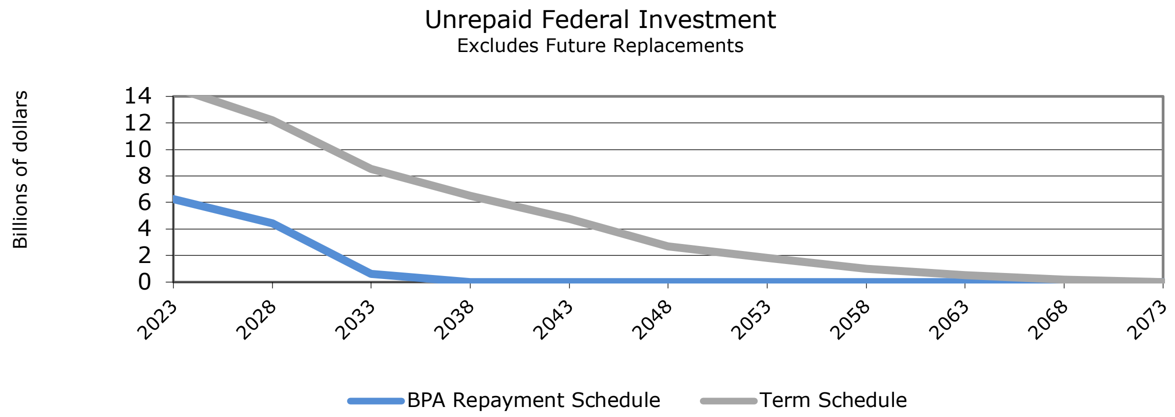
The graphs for Unrepaid Federal Generation and Transmission Investment illustrate that unrepaid investment resulting from BPA's generation and transmission repayment schedules is less than the allowable unrepaid investment. This demonstrates that BPA's rates are sufficient to recover all FCRPS investment costs on or before their due dates.

The term schedule lines in the graphs show how much of the obligation can remain unpaid in accordance with the repayment periods for the generation and transmission components of the FCRPS. The BPA repayment schedule lines show how much of the obligation remains to be repaid according to BPA's repayment schedules. In each year, BPA's repayment schedule is ahead of the term schedule. This occurs because BPA plans repayment both to comply with obligation due dates and to minimize costs over the entire repayment study horizon (35 years for transmission, 50 years for generation). Repaying highest interest-bearing investments first, to the extent possible, minimizes costs. Consequently, some investments are repaid before their due dates while assuring that all other obligations are repaid by their due dates. These graphs include forecasts of system replacements during the repayment study horizon that are necessary to maintain the existing FCRPS generation and transmission facilities.





The Unrepaid Federal Investment graph displays the total planned unrepaid FCRPS obligations compared to allowable total unrepaid FCRPS investment, omitting future system replacements. This demonstrates that each FCRPS investment through 2023 is scheduled to be returned to the U.S. Treasury within its repayment period and ahead of due dates.



If, in any given year, revenues are not sufficient to cover all cash needs including interest, any deficiency becomes an unpaid annual expense. Interest is accrued on the unpaid annual expense until paid. This must be paid from subsequent years' revenues before any repayment of federal appropriations can be made.

LEADERSHIP

Enterprise Board members as of Sept. 30, 2023

John Hairston, Administrator and Chief Executive Officer

Center, speaking at the Washington, D.C., event "Supporting Tribally-led Salmon Reintroduction Effort in the Upper Columbia Basin," Sept. 21, 2023. From left: Jarred-Michael Erickson, Chairman, Confederated Tribes of the Colville Reservation; Hemene James, Vice Chair, Coeur d'Alene Tribe; Deb Haaland, Secretary, U.S. Department of Interior; Right: Richard W. Spinrad, Ph.D., Under Secretary of Commerce for Oceans and Atmosphere & Administrator, NOAA; and Greg Abrahamson, Chairman, Spokane Tribe of Indians.

Joel Cook, Chief Operating Officer

Robin Furrer, Chief Administrative Officer

Dan James, Chief Workforce and Strategy Officer

Suzanne Cooper, Senior Vice President, Power Services

Richard Shaheen, Senior Vice President, Transmission Services

Scott Armentrout, Executive Vice President, Environment, Fish and Wildlife

Tom McDonald, Executive Vice President, Compliance, Audit and Risk Management

Ben Berry, Executive Vice President, Information Technology

Marcus Chong Tim, Executive Vice President, General Counsel

Marcus Harris, Executive Vice President and Chief Financial Officer

Lizá Rosa, Director, Human Resources Service Center

Sonya Baskerville, Director, Intergovernmental Affairs and Regional Relations

Nita Zimmerman, Chief Business Transformation Officer

Joel Scruggs, Director, Communications

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