Integrated Program Review

Initial Publication, June 2024

This document and the information contained within was made publicly available on June 25, 2024, and contains information sourced directly and not directly from BPA financial statements. Figure 19 was updated on Aug. 14 to correctly align with the detailed data file Table 3-A.

Letter from the Administrator

The Bonneville Power Administration (BPA) invites you to participate in the BP-26 Integrated Program Review (IPR). The IPR is an opportunity to review and comment on BPA's estimates of projected capital and expense costs for the next rate period, covering fiscal years 2026, 2027 and 2028.

This three-year rate period is designed to span the final years of long-term Regional Dialogue contracts. This will be a transformative time as we usher in a new era of long-term power sales agreements and make headway on other elements of our 2024-2028 Strategic Plan. Our strategy provides a framework for BPA to remain competitive as we enhance reliability, respond to changing customer needs, strengthen resilience in the changing landscape, and continue our long-standing commitment to environmental stewardship. These strategic priorities have informed our initial spending forecasts.

A central component of our strategy is an ongoing commitment to financial strength, with the ultimate goal of providing stable, competitive power and transmission rates over the long term. We have demonstrated this commitment since establishing our Financial Plan in 2018. Notably, from BP-18 to BP-24, BPA's diligent financial practices allowed the agency to perform all of its duties at an overall cost-level substantially below the rate of inflation for the same period, with Power seeing only a 4% increase, an annual average of 0.6%, and 15% for Transmission, an annual average of 2.4%.

BPA will continue to manage the costs of operating the federal system, consistent with our mission objectives and statutory obligations, while also recognizing that cost-management requires balancing varied priorities and obligations. This challenge is compounded by the significant work associated with the agency's new strategic priorities, as well as forecast inflation and other cost pressures.

Taking all of these factors into consideration, BPA is forecasting cost increases relative to BP-24 in several key areas:

- **Transmission expansion**: Asset management investments, including those to expand the grid, make up the largest projected increase in Transmission's IPR cost forecast. Investments are necessary to meet the growing needs of our customers as they seek a transmission system that provides access to clean energy and enables increasing load growth and economic development.
- Generating Resources: Projected increases support reliable and efficient operations for BPA's generating partners by addressing inflationary pressures, enabling high-priority non-routine maintenance and maintaining equipment for continued reliability. BPA is also focused on making essential investments in long-term generation reliability and increased capacity by ramping up the federal hydro capital program to reach \$300 million annually.
- Information technology: IT investments are essential to BPA's mission delivery and achievement of all other strategic goals. Investments in BP-26 place a heavy emphasis on cybersecurity, including continuous monitoring capabilities to mitigate threats, as well as operational resilience, situational awareness and other areas to address risks to critical infrastructure and support the delivery of reliable, resilient power and transmission services.
- Environmental stewardship: Increases in Environment, Fish and Wildlife spending will support necessary investments in new and existing mitigation assets as well as inflationary pressures on

existing program costs. In addition, expected funding increases will allow BPA to satisfy its contractual commitments under new agreements with states and Tribes.

• Workforce: BPA is planning to strengthen its workforce to deliver on the expanded work envisioned in the Strategic Plan. Over the last 10 years, BPA has absorbed new workload without significant increases in overall staffing levels, and we have exhausted opportunities for additional efficiencies. This investment is essential to meeting mission and strategic objectives and ultimately to BPA's long-term success.

Overall, BP-26 program costs for the Power business line are projected to grow by an average of 6.9%, or \$105 million per year; and Transmission business line costs are projected to grow an average of 10.5%, or \$70 million per year. While this exceeds the average inflation rate of 3.4% from BP-24 to BP-26, the risk of not doing this work could be far more costly. By investing in these priorities now, BPA will be able to deliver far greater value for our customers and the region well into the future. In addition, while the cost increases are above inflation in the current period, the overall program cost increases since 2018 are below the rate of inflation.

These cost estimates are preliminary and are one of many components that will be used to develop BP-26 power and transmission rates.

I'm looking forward to an open, constructive dialogue through the upcoming IPR workshops to best inform our cost forecast. And I greatly appreciate your engagement and support as we work to sustain BPA's role as a leader in clean energy, adapting to new demands and helping our customers and the region thrive in this era of change.

Sincerely,

John Hairston BPA Administrator and CEO

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1 Introduction

BPA conducts the Integrated Program Review (IPR) process before each rate case to provide an opportunity for interested parties to review and comment on the projected estimates of program expenses and capital costs. The BP-26 IPR and Rate Case covers the three fiscal years (FY) from 2026-2028 (hereafter referred to as "upcoming rate period") to enable rate-setting through the end of the Regional Dialogue Contracts.

The cost estimates resulting from this process are one component of assumptions and factors that will be used to develop the power and transmission rates for the BP-26 Rate Case. All other costs considered in the rate-setting process are out of the scope of the IPR and are shown in blue in Figure 1 below.



Figure 1: The Rate-Setting Process

Because both expense and capital forecasts are included in power and transmission rates, BPA's priority for IPR is to ensure that cost estimates are sufficient and reasonable to cover, on a forecast basis, BPA's operations during the upcoming rate period, as well as BPA's mission objectives and statutory obligations. Although the IPR provides a reasonable forecast of costs, as stated in Section 8, BPA retains the ability to refine and adjust spending during the actual year of operations as needed. This allows for the most efficient use of resources to meet mission objectives and the ability to adjust estimates if some costs are higher or lower than anticipated in the IPR.

1.1 Initial IPR

The expense and capital forecasts included in this Initial IPR publication are guided by BPA's Strategic Plan and reflect planning to deliver on the operational objectives contained in the strategy and BPA's Financial Plan.

1.2 Expense

Since adopting the 2018 Financial Plan, BPA has worked toward an aspirational goal to hold its program costs at or below the rate of inflation.

While BPA continues its focus on managing its costs, these IPR cost estimates account for continuing upward cost pressures, growing customer demands, and new initiatives intended to position BPA for long-term success. In particular, BPA has forecast substantial new investments in transmission infrastructure, information technology and market expansion to deliver on BPA's Strategic Plan goals. Combined, these efforts result in more significant cost increases than in recent periods.

Overall, the BP-26 forecast of program costs grew by 6.9% per year for the Power business line and 10.5% per year for the Transmission business line. Table 1 shows these forecasts in dollar amounts.

(\$millions)	Average BP-24 Rate Case	Average BP-26 Initial IPR	IPR vs Rate Case Over (Under)	
Power IPR Expense	1,409	1,674	265	
Transmission IPR Expense	594	775	180	
Total	2,003	2,449	445	

Table 1: IPR Expense Summary

For the Power business line, the average BP-26 forecast costs are \$265 million above the average BP-24 forecast. Historically, Power Services' IPR costs decreased in BP-20, were flat in BP-22, and increased 3.7% for BP-24, which is substantially lower than inflationary pressure over the same period. Projected cost increases are driven by the forecast needs of BPA's generating partners and other investments consistent with BPA's strategic plan, including support for information technology, the Chief Administrative Office, the Fish and Wildlife (F&W) Program, and other labor costs.

For the Transmission business line, the average BP-26 forecast costs are \$180 million above the average BP-24 forecast. From BP-18 to BP-24, Transmission IPR costs have increased by a total of 15%, which is substantially lower than inflationary pressure over the same period. Projected cost increases align with BPA's Strategic Plan, including by supporting growth of the transmission system, information technology, wildfire mitigation, cybersecurity, and investment in BPA's workforce.

1.3 Expense Program Priorities for IPR

The BP-26 IPR program expense forecast is guided by organizational priorities aligned with BPA's Strategic Plan. This alignment enables BPA to assure its mission

deliverables while meeting other priorities. The main drivers of BPA's expense forecasts for the BP-26 IPR are investing in:

- Transmission expansion
- Generating resources
- Information technology
- Environmental stewardship, including investments in the F&W Program
- BPA's Strategic Plan
- BPA's workforce

Transmission expansion: In response to fundamental changes in the utility industry driven by regional decarbonization goals and a changing resource mix, BPA has committed to explore the construction of new transmission projects. Through the Evolving Grid Initiative and changes in the interconnection queue, BPA is pursuing multiple efforts to support the region and the needs of our customers. To support these efforts, BPA is investing in additional staff and other resources that are reflected in the forecast costs included in IPR.

Generating resources: BPA works collaboratively with the U.S. Army Corps of Engineers (USACE), U.S. Bureau of Reclamation (USBOR), and Energy Northwest to safely administer a sustainable asset management program that focuses on generating low-cost, reliable power while supporting the multipurpose missions of each entity. The forecast includes increases to support rising labor costs, ensuring safety, and preserving the long-term reliability of the Federal Columbia River Power System (FCRPS).

Information technology: BPA is continuing to invest in information technology to support existing systems and tools, and to implement new systems that support business objectives and achieve compliance with IT and cybersecurity requirements.

Environmental stewardship, including investments in the F&W Program: BPA is projecting an 11% increase in fish and wildlife costs for BP-26. The forecast cost increases across the program result from necessary investments in new and existing mitigation assets, inflationary pressures on existing program costs, and new fish and wildlife agreements with states and Tribes. These new agreements include the Resilient Columbia Basin Agreement, the Memorandum of Understanding and Mediated Settlement Agreement related to the Phase 2 Implementation Plan, and Accords with the Coeur d'Alene Tribe and the Spokane Tribe of Indians. (Note: due to the nature of the funding, some of these costs are not included in IPR projections, but nonetheless will be accounted for and recovered in the subsequent power rate process.)

BPA's Strategic Plan: As discussed in Section 2, BPA is investing resources across all departments to execute BPA's Strategic Plan.

BPA's workforce: BPA is continuing its focus on strategic execution, organizational culture, and the work environment to ensure it is effectively planning and executing its strategies. In addition, BPA is expanding its workforce to meet growing needs in the areas discussed above, which are driving the forecast costs in the upcoming rate period. All of these are essential to BPA's ability to perform its public service mission, meet its responsibilities and provide excellent customer service.

These BP-26 cost increases will be discussed in more detail in the sections to follow.

1.4 Capital

BPA developed capital investment forecasts for the BP-26 rate period as part of Strategic Asset Management Plans (SAMPs) for seven asset categories (federal hydro; transmission; IT; fleet; facilities; security; and environment, fish and wildlife). The SAMPs undergo significant planning and prioritization in alignment with ISO 55000 standards, which are internationally recognized standards for life-cycle asset management. While each of these asset categories is at a different level of maturity in adopting the ISO 55000 standards, BPA is committed to this continuous improvement process to make the best capital decisions in support of BPA's mission objectives.

The key building blocks necessary to achieve that alignment are development of longerterm SAMPs that guide prioritization for the portfolio of assets, and short-term, tactical, asset plans that detail specific investments to be made each fiscal year in alignment with the long-term SAMPs. BPA has spent several years refining its planning and prioritization processes to work toward overcoming several challenges, including aging infrastructure and resource constraints to execute the planned amount of capital work.

These SAMPs provide roadmaps for managing the health, performance, costs, and risks of the assets owned or leased by BPA to maximize the life-cycle value. The IPR projected capital costs are a result of the SAMPs developed for each asset category and balance the priorities of BPA's mission and strategic plan objectives (Note: The CGS Capital forecast is not included in the SAMPs, but is included in the IPR Capital projections).

Capital information in this publication is a summary of the detailed information available in the SAMPs. Use the following link to review the detailed development of capital estimates and asset management strategies for each asset category: www.bpa.gov/about/finance/strategic-asset-management-plans.

For this initial IPR, the projected capital costs are shown in Table 2 for Power and Transmission services. The change in projected capital from the BP-24 rate period is an increase of \$379 million for Power and an increase of \$764 million for Transmission. This table includes capital costs for all BPA asset categories as well as the Columbia Generating Station.

(\$millions)	Average BP-24 Rate Case	Average BP-26 Initial IPR	IPR vs. Rate Case Over (Under)	
Power IPR Capital	430	809	379	
Transmission IPR Capital	640	1,404	764	
Total	1,071	2,214	1,143	

Table 2: IPR Capital Summary

2 BPA Strategic Plan Overview

BPA's <u>2024–2028</u> Strategic Plan builds on the framework of our 2018–2023 strategy, leveraging the foundational work that BPA has done in the last five years to position the agency as a leader in this clean energy transition. BPA is coming from a place of financial strength, with competitive rates, improved liquidity and access to capital, and the tools to sustain this financial foundation on which the agency can achieve its other goals.

This strategic plan guides the path forward, as BPA once again evolves the FCRTS and FCRPS—a clean energy success story—to help customers, tribal partners, constituents, and the Pacific Northwest thrive in this era of energy transformation.

Figure 2 shows each program category where costs are forecast related to executing BPA's Strategic Plan. Figure 3 shows the organizations that are forecasting costs and their percentage of total projected costs.

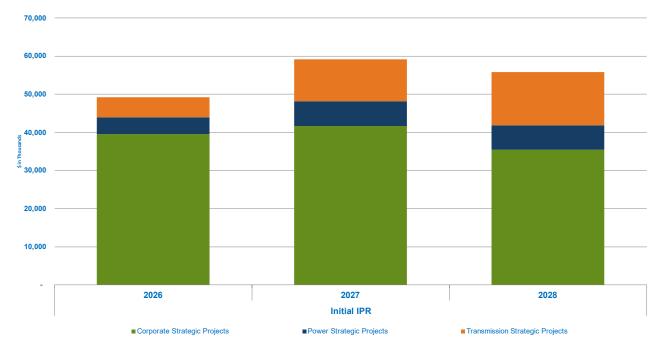


Figure 2: BPA Strategic Plan, Expense Overview

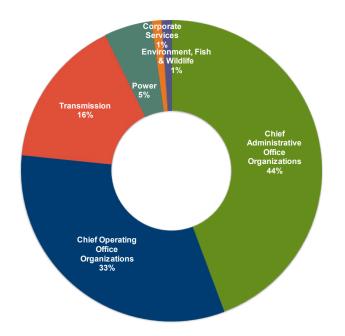


Figure 3: BPA Strategic Plan, Expense Summary by Organizational Grouping

The following sections explain some ways in which BPA's Strategic Plan informed the 2026 IPR cost forecast.

Invest in People

The key to BPA's success is its people: devoted public servants, trustworthy stewards, and champions of public power. Further investments in our highly capable workforce and workplace culture will contribute to greater job satisfaction, employee wellness and work-life balance—producing significant benefits for everyone we serve.

—Become the safest utility in North America by continuously improving the physical and psychological safety of the BPA workforce.

In executing our Safety strategy, BPA will proactively address safety in the workplace through program enhancements, enhancing the safety culture across BPA and facilitating a robust, comprehensive training curriculum relevant to all employees.

Enhance the Value of Products and Services

Success of the strategic plan will include the collaborative development of widely supported power products, policies and rate structures, resulting in new mutually beneficial sales agreements that take effect in 2028. BPA will also transform transmission processes and advance infrastructure investments while engaging in the development of organized markets and greater regional integration.

-Remain public power's provider of choice by fully subscribing the federal base system in long-term contracts.

Power Services is developing new long-term power sales contracts that will replace the current Regional Dialogue contracts in 2028. The value of these contracts represents approximately 76% of Power's revenue. BPA's strategic goal is to remain the provider of choice by fully subscribing the federal base system in long-term contracts. In BP-26, Power Services will be in the final phase of the process to develop, execute and be ready to implement new long-term power contracts with utility customers. The updated products and services that will be offered by Power to meet the future needs of its customers will require significant upgrades to several systems needed for contract implementation.

—Foster market evolution across the West to enhance the delivery of costeffective and reliable service.

Day-Ahead Market Exploration

New markets present opportunities to enhance the delivery of reliable, affordable and carbon-free power to customers through increased resource diversity. BPA is currently exploring two market initiatives underway in the West—the California Independent System Operator's (CAISO's) Extended Day-Ahead Market and Southwest Power Pool's Markets+. BPA is taking an incremental approach toward more integrated system operations that may enhance reliability and resilience. BPA will position itself to consider moving beyond a day-ahead market, if we choose to participate in one, through the evaluation of services and benefits that could be provided by a regional transmission operator.

While BPA has not yet made a final decision on day-ahead market participation, implementation planning is underway to ensure BPA is ready when and if the decision is made. The cost forecast reflects system changes and service contracts to support the go-live efforts.

Western Resource Adequacy Program (WRAP)

In December 2022, BPA made the decision to participate in the WRAP program, a region-wide reliability program. WRAP helps ensure participant utilities plan for and have enough physical resource capacity available to provide reliable service, even under the most extreme conditions. During BP-26, the program will be integrated as part of BPA's day-to-day Power Services planning and operational activities. BPA is an active WRAP participant that will start the rate period in a non-binding status and finish the rate period as a binding participant, with potential financial penalties for failing to meet program requirements. As a program, WRAP will mature to binding operations in 2027, an important milestone for the continued success of WRAP, its participants, and the resource adequacy of the region.

-Advance transmission investments and innovative solutions to integrate loads and resources.

The demand for clean energy is driving the need for transmission expansion to deliver energy from geographically dispersed resources to population centers where demand is expected to grow. Novel approaches will be needed to address the sharp rise in generator interconnection requests and transmission service while maintaining reliability and managing costs. Transmission Services is aggressively identifying and developing transmission expansion projects to support the clean energy goals of our customers and the region. Transmission Service's forecast includes resources needed to deliver the portfolio of evolving grid projects as well as implementing queue reforms and related tariff changes necessary for a first-ready/first-served approach for generator interconnection requests, allowing us to prioritize the most viable projects.

Mature Asset Management

BPA continues its dedication to making risk-based business decisions through improving our Asset Management programs agencywide as the hydropower dams, transmission grid and other publicly owned assets associated with BPA's mission play a central role in the region's economy and way of life. As these assets age, as system operations become more complex, and as the world in which we operate continues to change, a robust asset management program ensures we can preserve and enhance these assets so they can deliver the greatest value to the region. In our continued Asset Management maturity work, minimal additional resources and contract dollars are forecasted to support the continued maturity of our Asset Management activities and to ensure the necessary systems and tools are in place to support that maturity, including development of a criticality, health and risk (CHR) tool.

-Improve asset management data systems and capabilities

BPA's asset management program maturity depends upon readily accessible quality data from defined sources to best understand information and asset life cycle components to get the best asset value and life. BPA is specifically diving more into our Transmission asset management processes, data mapping and systems with the intention of improving our existing and newly defined sources, having the appropriate system consolidation, and an understanding on how to enhance system integration and system optimization where practicable.

-Enhance risk-based decision making and portfolio optimization

An asset management foundational element is understanding asset's CHR. Criticality measures the asset's importance to BPA's business or the consequence of failure; health measures the asset's condition; and risk describes the impact of uncertainty for those assets. This understanding is necessary for risk-based decisions and relies

heavily on quality, accessible data from clearing defined sources, data and asset management governance and clear, collaborative processes. BPA is working to enhance asset and data governance consistently and effectively, clearly understand and map business processes appropriately and create stronger decision criteria methodologies that leverages CHR data to sharpen project prioritization and better inform investment decisions which ultimately maximizes an asset's value. Our ultimate goal, once the methodologies and data are in alignment, is to automate our portfolio and project optimization via a new automated software tool.

Preserve Safe and Reliable System Operations

BPA has more than eight decades of experience maintaining safe, reliable power and transmission operations, a feat that required continual adjustment as the Northwest's grid evolved over time. We are prepared to continue this legacy as new and emerging reliability and security risks challenge the grid. Key considerations are the impacts of extreme weather, wildfires, cyber and physical attacks, and the integration of more variable energy resources.

-Strengthen resilience in preparation for high-impact events and system change.

Climate-related risks and security threats—both physical and cyber—have intensified. At the same time, the resource and load mix is changing, with fewer baseload resources available and more variable energy resources connecting to the grid. BPA will ensure it is better prepared to respond to and recover from high-impact events as the system continues to change. Transmission's forecast includes resources for hardening facilities and communications systems to enable continued operations through high-impact events, and prioritizing proactive efforts to improve our ability to respond to disruptions. This includes developing tools to improve situational awareness for wildfires, cyber threats and severe weather. Additionally, we are investing to increase knowledge and training of staff capable of 24/7 operations in the face of high-impact events.

-Implement operational improvements that support grid reliability.

Transmission Services continues to maximize the capacity of the existing grid through a combination of operational studies, visualization tools, congestion management and other operational improvements. Transmission's forecast includes the costs of implementing several new tools to improve situational awareness, including a common visualization platform for BPA Power and Transmission real-time operations that allows coordination of issues across multiple control centers, real-time tools (including automation), ability to improve real-time awareness and response from real-time staff, and implementing the use of ambient adjusted ratings within real time.

—Advance a culture of compliance to meet changing requirements, improve reliability and manage risk.

As the world around us evolves, so does the regulatory environment in which we operate. Improvements in internal practices and capabilities will accommodate change and reduce risk associated with meeting changing compliance standards. Forecast investments include increased engagement with regulators, as well as advancements in internal controls and causal analysis, and maintains our focus on developing BPA's facilities ratings methodology and implementation.

Modernize Business Systems and Processes

We are sharpening our focus on needed investments to improve foundational internal business systems and processes. These enhancements will support our ability to deliver reliable, resilient, and competitive power and transmission services as the electricity industry landscape continues to change.

—Develop more cost-effective, well-organized and efficient systems for managing technology and business operations.

Corporate Modernization

BPA is developing a Corporate Modernization initiative that aims to improve processes and technology in key centralized business functions. BPA's leadership has recognized a need to holistically redesign corporate business processes and systems to improve efficiency, accuracy, performance, and flexibility. Projects will include improvements to procurement and finance as well as potential other areas that support the rest of the agency. The result for BPA will be shared services that are closely integrated with core business functions, enhancing BPA's ability to ensure a reliable power supply while keeping rates affordable.

Corporate Modernization will provide BPA with streamlined business support, predictable internal service quality, improved financial and procurement capabilities, and improved decision support through a simplified and updated system architecture, standardized roles and responsibilities, end-to-end process redesign, and streamlined dataflow.

While the exact projects are yet to be defined, BPA has forecast costs for Corporate Modernization execution. These forecasts reflect updates to existing systems and new systems that may be identified.

IT Strategy

BPA's Technology initiatives address a broad range of foundational needs. Improvements will support our internal business systems and processes as well as our ability to deliver reliable, resilient, and competitive power and transmission services. We aim to improve internal service delivery methods, integration of enterprise security, operational resilience, situational awareness and technology rationalization, processes for requirements development and prioritization, and enhanced project throughput enabling numerous business modernization initiatives.

-Strengthen the resiliency and security of information and operational technology.

BPA's Technology initiatives embrace our culture of continuous improvement and place heavy emphasis on cybersecurity. We will mature our continuous monitoring capabilities to improve identification and mitigation of key threats, as well as evolve our processes for assessing and addressing cyber risk. Furthermore, we will evaluate and leverage new technologies that enhance our abilities to address risk to critical infrastructure in support of the delivery of reliable and resilient power and transmission services.

3 Development of Expense Estimates

3.1 Inflation Methodology

Forecast inflation rates are an important benchmark and allow BPA to align the economic consensus of expected inflation to BPA's existing cost categories, where appropriate. Inflationary pressures have continued to increase over the past several years, driven first by COVID-19 demand-related contraction, followed by supply chain disruptions and exceptionally low unemployment.

BPA continues to use a cost pools approach, which separates costs between the major inflationary drivers of labor and non-labor. The labor cost pool included the forecast costs of federal salaried employees, federal hourly employees, BPA's contract workforce, service contracts, and portions of the generating partner cost pools. The non-labor cost pool included materials, supplies, and other costs such as travel and training. For the labor cost pool, BPA used the Employment Cost Index (ECI), which is a national measure of inflation on wages and employee benefits. For the non-labor cost pool, BPA continues to use the GDP price deflator. For the BP-26 IPR period, the annual average GDP price deflator rate is 2.3% and the annual average ECI rate is 3.6%. Given the different cost pools, the BP-26 annual average inflation rate is 3.4%.

3.2 Labor Forecast Methodology

Over the last 10 years, BPA has absorbed new workload without significant increases in its overall staffing levels. Having exhausted most opportunities to re-purpose staff and eliminate unnecessary work, BPA is forecasting to expand its workforce to deliver on the new core and strategic work envisioned in the Strategic Plan. While BPA plans to aggressively pursue hiring for these new positions, BPA has included a lapse that

moderates the forecast cost of new personnel to reflect a more probable hiring rate of 100 net FTE per year BPA-wide.

Consistent with BP-24, BPA has also included a lapse on the future cost of existing personnel. This lapse reflects typical turnover rates and the average time it takes to fill vacancies after a separation.

The combined lapses result in a 16% reduction in the personnel cost forecast. Overall, this methodology seeks to strike a balance between under-forecasting for our projected hiring needs and over-estimating the pace of hiring we can reasonably achieve.

4 Transmission Services

Transmission Services Overview

Transmission Services is responsible for planning, designing, constructing, marketing, operating and maintaining more than 15,000 circuit miles of transmission assets in the Pacific Northwest. The projected Transmission Services costs for the upcoming rate period support BPA's strategic direction, builds on BPA's legacy of transmission system reliability, and is based on a foundation of safety, providing the best value for our customers and constituents, and delivering a robust, open-access transmission system.

Transmission Services operates in an increasingly dynamic, uncertain and evolving environment. The region's goals to reduce greenhouse gas emissions and increase access to clean energy while enabling major load growth and economic development is redefining the energy landscape.

In an ever-evolving landscape, Transmission Services embraces innovation and leadership development to navigate change effectively. Its goal is to cultivate a workforce capable of thriving amid shifting circumstances. Transmission staff will lead the execution of growing capital and expense programs created by the increased demand, while balancing the need to maintain and reinforce the aging transmission system. These conditions demand a responsive and modern approach to the way BPA positions itself commercially and how the Transmission organization aligns to deliver and capture value. Transmission is investing to meet the demand to expand our network while also making changes to internal and external processes to gain efficiencies and increase speed of service. This work will ensure Transmission maintains financial strength while continuing to meet customer needs and delivering the public benefits that are so valuable to the region.

Figure 4 shows each program within Transmission Services and its percentage of the total.

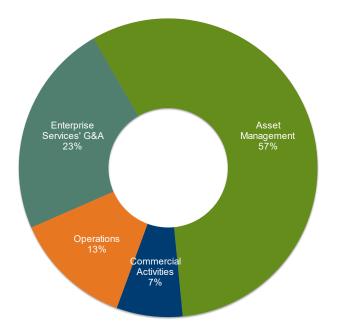


Figure 4: Transmission Services, Expense Summary by Program

Transmission Services Objectives in IPR

Transmission Services' increase of \$180 million above BP-24 is primarily driven by work to expand the transmission system to support regional and customer needs. From BP-18 to BP-24, Transmission IPR costs have increased by a total of 15%, which is substantially lower than inflationary pressure over the same period. Transmission Services applied all six goals from BPA's strategic direction in forecasting costs in the upcoming rate period. The agency's strategy is realized through its three major programs—Asset Management, Operations, and Commercial Activities—which align resources to business outcomes that achieve objectives supporting BPA's strategy. Upward cost pressures include price and wage inflation, as well as additional workload to increase customer responsiveness, maintain the asset base, modernize systems, enhance cybersecurity and mitigate wildfires. Balancing factors include carefully evaluating and prioritizing hires, projects, and consolidating support workload.

Transmission's projected costs support safety, compliance, reliability, resiliency and market transformation activities. In an era of rising cyber and physical threats, wildfires, and more frequent and severe extreme weather events, Transmission is committed to safeguarding its critical infrastructure. Managing resource limitations, labor and material costs, and enhancing asset management are integral to our strategy.

Transmission Services will develop strategy, policies and implementation plans to enable customers' and BPA's participation in the Western Energy Imbalance Market and evaluate and potentially enable participation in other emerging markets that involve the use of BPA's transmission system.

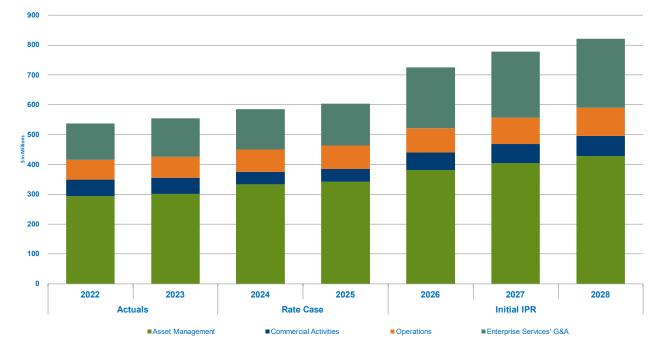


Figure 5 provides an overview of recent, current, and forecast expenses for Transmission Services.

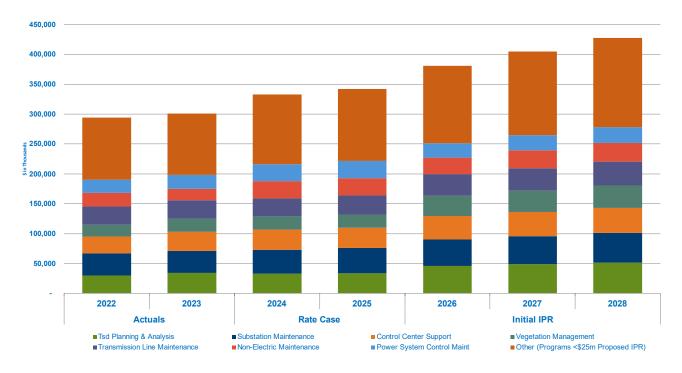
Figure 5: Transmission Services, Expense Overview

4.1 Asset Management

Program Overview

Asset Management makes up 55% of the forecast IPR program costs for Transmission. Figure 6 provides an overview of recent, current, and forecast expenses for the Asset Management Program. Figure 7 provides an overview of recent, current, and forecast capital requirements for the Asset Management Program.

See Table 1-A in the Appendix, which presents expenses in more detail, and Table 2-A, which lists forecast capital requirements through FY 2035





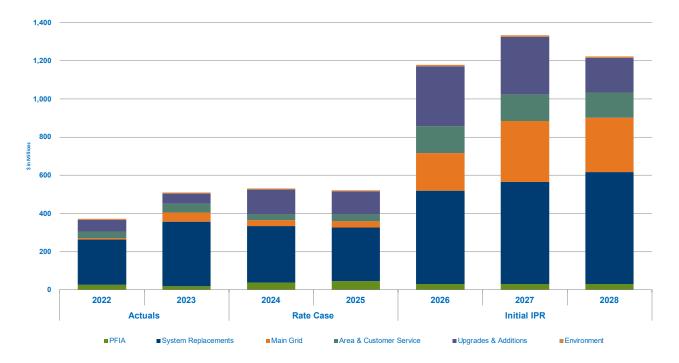


Figure 7: Transmission Asset Management, Capital Overview

To ensure that Transmission is poised to adapt to the changing nature of the operating environment and support BPA's strategic goal "Maturing Asset Management" as outlined in the 2024-2028 Strategic Plan, Transmission continues to adapt and improve its asset management capabilities. Transmission is currently working with the IT organization to implement a Transmission Portfolio Optimization Tool (TPOT), which will ensure that people, process, and systems are in place to use leading asset management methodologies, such as the Value Framework through an asset life cycle. Transmission's Asset Management program is discussed comprehensively in the 2024 <u>Strategic Asset Management Plan</u> (SAMP) update and is also discussed briefly below.

Asset Management Capital

Transmission manages approximately 313,000 assets organized in an Asset Hierarchy that assigns them into 13 Asset Portfolios, 92 Asset Types, and 220 unique Asset Sub-Type combinations managed in 12 Asset Programs (SAMP Table 3.3-1). As discussed below, increases in customer and regional demand are driving an increase in capital investment across the transmission system. The depreciated value is approximately \$7.1 billion. Annual forecast O&M cost is approximately \$280 million.

Transmission assets deliver the following products and services:

- Network Transmission (NT) service
- Point-to-Point (PTP) service
- Generator Interconnection/Integration (GI)
- Line and Load Interconnections (LI)
- Ancillary Services and Control Area Services (AS and CAS)
- Dark fiber communications

Requests for new products and services are received via Generator Interconnection Requests, Line and Load Requests, and the Cluster Study submissions through the Transmission Service Requests (TSR) Study and Expansion Process (TSEP). Transmission is forecasting an increase in these requests over the next 10 years. Growth in requests is an industrywide phenomenon, as acknowledged by FERC Order 1920.

In the coming years, Transmission plans to:

- Increase the Expand Program to support the Evolving Grid projects resulting from the 2022 Cluster study. Transmission will continue to support the results of future subsequent cluster studies.
- Increase the Sustain Program based on aging infrastructure and to keep pace with technological advancements.
- Increase the availability of human and material resources, directly and through suppliers, to ensure delivery of the increasing Expand, Projects Funded in Advance (PFIA), and Sustain Programs.

• Continue heightened focus on pacing with asset and system technological changes and improving the configuration management and cybersecurity capabilities that are essential to the operation of the Transmission System.

Asset Management Expense

A robust asset management strategy and a system maintenance plan are essential for BPA to respond to many of the Northwest's Transmission needs. The assets contained within the asset management strategy and the system maintenance plan deliver electric power to utilities serving more than 12 million people through transmission service, generator interconnections, line and load interconnections, interregional transfers of capacity and energy, and ancillary services such as regulation and load-following services.

BPA is actively growing its efforts to mitigate the risk of wildfires. The agency is making significant progress in asset management Value Framework maturation, inclusive of factors that address wildfire ignition or fuel in BPA's asset base. BPA continues to evaluate and deploy existing and emerging solutions that enhance operational effectiveness in mitigating wildfire risk. The updated 2024 Wildfire Mitigation Plan contains additional details.

Transmission continues to align its replacement and maintenance work streams by using processes and analytics to converge on an integrated best value strategy at all levels of the organization. The current state is interval-based maintenance with correctives initiated by internal standards and guides that drive a maintenance action. The future vision is based on more efficient gathering and use of maintenance data and equipment reliability estimations to inform risk-based planning processes.

Program Objectives in IPR

Transmission Services' Asset Management Program objectives continue to align with BPA's strategic direction, with cost projections focused on sustaining optimal asset performance and right-sizing program forecast costs to ensure reliability and meet customer needs. To that end, the program continues to prioritize safety and occupational health to empower employees and contractors to recognize and address safety issues. Emergency maintenance ensures continued overall system reliability requirements and public safety. Preventative maintenance on the BPA transmission system provides reliable and sustainable assets that meet current and future agency needs, ensuring that performance condition standards comply with applicable regulations while minimizing life-cycle costs.

BPA's cost projections include increases in Transmission asset management expense above BP-24 rate case levels, which are expected to provide sufficient resources to perform core maintenance as well as workplace safety and strategy-driven process improvements. The increases will also help minimize forecast cost gaps that would have reduced BPA's capacity to perform preventative maintenance and process improvements for programs such as mission-critical information technology, telecommunications strategy, cybersecurity, physical security, compliance, and wildfire mitigation.

4.2 **Operations**

Program Overview

Operations comprise 13% of Transmission's forecast IPR program costs. Figure 8 provides an overview of recent, current, and forecast expenses for the Operations Program, while Table 1-A in the Appendix provides them in more detail.

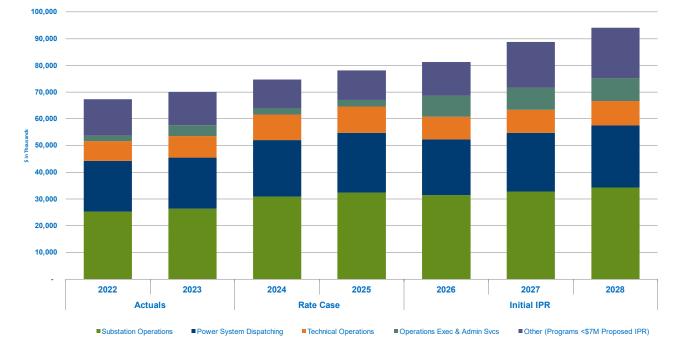


Figure 8: Transmission Operations, Expense Overview

The **Transmission Operations Program** has multiple subprograms that support the core components of BPA's strategic plan by enhancing the safe and reliable delivery of power to BPA's customers. These include:

- The **Substation Operations** subprogram supports the continuity of operations through work standards and control of energized access, including physical and cybersecurity requirements impacting system reliability and safety.
- The **Technical Operations** subprogram develops and manages all near-term system operating limits and total transfer capabilities to support the safe,

dependable and open-access operation of the transmission system. Technical Operations also provides operating and mitigation plans for all system conditions to support real-time operation of the interconnected system. The subprogram provides technical support for planned outages, remedial action schemes, automatic generation control, balancing authority operations, renewable resource integration, and disturbance and event monitoring and reporting.

• The **Power System Dispatching** subprogram provides for the operation and management of two regional control centers providing dispatch and control services. As the balancing authority and transmission operator, this program monitors and manages the integrated power system to ensure safe, reliable and compliant operations, including the direction of real-time actions during normal, planned and emergency conditions. This program also provides outage coordination for internal BPA and external stakeholders and provides training programs to maintain NERC-certified dispatch staff.

Program Objectives in IPR

Power System Dispatching will continue to reliably dispatch the power system by providing service to BPA's customers, providing interregional interconnections, improving substation operations continuity and maintaining electrical reliability. Technical Operations' projected costs will support the studies to verify the system can be operated reliably for overall visibility of the bulk electric system and maintain public safety. The program objectives include regulatory requirements and training to implement current and emerging NERC and federal cybersecurity requirements, along with required training. Operations is committed to continuously improving our operational tools and processes that were delivered through BPA's Grid Modernization Program.

4.3 Commercial Activities

Program Overview

Commercial activities comprise 9% of Transmission's forecast IPR program costs. Figure 9 provides an overview of recent, current, and forecast expenses for the Commercial Activities Program, while Table 1-A in the Appendix provides more detail.

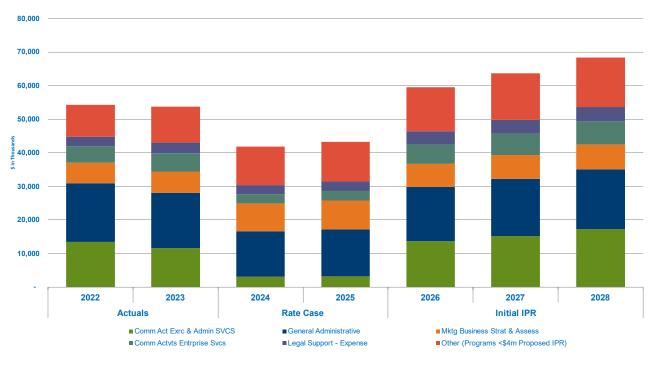


Figure 9: Transmission Commercial Activities, Expense Overview

Attracting and retaining highly qualified individuals will be critical to successfully meeting the objectives of the Commercial Activities Program.

The Transmission Commercial Activities Program provides direction to standardize and streamline products, rules and strategies to satisfy BPA's commercial objectives and customer needs. The program strives to optimize current and future opportunities and efficiencies to support more than 300 customers, resulting in average annual revenues of \$1.2 billion.

The Commercial Activities Program has four objectives, described below, outlining a broad set of activities and targets that encompass all aspects of the commercial function, including core and strategic work.

- **Products and Services Planning.** This objective focuses on using market analysis and customer input to develop, define and deploy improvements to BPA's products and services offerings.
- **Products and Services Implementation.** This objective focuses on the performance of BPA's commercial processes and systems. Not only should the commercial processes and systems be clear and transparent to customers, but they must also align with BPA's open access transmission tariff, its rate schedule and other applicable regulatory guidance.
- **Revenue Planning and Capture.** This objective focuses on a few different areas that tie together. Improvements to short-term and long-term market inventory calculations as well as improved forecasting of existing long-term

rights will inform the development of updated revenue targets, which will then be captured through accurate billing.

• **Customer Management.** This objective includes BPA account executives as well as the digital interface for customers to conduct their day-to-day business with BPA. From accessing bills to study results to contracts, customers will be able to access their information consistently and closer to real time.

Program Objectives in IPR

The major projects and objectives of the Commercial Activities Program also align with BPA's strategic direction to meet transmission customer needs and sustain financial strength. In addition, the Commercial Activities Program has taken into consideration how it will interface, influence or be influenced by major agency initiatives such as fostering market evolution, queue reform, and Provider of Choice.

The current work in the Commercial Activities Program is intended to improve business processes and efficiencies. Our projected costs ensure that BPA staff, systems and processes can continue to identify and effect efficiencies across Transmission's commercial activities. The investments reflected in these projected costs will create both short-term and long-term benefits through policy clarity, system and process efficiencies, and maximizing revenues.

4.4 Enterprise Services G&A

Program Overview

Enterprise Services G&A costs make up 23% of Transmission's forecast IPR program costs. Figure 10 provides an overview of recent, current, and forecast expenses for Enterprise Services G&A, while Figure 11 shows each organizational grouping within Enterprise Services G&AAllocations and their percentage of the total. For a description of Enterprise Services, its cost projections, and drivers, see Section 7 of this document.

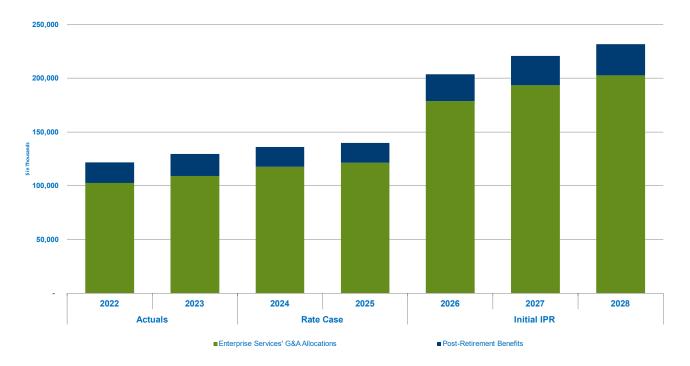


Figure 10: Transmission Enterprise Services G&A, Expense Overview

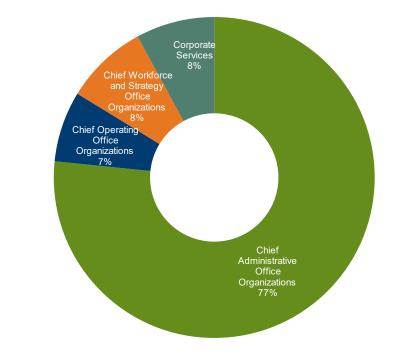
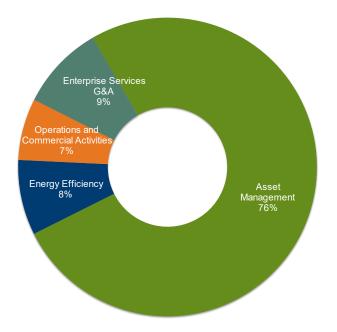


Figure 11: Transmission Enterprise Services G&A, Expense Summary by Organizational Grouping

5 Power Services

Power Services Overview

Power Services is responsible for marketing federal power, including the power sold under the long-term Regional Dialogue power sales contracts. Power's costs include the cost of federal and nonfederal power, fish and wildlife mitigation, and energy efficiency. In addition to the FCRPS, BPA acquires and markets power produced by several nonfederal resources, including the Columbia Generating Station nuclear plant, and small hydro and wind projects. Power Services is focused on remaining the provider of choice while maintaining the reliability and flexibility of its carbon-free generating resources, advancing energy efficiency, and modernizing its operations to participate in new markets. Figure 12 shows each program category within Power Services and its percentage of total projected costs.





Power Services Objectives in IPR

Historically, Power Services' IPR costs were reduced in BP-20, held flat in BP-22, and increased 3.7% for BP-24, which is substantially lower than inflationary pressure over the same period. In BP-26, Power Services is forecasting a 19% increase in IPR costs from BP-24. Most of the forecast increases are for the generating partners to address forecast inflationary pressures, high-priority non-routine maintenance, and to support efforts to maintain equipment condition for continued reliability. Power Services is also focused on making essential investments in long-term generation reliability and

increased capacity by ramping up the federal hydro capital program to reach \$300 million annually.

Figure 13 shows the recent, current, and forecast costs for each category. Table 3-A in the appendix lists the detailed information for all Power Services program categories.

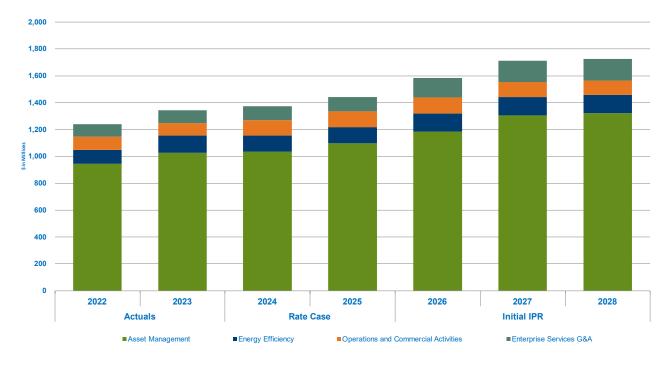


Figure 13: Power Services, Expense Overview

5.1 Asset Management

Program Overview

Power Service's Asset Management program includes capital and expense costs for F&W and supporting the generating partners: the USACE, Reclamation, and Energy Northwest. The Asset Management Program represents 76% of Power IPR program costs.

Figure 14 provides an overview of recent, current, and forecast expenses for the Asset Management Program. Figure 15 provides an overview of recent, current, and forecast capital requirements for the Asset Management Program.

See Table 3-A in the Appendix, which presents the expenses in more detail, and Table 2-A, which lists Power Services' Asset Management Program's forecast capital requirements through FY 2035.

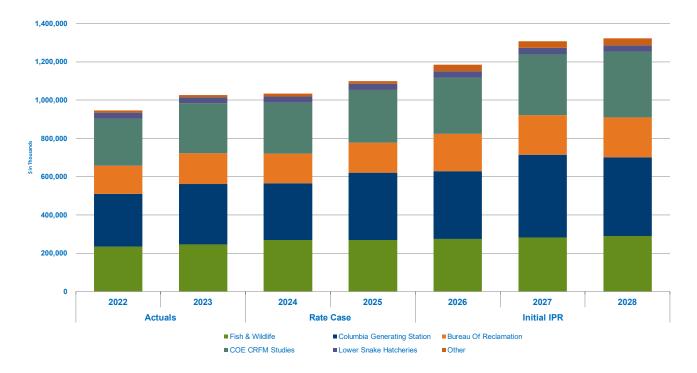


Figure 14: Power Asset Management, Expense Overview

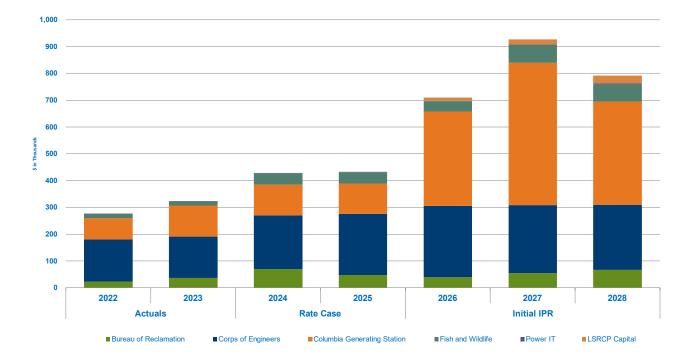


Figure 15: Power Asset Management, Capital Overview

Program Objectives in IPR

Power's Asset Management cost forecast for BP-26 represents a 19% increase from BP-24 to support rising workforce costs, improving the reliability of the power generation system, and addressing our environmental commitments. As noted above, the projected costs include F&W spending discussed in Section 6, high-priority non-routine backlog activities, and reducing deferral of work that supports equipment condition.

Energy Northwest's Columbia Generating Station cost forecast reflects its workforce size and the costs of refueling and maintenance outages.

Federal Hydro

Program Overview

As the largest hydropower system in the U.S., the FCRPS supplies low-cost, carbonfree power products and services to customers in the Pacific Northwest that, in turn, serve retail consumers of electricity. The FCRPS is also a multipurpose system that provides flood risk management, navigation, irrigation, municipal and industrial water supply, and recreation opportunities for the region. BPA directly funds USACE and USBOR operations, maintenance, and capital programs for power assets, as well as a share of multipurpose joint assets that include a power purpose in combination with federal appropriations.

USACE, USBOR and BPA work collaboratively to safely administer a sustainable asset management program that focuses on delivering low-cost, reliable power and supporting the multipurpose missions of the FCRPS. As trusted stewards, the three agencies must cost-effectively balance the multiple uses of FCRPS physical assets and natural resources while mitigating the environmental and cultural impacts of the system.

As depicted below in Table 3, the forecast level of capital and expense spending over the next 50 years is closely tied to the amount of generation produced by each strategic class. It should be recognized that generation is just one of the various missions that FCRPS facilities support, so exact alignment is not expected.

The majority of the capital and expense programs are forecast for the mainstem Columbia River projects, which represent 79% of average annual FCRPS generation (see Table 3). The mainstem projects are also the most cost-effective of the strategic classes with a 50-year incremental cost of generation (direct capital and expense) of \$10.92/megawatt-hour (MWh) and a 50-year fully loaded cost (all USACE/USBOR/BPA costs attributable to the hydro system) of \$21.25/MWh. As a system, the capital and expense programs presented in this IPR are expected to have a 50-year cost of generation of \$13.41/MWh and a 50-year fully loaded cost of \$24.29/MWh.

Strategic Class	% of FCRPS Average Annual Generation	% of 50-Year Capital Forecast	% of 50- Year Expense Forecast	50-Year Cost of Generation (\$/MWh)	50-Year Fully Loaded Cost (\$/MWh)
Main Stem Columbia	79%	72%	66%	\$10.92	\$21.25
Lower Snake	9%	13%	13%	\$21.76	\$36.69
Headwater	7%	7%	8%	\$14.60	\$25.74
Area Support (Non- WVY*)	2%	2%	4%	\$23.68	\$32.99
Area Support (WVY)	2%	5%	6%	\$61.31	\$77.56
Local Support	1%	1%	3%	\$43.98	\$56.40
FCRPS	100%	100%	100%	\$13.41	\$24.29
*Willamette Valley Projects					

Table 3: Summary of Program Forecasts

Federal Hydro Capital

The FCRPS long-term strategy is to make coordinated O&M and investment decisions that maximize the value of FCRPS assets by reducing costs, mitigating risk, improving efficiency, and producing incremental value. A cornerstone of the strategy is decisionmaking that is risk-informed and considers asset condition, probability of failure, and impacts to each of the three agencies' missions. A key component in building the FCRPS strategy and projecting costs is determining the optimal time to reinvest in FCRPS assets. FCRPS staff use Copperleaf, an asset investment planning and management tool, to develop the capital investment strategy and plan. Copperleaf tracks the benefits, costs and assets associated with investments and provides tools for future investment identification as well as investment-decision optimization. Using asset condition, failure characteristics and investment information, Copperleaf can calculate the optimal time to invest in an asset, optimize the timing of investments in an investment portfolio, and illustrate the costs and benefits of different investment strategies. This type of optimization and analysis is a key part of ISO 55000 standards for Asset Management Decision-Making.

Arriving at investments to include in projected costs involves performing sensitivity analyses to understand the cost and risk tradeoffs of various levels of capital investment. For BP-26, five levels of investment were studied, ranging from \$250 million per year to \$350 million per year, escalating at the rate of inflation. The model seeks to replace equipment at the point at which life-cycle costs are minimized and prioritizes assets with a higher cost of deferral.

Figure 16 shows the 25-year Net Present Value (NPV) at the five investment levels analyzed. Compared to a no-investment alternative, all investment levels analyzed produce an NPV between \$14.5 billion and \$15.6 billion through risk mitigation and efficiency benefits. The net benefits of increased levels of investment are significant between a \$250 million and \$300 million investment level. Beyond \$300 million per year, the incremental benefits show diminishing returns. The cost forecast reflects investing \$300 million per year, increasing at the rate of inflation. This appropriately balances risk reduction, cost, and executability.

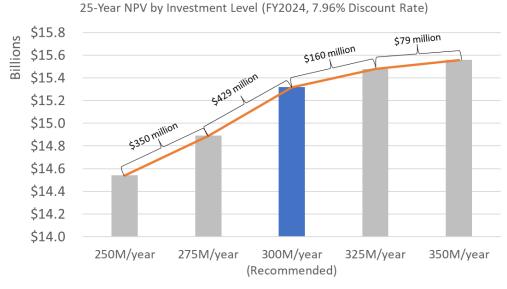


Figure 16: NPV of Investment

Federal Hydro Expense

To meet program requirements and ensure continued reliability, USACE and USBOR are forecasting an increase in projected costs. Again, the increases reflect inflationary pressures, high-priority non-routine maintenance backlog activities, and efforts to maintain equipment condition for continued reliability.

The agencies continue to analyze and evaluate the value and importance of assets to optimize O&M and investment strategies. Current demands to provide water quality, fish passage/attraction, power generation, water delivery for irrigation and municipal water, recreation, and ancillary services at each facility will be evaluated. This approach is aligned with the asset management life-cycle's purpose of ensuring that the assets continue to meet the needs of the organizations and that O&M resources are optimized to ensure that those efforts are performed as cost-effectively as possible.

The ongoing effort to find efficiencies in the O&M program comes at a time when the hydropower industry is facing rising cost pressures from aging infrastructure, wage increases, and increasing regulations, including National Pollution Discharge Elimination System (NPDES) permits and related 401 certifications, fish spill operations, and potential temperature Total Maximum Daily Load (TMDL) implementation plan requirements. Cost-management efforts will continue, and resources will be prioritized

to support mission-critical efforts while also implementing strategic reductions in other program areas.

Deferring or slowing maintenance creates an increased risk of outages that negatively impact unit availability and available generation. Historically, the forced outage factor for USACE is 5% to 7%; it increased from 5.2% to 6.0% from March 2022 to March 2024. John Day and The Dalles dams continue to experience high forced outage rates of 14.3% and 10.7%, respectively. Other main stem facilities are experiencing elevated forced outage rates with Grand Coulee at 20.6%, and Bonneville at 24.6% in March 2024. USBOR's forced outage factor is historically near 3% but is currently at 18.6% due to extended unit outages at Grand Coulee. Figure 17 shows the current forced outage factor vs. 10-year averages by location.

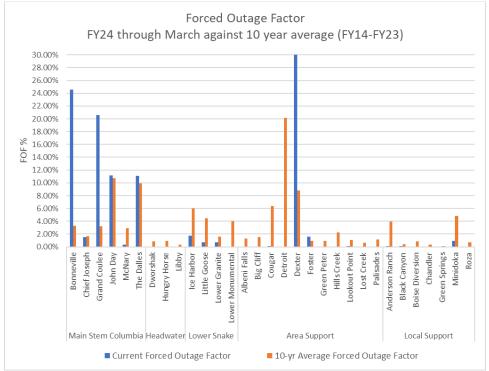


Figure 17: Forced Outage Factor

Overall, most of the forced outages contributing to the high FCRPS forced outage factor are from the mainstem Columbia and lower Snake strategic classes. These strategic classes account for 89% of the FCRPS average annual generation. Bonneville, The Dalles, John Day and Grand Coulee dams all currently have forced outage factors higher than their 10-year averages.

Program Objectives in IPR

The increased projected costs reflect reducing the deferral of work and easing pressure on staffing reductions. These projected costs support increasing the expected reliability of the power generation system and addressing our environmental commitments.

Columbia Generating Station

Program Overview

The Columbia Generating Station (Columbia) is a 1,207 (gross) megawatt (MW) boiling water nuclear reactor located on the Department of Energy (DOE) Hanford Reservation in Richland, Washington. Columbia began operating in 1984 and is licensed by the Nuclear Regulatory Commission (NRC) to operate through 2043. Columbia is owned and operated by Energy Northwest, a joint operating agency under Washington State law created by and in support of aggregate public power needs. Columbia's output, along with FCRPS power, is used to supply and meet the BPA administrator's long-term firm power sales contract obligations.

Columbia's forecast operating costs are included in Power Services' rates and cover the O&M of the nuclear plant. BPA acquires 100% of Columbia's generation and funds 100% of its costs. BPA also directly funds Columbia's Decommissioning Trust Fund, Independent Spent Fuel Storage Decommissioning Trust Fund and Nuclear Electric Insurance Limited (NEIL) insurance premiums.

Energy Northwest has worked for over a decade to improve and sustain excellent technical performance and provide competitively priced reliable power. Columbia continues to demonstrate high levels of reliability. In 2022, Columbia produced more than 9.8 million MWh, which is the highest output for any calendar or fiscal year in the station's 38-year history.

Columbia Generating Station Capital

Columbia's average capital forecast for BP-26 is \$422 million, which is an increase of \$307 million over the BP-24 average, see Table 4-A in the Appendix for further details on projected capital. Drivers include large capital life-cycle management projects. Energy Northwest has included costs associated with an Extended Power Uprate (EPU) to increase Columbia's generation up to 170-megawatt equivalent (Mwe) in the IPR forecasts. A business case study is planned for completion in the spring of 2025 to determine the feasibility of the EPU.

Columbia Generating Station Expense

Columbia's average expense forecast for BP-26 is \$395 million, which is an increase of \$75 million over the BP-24 average. Drivers include increases in staffing, escalation and longer than normal refueling and maintenance outages.

Program Objectives in IPR

Projection of costs for the upcoming rate period will support major reinvestment in Columbia. Higher costs are attributed to Columbia's longer than average maintenance and refueling outages, increased staffing, and accumulated impacts of inflation.

Forecast O&M costs are based on Energy Northwest's Columbia Long Range Plan (LRP). The LRP is established through a rigorous internal process that looks at challenges and constraints needing to be overcome to meet Columbia's mission and support continued operation. O&M and capital projects are reviewed and ranked prior to inclusion in the LRP. The LRP is systematically monitored and updated annually to account for the needs of the plant based on defined life-cycle management requirements.

Energy Northwest identifies, funds, and completes major projects each year. Noteworthy capital projects include:

- Moisture separator reheater internal retrofit.
- Replacement of normal transformers, startup and backup transformers.
- Digital feedwater level control replacement.
- Replacement of condensate-heat exchangers.
- Installation of digital electro-hydraulic control system.

As part of its adaptive management process, Energy Northwest looks for opportunities to maintain flexibility to address emergent challenges.

Fish and Wildlife

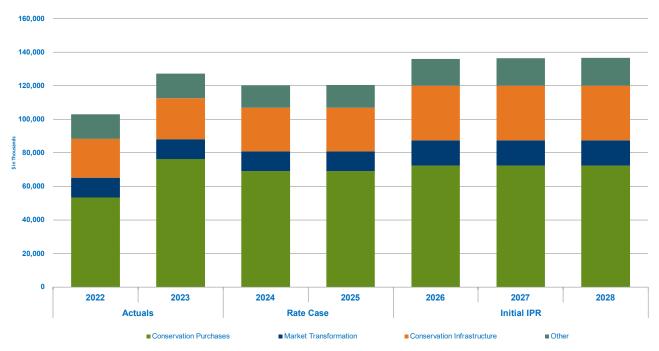
The narrative for the F&W Program, which is a part of Power's Asset Management Program, can be found in Section 6.

5.2 Energy Efficiency

Program Overview

Through its Energy Efficiency (Conservation) program, BPA meets its obligation to acquire and encourage the development of energy conservation to maximize the value of the FCRPS and lessen BPA's need to acquire other resources to supply firm power to its customers. Projected costs for the Energy Efficiency program include:

- Regional program delivery infrastructure, which includes program implementation, emerging technology, market research, and support services.
- A grant to the Northwest Energy Efficiency Alliance (NEEA) for market transformation and regional infrastructure support.
- Low-income weatherization grants to states and Tribes.
- Distributed energy resources.
- Conservation purchases.



Energy Efficiency activities comprise 8% of Power's forecast IPR program costs. Figure 18 provides an overview of recent, current, and forecast expenses for Energy Efficiency. See Table 3-A in the Appendix, which presents the expenses in more detail.

Figure 18: Power Energy Efficiency, Expense Overview

Program Objectives in IPR

BPA's Energy Efficiency program focuses on acquiring cost-effective energy savings to meet the agency's power resource needs. The evolving energy landscape and customer needs drive BPA to continuously evaluate and refine the scale, scope, and composition of its energy conservation program portfolio and to ensure reliable resources are acquired.

Projected costs support conservation acquisitions and program implementation for the upcoming rate period. Conservation acquisitions are informed by the needs of BPA's customers, the Council's 2021 Power Plan, BPA's 2022 Resource Program, and strategies established in BPA's 2022-2027 Energy Efficiency Action Plan.

The portion of projected energy efficiency costs included in the Operations Program Plan are listed in Table 3-A in the Appendix. Conservation purchases are included in the Commercial Activities Program Plan.

Energy Efficiency costs for the upcoming rate period support the following programs.

Conservation Infrastructure: Provides support for BPA's regional programmatic infrastructure, momentum savings and emerging technology. It also measures

maintenance and regional end-use load research, program evaluation, and contract staffing. A portion of these projected costs reflect a continued focus on achieving heating, ventilation, and air conditioning (HVAC) and weatherization savings in support of acquiring savings during times of BPA's highest energy needs.

Market Transformation: BPA is one of 15 regional members of NEEA. BPA's funding, based on load share, helps enable transformations of targeted markets to more efficient products. Market transformation is a well-established channel for low-cost, long-term savings and is highly effective in markets that are challenging for traditional utility programs to reach. Verified savings from NEEA's intervention strategies and activities are counted toward BPA's annual savings accomplishments. NEEA's approach identifies opportunities and impediments, removes barriers, and accelerates market adoption. Projected costs support NEEA's 2025-2029 Business Plan investment, which is expected to increase.

Low-Income and Tribal Weatherization: BPA acquires conservation through grants to the four Northwest states and recognized Tribes within the region to improve efficiency levels for qualified low-income residences. Grants to states are allocated on a proportional basis using the most current census data for households with incomes below federal poverty guidelines. Grants to Tribes for low-income services are made on an application basis and take a variety of factors into consideration, including geographic dispersion, prior participation, and local needs.

Distributed Energy Resources: This program category includes costs of service contracts for analyzing Distributed Energy Resource market trends, feasibility, availability, and cost data, as it applies to resource planning and other power requirements. BPA is working with customers to pilot a Demand Voltage Reduction (DVR) program that uses intermittent utility-level voltage control to create a cost-effective energy and capacity resource. BPA will evaluate the development of other products and review opportunities to acquire them when supply needs arise and it is cost-effective to do so.

Conservation Purchases: The projected cost of conservation purchases includes the cost of Energy Efficiency Incentives (EEI) and Energy Smart Reserved Power (ESRP). BPA customers locally develop a broad array of energy saving measures and programs to serve their needs and those of their consumers. Under the Energy Conservation Agreements, BPA acquires energy savings from customers through EEI payments based on utility-reported energy conservation.

BPA's ESRP program acquires conservation through efficiency projects at federal agency facilities, such as fish hatcheries, transmission substations, or USBR irrigation projects that receive power directly from the federal dams. By improving efficiency at

these facilities, BPA increases the amount of power available to supply its utility customers.

5.3 Other Operations & Commercial Activities

Program Overview

Other Operations and Commercial Activities comprise 7% of Power's forecast IPR program costs. Figure 19 provides an overview of recent, current, and forecast expenses for Other Operations and Commercial Activities. See Table 3-A in the Appendix, which presents the expenses in more detail.

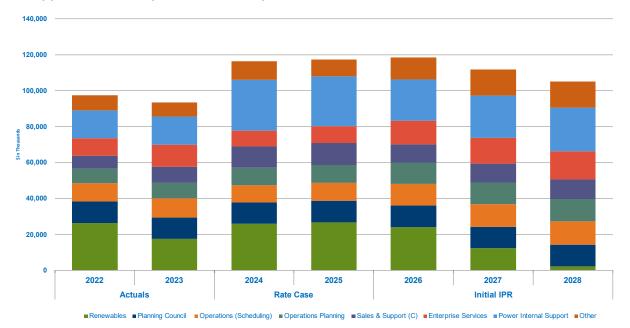


Figure 19: Power Operations and Commercial Activities, Expense Overview

Operational activities include the internal support needed for Power Services to deliver on its mission. The largest component includes the salaries and benefits for approximately 320 Power Services employees responsible for all aspects of the business activities and processes. This includes professional services, supplemental labor, travel, training, and recognition awards. Power's internal support projected costs include essential staffing and training required to fulfill BPA's commitment to provide competitive products and services along with the continued modernization of assets and system operations.

Commercial activities include all power sales and power purchases, including bulk trading activities and long-term power sales under Regional Dialogue contracts.

Program Objectives in IPR

Power staffing levels remained near all-time lows during BP-22 and BP-24, at under 300 employees. Projected costs for BP-26 reflect an expected small net increase in staff, consistent with BPA's workforce strategy, to support key strategic initiatives including: regional market developments, regional resource adequacy, and timely execution of post-2028 power contracts. Consistent with the agency's strategic direction, Power will focus on initiatives and work that support BPA's efforts to enhance the value of products and services and preserve safe, reliable system operations. Work will continue on remaining the provider of choice, modifying the Columbia River Treaty, marketing of surplus capacity, and exploring new markets.

BPA will continue to actively participate in the WRAP, the region-wide reliability program that helps ensure utilities have enough resources to provide reliable service, even under the most extreme conditions. The forecast cost increase of \$1.5 million is based on BPA's projected participation through BP-26.

5.4 Enterprise Services G&A

Program Overview

Enterprise Services General and Administrative (G&A) costs make up 9% of forecast Power IPR program costs. Figure 20 provides an overview of recent, current, and forecast expenses for Enterprise Services G&A, Figure 21 shows each organizational grouping within Enterprise Services G&A Allocations and their percentage of the total. For a description of Enterprise Services, its cost projections, and drivers, see Section 7 of this document.

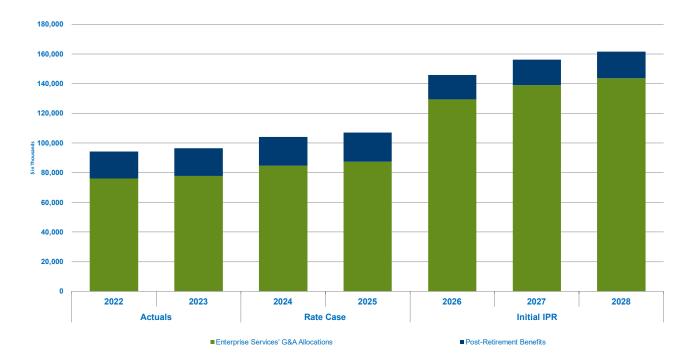


Figure 20: Power Enterprise Services G&A, Expense Overview

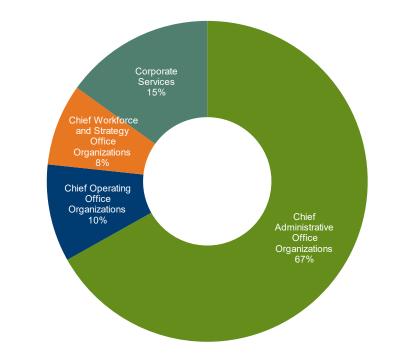


Figure 21: Power Enterprise Services G&A, Expense Summary by Organizational Grouping

6 Environment, Fish & Wildlife

Program Overview

BPA's Environment, Fish and Wildlife (EFW) division mitigates the effects of the Federal Columbia River power and transmission systems, prevents environmental impacts, and provides compliance with applicable environmental laws and regulations. Figure 22 provides an overview of recent, current, and forecast expenses for EFW. Tables 1-A, 3-A and 5-A in the Appendix contain additional details.

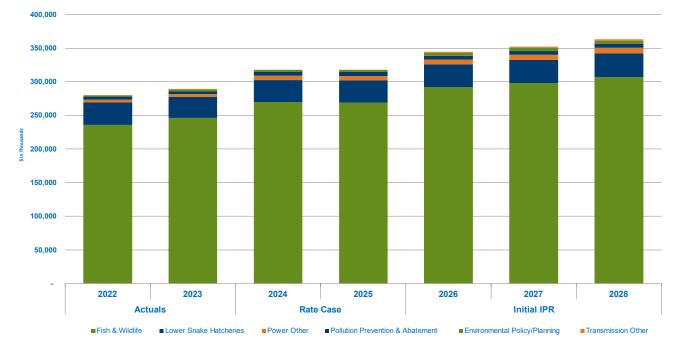


Figure 22: Environment, Fish & Wildlife; Expense Overview

EFW provides support and compliance for Power and Transmission services through four programs: Environmental Planning and Analysis; Historic Preservation and Cultural Resource Compliance; Pollution, Prevention and Abatement; and Fish and Wildlife.

Environmental Planning and Analysis ensures that BPA activities subject to environmental review are compliant with federal environmental laws and regulations, including the Endangered Species Act (ESA), the National Environmental Policy Act (NEPA), and the Clean Water Act (CWA), among other environmental laws. Environmental Planning and Analysis provides this function for BPA's F&W Program, as well as for transmission and power projects, programs, and activities.

Historic Preservation and Cultural Resource Compliance ensures BPA compliance with applicable cultural resource statutes, regulations, executive orders and policies for Transmission Services, BPA's F&W Program, and power and policy projects.

Pollution Prevention and Abatement minimizes BPA's environmental liabilities and ensures that Transmission activities, projects and facilities comply with applicable environmental regulations. To that end, this organization develops, coordinates, and manages environmental compliance programs for the O&M and construction of BPA's transmission system. Nearly all of Pollution Prevention and Abatement's resources are dedicated solely to Transmission and are direct Transmission costs. As such, Pollution Prevention and Abatement manages the environmental capital program, which is a part of the Transmission asset category.

BPA's **F&W Program** provides funding to local, state and federal entities, Tribes, and non-governmental organizations to implement hundreds of mitigation projects. These actions help improve the overall conditions for fish and wildlife adversely affected by the development, management and operation of the FCRPS. For example, F&W Program funding improves habitat in the mainstem of the Columbia River as well as tributaries and the Columbia River estuary, builds hatcheries and boosts hatchery fish production, evaluates the success of these efforts, and improves scientific knowledge through research. This work is implemented through annual funding awards, such as contracts and cooperative agreements, many of which are associated with long-term funding agreements like the Columbia Basin Fish Accords and wildlife settlements. With the exception of capital funding for hatchery construction, certain land acquisitions, and certain large-scale habitat access improvement projects, the F&W Program is expense funded.

In its role under the Northwest Power Act, the Northwest Power and Conservation Council (Council) develops a program of measures to protect, mitigate and enhance fish and wildlife, including related spawning grounds and habitat, on the Columbia River and its tributaries. BPA funds mitigation actions that are consistent with the Council's program. These actions fulfill, in part, BPA's Northwest Power Act fish and wildlife responsibilities as well as many of its ESA compliance commitments associated with various biological opinions.

In addition to the hatchery operations that are funded through the F&W Program, BPA has a direct-funding agreement with the U.S. Fish and Wildlife Service (USFWS) to pay the annual expense costs of operating and maintaining the **Lower Snake River Compensation Plan (LSRCP)** fish hatcheries and facilities. Congress authorized the LSRCP as part of the Water Resources Development Act of 1976 (90 Stat. 2917) to offset fish and wildlife losses caused by construction and operation of the four lower Snake River dams. The LSRCP facilities were constructed by USACE; upon their completion and at the direction of Congress, jurisdiction and control of the facilities passed to the USFWS, along with responsibility to administer the LSRCP program. The LSRCP hatcheries and satellite facilities produce and release more than 19 million salmon, steelhead and resident rainbow trout annually. The 26 LSRCP hatcheries and satellite facilities are operated by Idaho Fish and Game, Washington Department of Fish and Wildlife, Oregon Department of Fish and Wildlife, USFWS, the Nez Perce Tribe, Confederated Tribes of the Umatilla River and Shoshone-Bannock Tribes.

Capital

Environment, Fish and Wildlife's forecast capital costs include certain projects within the F&W Program and LSRCP as well as environmental capital investments which are shown in Table 4 below and Table 6-A in the Appendix for capital projections through 2035.

(\$thousands)	Actuals		Rate Case		Proposed IPR		
	2022	2023	2024	2025	2026	2027	2028
Fish and Wildlife	16,119	14,646	41,335	41,300	37,930	66,988	64,094
LSRCP Capital*					11,780	19,400	28,255
Environment	6,298	6,277	5,600	5,610	5,999	6,209	6,426
Total	22,418	20,923	46,935	46,910	55,709	92,597	98,775

Table 4: Summary of Environment, Fish & Wildlife Capital

 * The LSRCP Capital amounts are not included in the EF&W SAMP

F&W Program Capital Investments

The F&W Program's forecast capital costs are represented by three categories: hatcheries; conservation lands; and large-scale habitat access improvement.

Hatcheries

The <u>Strategic Asset Management Plan (SAMP) for hatcheries</u> covers the assets associated with 16 safety net, conservation and supplementation hatchery facilities and related satellite facilities throughout the Columbia River Basin (Basin). These hatcheries and associated facilities (e.g., weirs, traps, acclimation facilities) are funded through BPA's F&W Program. While BPA does not have permanent ownership of these facilities nor operate them directly, BPA funds artificial production at Basin hatcheries to help preserve and rebuild genetic resources to reduce short-term extinction risk and promote ESA-listed species.

BPA's asset management program for hatcheries has continued to mature since the last IPR process. BPA has developed strategic objectives for the hatchery program for the next five years with a focus on improving programs, standards, systems and processes for obtaining and maintaining asset information. With improved information on our assets, and an improved understanding of asset management principles with our partners, we continue to improve our ability to make formalized decisions for asset replacements that are risk-based and data-driven. Developing these programs will be the focus for the next five years.

For BP-26, BPA estimates an average of \$29.1 million per year for hatchery capital costs, which includes new hatchery commitments established in agreements signed in FY 2024. These cost estimates are dependent upon planned project schedules, which are subject to change as a result of circumstances outside of BPA's control during the planning, design, permitting and constructions phases. In those cases, the cost estimates may need to be adjusted to align with the revised schedules.

Conservation Lands

Land acquisitions that permanently extinguish a portion of BPA's mitigation obligations are funded through BPA's capital program, and these include land acquisitions to mitigate impacts to fish and wildlife throughout the basin.

The acquisition and management of these lands is also addressed in the SAMP. BPA permanently protects mitigation properties through the acquisition of conservation easements or third-party rights of enforcement. Partners also develop land-management plans identifying how the property will be managed to protect and restore fish and wildlife habitat.

On average, land capital costs are estimated at \$15.2 million per year for BP-26. Fiscal year execution will depend on the availability of land parcels and the willingness of landowners.

Large-scale Habitat Access Improvements

Expenditures related to large-scale habitat access improvements in the Columbia River tributaries and estuary are estimated to average \$12 million per year for BP-26. As an example of this type of work, BPA is funding the acquisition of a 943-acre conservation easement at the confluence of Birch Creek and the Umatilla River for the Uma-Birch Floodplain Reconnection Project. A 290-acre floodplain historically existed at the confluence, but the floodplain connection has been severely limited and is now disconnected from its historical floodplain. Riparian, floodplain and wetland habitat currently present on the property will be restored to a high-functioning complex of off-channel habitat. The acreage and quality of riparian and wetland habitat is expected to increase as a result of the implementation of ongoing and future restoration activities at Uma-Birch.

Lower Snake River Compensation Plan

In December 2023, Bonneville committed to make \$200 million capital available for ten years to the USFWS for LSRCP hatchery modernization, upgrades, and non-recurring maintenance. Bonneville will use its existing direct-funding authority to provide funds to the USFWS. USFWS has planned to implement \$59.4 million in capital projects using BPA-committed funds during the BP-26 rate period.

Environmental Capital Investments

Pollution Prevention and Abatement plans to replace 15 to 30 pieces of high-voltage equipment annually that are regulated for PCB content under the Toxic Substances Control Act; install or upgrade drainage treatment and containment systems at environmentally sensitive transmission facilities to maintain water resources protection and to prevent regulatory compliance issues; and install or upgrade oil storage at key transmission facilities to meet environmental regulatory standards and requirements. There are no new programs planned for BP-26.

Expense

Fish and Wildlife

In BP-26, BPA will continue to collaborate with the Council, states, Tribes and other partners to identify opportunities to prioritize and implement projects that directly benefit fish and wildlife in a cost-effective manner. In addition, the F&W Program will continue to implement projects that provide additional information and on-the-ground benefits to resident and anadromous fish that were specified in the 2020 USFWS and National Marine Fisheries Service Biological Opinions.

The F&W Program is built upon a strong base of biological accomplishments. The portfolio of projects that comprise the F&W Program are largely maintained and refined rather than continuously reinvented. The flexibility of multi-year planning and the ability to shape available budgets on an annual basis allows the F&W Program to support high-priority work that is ready to implement. Through annual collaboration with project partners, BPA is able to identify efficiencies throughout the F&W Program and incorporate emerging priorities as they are identified. Finally, BPA will continue to fulfill its commitments in existing long-term funding agreements.

During BP-26, BPA is projecting an increase in F&W Program costs of \$32 million, an 11% increase. The estimated cost increase stems from inflationary pressure on the cost of materials, equipment, and staffing across the F&W Program and from new fish and wildlife commitments. Reflected in the cost increase is a \$2 million-dollar projected increase, on average, in Lower Snake River Compensation Plan (LSRCP) costs, including additional rearing capacity, increased cost of fish food, and other inflation-driven increases.

Environmental Planning and Analysis

In partnership with Transmission Services, Power Services, the business Transformation Office, and the F&W Program, Environmental Planning and Analysis will identify the appropriate NEPA strategies and provide quality, timely and cost-effective environmental planning and analysis services to deliver key program and project milestones in the upcoming rate period. Adjustments to personnel and travel costs will enable ongoing efforts to identify appropriate NEPA strategies and provide quality, timely and cost-effective environmental planning and analysis services.

Historic Preservation and Cultural Resource Compliance

For BP-26, Historic Preservation and Cultural Resource Compliance work includes the following:

- Identify the appropriate cultural resource strategies and provide quality, timely and cost-effective services to deliver key program milestones for BPA's transmission, F&W and FCRPS programs.
- Ensure construction mitigation measures and best-management practices identified as part of compliance processes are implemented; guaranteeing agency compliance is maintained for the duration of the undertaking, as well as carrying out further compliance requirements identified during the execution.
- Provide technical expertise to internal and external parties regarding cultural resource compliance.
- Act as technical support to supply chain, assisting in the purchase of environmental and cultural resource services, grants and agreements and supplemental labor management.

Historic Preservation and Cultural Resource Compliance is a new organization, requiring adjustments in materials, training, and other routine costs. Incorporating a cost-of-living adjustment and other forecast increased personnel costs in BP-26 enables ongoing efforts to identify appropriate strategies and provide quality, timely and costeffective cultural resource compliance services. New positions relate directly to increased workload, specifically within Transmission Services, including access road maintenance and wood pole replacement. Finally, increased costs are estimated to fully support the renegotiation of the FCRPS Systemwide Programmatic Agreement (SWPA) that will expire on October 6, 2029.

Pollution Prevention and Abatement

Pollution Prevention and Abatement plans to achieve the following goals in BP-26:

- Reduce Polychlorinated Biphenyls (PCBs), a primary persistent bio accumulative toxic chemical on BPA's transmission system.
- Ensure storm water discharges at BPA's transmission facilities (e.g., substations and maintenance complexes) meet all federal and state standards established under the Clean Water Act.
- Provide certainty that BPA's oil storage facilities meet all federal and state standards established under the Clean Water Act and applicable hazardous waste regulations.

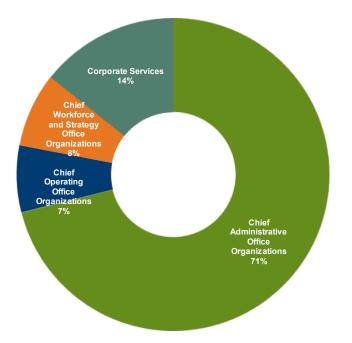
Additionally, the organization plans to fund studies to identify viable alternatives to sulfur hexafluoride, which is an extremely potent and persistent greenhouse gas used as an arc suppressant in high-voltage electrical equipment by BPA's Transmission organization.

The Pollution Prevention and Abatement program's forecast costs reflect a cost-of-living adjustment and other increased projected personnel costs. The cost projection also reflects staff limitations that may require the organization to work closely with Transmission to prioritize work associated with expanding programs, such as the wildfire mitigation and capital construction programs. Past costs and projected inflation inform the estimated out-year costs associated with environmental cleanups and emergency spill response actions.

7 Enterprise Services

Enterprise Services' increase of \$173 million above BP-24 is primarily driven by increases in the Chief Administrative Office which is discussed in Section 7.2. Enterprise Services support the Power and Transmission business line functions to ensure BPA's mission objectives are met. Enterprise Services consists of all departments not located within the Power and Transmission business units. Enterprise Services' costs are reflected in the Power or Transmission revenue requirement, either as an allocation or direct charge.

Figure 23 shows each function within Enterprise Services and its percentage of total average projected costs. Figure 24 provides an overview of recent, current, and forecast expenses for Enterprise Services, while Table 5-A in the Appendix provides them in more detail.





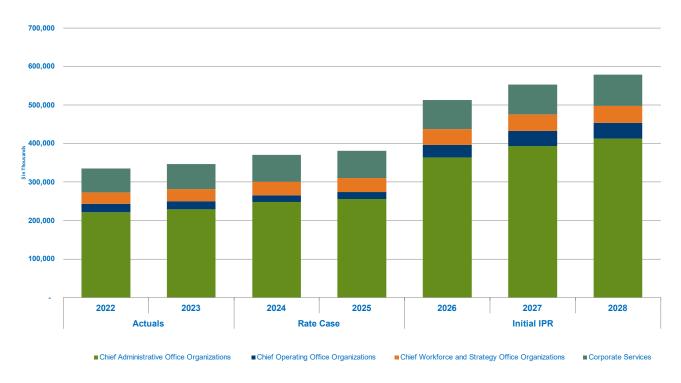


Figure 24: Enterprise Services, Expense Overview

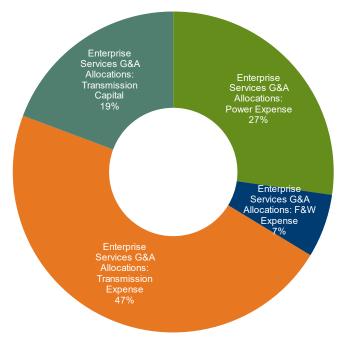
7.1 Allocation of Enterprise Services Costs

Enterprise Services is comprised of the costs necessary to provide essential services to operate the agency. These costs are directly charged to a program within the business line if there is a direct connection, and the remaining costs are allocated using cost allocation pools.

The cost allocation pools are collections of projected costs from the Enterprise Services organizations with similar cost allocation drivers. The drivers are used to determine the allocation rates. The makeup of the cost pools and projected costs are reviewed biannually to accurately reflect cost causation and assess the continued relevance of the allocation rates. Organizations may charge into one or more cost pools, when not charging directly to Power or Transmission. The description of products and services provided by these organizations can be found in the individual organizations' summaries. Costs can be allocated either evenly to Power Services and Transmission Services or based on specific cost drivers.

Power's revenue requirement includes the portion of Enterprise Services costs for Power and Fish & Wildlife within their IPR costs. Transmission's revenue requirement includes a portion of Enterprise Services costs within IPR program costs, and a portion within IPR capital for the Enterprise Services capital overhead indirect allocation.

Figure 25 shows the percentage of the BP-26 rate period Enterprise Services Costs allocated to each of the revenue requirements.





7.2 Chief Administrative Office Organizations

Program Overview

The Chief Administrative Office (CAO) provides vital cross-organizational policy and internal operational support and services for essential BPA functions and programs critical to executing our mission. The CAO is comprised of the following functions: Information Technology (IT), Safety, Security and Continuity of Operations, Supply Chain, Workplace Services, and the Program Management Office.

The CAO is projecting increased costs above inflation in BP-26 as well as growth in demand for some core work. The projected increase in costs has several strategically significant purposes that align with BPA's core mission:

- Additional personnel to support safety, expanding contracting needs, critical construction, and physical and personnel security.
- Growth of safety programs to maintain the safety of our workforce and meet compliance requirements.
- Continued implementation of Executive Order 14057 *Catalyzing Clean Energy Industries and Jobs through Federal Sustainability*, including the tools and equipment required to service BPA's fleet as we transition to electric vehicles.
- Enhancing physical and personnel security programs to address evolving threats and compliance requirements, protect BPA's physical assets and maintain the safety of our workforce.
- Maximizing the value of CAO's facilities, fleet, and security assets through construction support and maintenance.
- Expanding BPA's sustainability programs to meet federal mandates and growing sustainability requirements, especially related to zero emission fleet and buildings.

The CAO will continue to actively manage costs by investing in core infrastructure and key processes that maximize the value of BPA's resources over the next rate period and in future rate periods.

A brief description of capital spending is included in the section below. See the associated <u>Strategic Asset Management Plans</u> (SAMPS) published on BPA.gov for a detailed discussion about capital spending.

Figure 26 provides an overview of recent, current, and forecast expenses for the CAO. Figure 27 shows each of the major functions within the CAO and its percentage of total average projected costs. Table 5-A in the Appendix provides more detail on expenses and Table 2-A provides more detail on the capital.

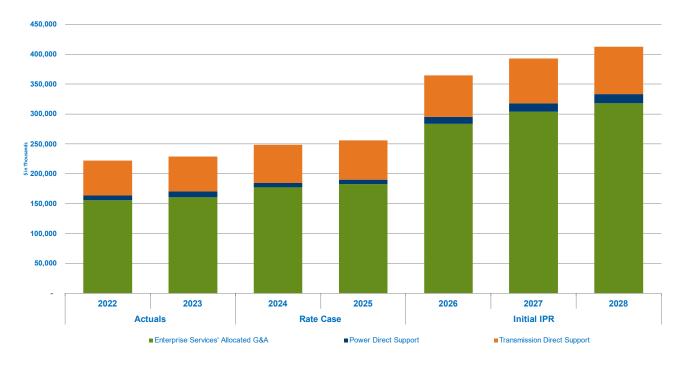


Figure 26: Chief Administrative Office Organizations, Expense Overview

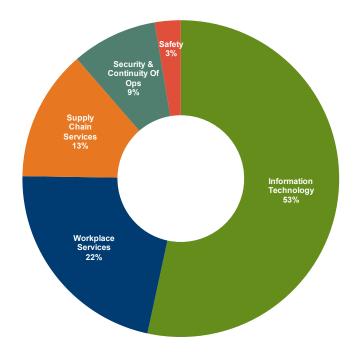


Figure 27: Chief Administrative Office Organizations, Expense Summary

7.2.1 Project Management Office

Program Overview

The CAO Program Management Office (PMO) guides the strategic, financial, asset management and workforce planning for the CAO organization, and provides internal operational support and services for essential BPA functions and programs critical to executing BPA's mission. The PMO facilitates a CAO compliance program focused on tracking internal and external audits, managing regulatory compliance requirements, and developing and maintaining policies. In addition, two BPA-wide programs are hosted in the PMO:

- **Sustainability Program** drives and coordinates sustainability planning, reporting, strategic goal-setting and related projects. It develops internal capacity for individuals and groups to apply sustainable practices across business lines and fosters a culture of sustainability throughout BPA.
- **Business Resilience Program** manages the incorporation of resilience concepts and activities into BPA business practices to enhance BPA's ability to prepare for, respond to, and recover from unexpected disruptions.

Program Objectives in IPR

In the BP-26 rate period, the PMO will focus on aligning CAO-wide operations with the agency strategy; improving governance; maturing processes; and integrating sustainability and resilience federal mandates into BPA's operations. The majority of the PMO's work will be realized using existing resources. The cost forecast includes the following:

- A modest increase in execution of strategies.
- Implementation of federal sustainability mandates for BPA's fleet, facilities and other sustainability-related obligations.

7.2.2 Safety

Program Overview

The Safety program supports BPA's mission and safety core value to provide a workplace that is free from all recognizable safety and health hazards through advice, information and support to the BPA workforce. The program engages with executives, agency leaders and workforce members to build a strong safety culture across BPA. Additionally, it implements a robust safety and health system by collecting industrial exposure data and monitoring industry improvements in the safety discipline. Safety

also seeks continuous improvement by benchmarking with industry peers, conducting workload studies and engaging in independent third-party program reviews.

The program ensures compliance with the DOE Federal Employee Occupational Safety and Health (FEOSH) program by reviewing and updating programs and procedures. Safety also conducts inspections, investigations, and appraisals, and recommends safe work practices and procedures. The Safety organization reviews contractors' sitespecific safety plans and performs worksite audits in compliance with host utility responsibilities. The Safety organization also recommends and tracks approved corrective actions and ensures compliance with applicable medical surveillance requirements.

The Safety program collaborates with executive management and the workforce to effectively implement a robust safety and health program to ensure that accident and injury prevention remain a priority.

Program Objectives in IPR

For the BP-26 rate period, the Safety Program will focus on executing BPA's updated safety strategy, implementing training, setting industry-leading safety standards and working with our business partners to integrate safety operations. Expansion of safety work will focus on:

- Integration of safety as a core value throughout the employee life cycle, from recruitment to retirement
- Implementation of a completed Safety and Occupational Health Manual
- Expansion of required training and integration of a Position Hazard Analysis with a Learning Management System
- Maturation of our ANSI Z10 Safety Management System
- Expansion of contract oversight capabilities
- Implementation of industrial hygiene monitoring plans
- Maturation of industrial hygiene program

7.2.3 Security and Continuity of Operations

Program Overview

BPA's Security and Continuity Operations is comprised of three program offices: Continuity and Emergency Management; Physical Security; and Personnel and Information Security. These program areas support the operational and compliance mandates of several authorities, including NERC Critical Infrastructure Protection (CIP) standards, DOE policy, Office of Personnel Management (OPM) requirements, Homeland Security, Federal Information Processing Standards (FIPS), Department of Commerce (export control), and counterintelligence. BPA's Continuity and Emergency Management program ensures the agency is prepared for all-hazard events and is capable of quickly responding to and recovering from continuity events. BPA's Security Program develops and executes the Security asset category SAMP for the protection of BPA's critical assets in accordance with regulatory compliance. The multi-year plan informs financial investments in physical protection measures and electronic systems to protect BPA's people and critical infrastructure used to deliver power to ratepayers in the Pacific Northwest. The Security Program also ensures BPA's workforce is properly vetted, physical security operations are stable, continuity and disaster planning are achieved, and BPA's sensitive information is protected.

The cost forecast also reflects the replacement of security systems that have reached the end of their functional life cycle. Replacement systems provide enhanced monitoring capabilities, improved design elements, reduce many manual processes and decrease occurrences of human error.

More information about Security's asset investments is provided in its <u>SAMP</u> published on BPA.gov.

Program Objectives in IPR

BP-26 Security expense objectives include:

- Expanding current levels of security operations.
- Expanding the current level of protection while planning for an increase in contractual labor costs.
- Planning for an increase in system maintenance costs to keep up with device failures while capital reinvestments get under way.
- Planning for expected increases in OPM costs for background investigations to keep the BPA workforce vetted in accordance with law and policy.
- Planning for the expected rollout of a government-wide program for protecting Controlled Unclassified Information.
- Planning for resources to support the Business Impact Analysis findings and mitigation strategies for Continuity Resilience initiatives.
- Responding to security threats across BPA's operational footprint.

7.2.4 Supply Chain

Program Overview

Supply Chain is the enterprise provider of procurement, materials management, logistics services, supplemental labor workforce management, and fleet management. The organization develops and executes strategies to provide internal business partners managed solutions to secure equipment, materials, supplemental labor and a variety of contract services.

Supply Chain Services consists of five major functions:

- Fleet Services acquires, repairs, and performs maintenance on BPA-owned and leased mobile equipment. The assets consist of approximately 1,420 heavy mobile equipment and specialty vehicles, 915 leased passenger vehicles, 135 generators and 700 components of equipment. (Details can be found in the Fleet <u>SAMP</u>.)
- Logistics and Transportation manages, warehouses and safeguards BPA's \$140 million emergency, new construction and maintenance inventory. Logistics processes orders and ships to field sites, as well as performs reverse logistics, inventory management, and material-cataloging. Investment recovery and hazardous waste operations process unneeded material through selling, transferring, donating or disposing.
- The **Supplemental Labor Management Office** monitors, administers and manages the use of supplemental labor throughout BPA, and is responsible for ensuring effective and efficient use of supplemental labor resources forecast to cost \$132 million per year. It provides Contracting Officer's Representative oversight support and offers assistance in administering BPA's contract workforce.
- **Contracts and Strategic Sourcing** provides contracting services to BPA's internal organizations culminating in over 5,000 contracts/purchase orders being awarded each year with an annual spend of over \$1.3 billion and administration of \$2.5 billion of in-flight contracts.
- **Technology and Strategic Planning** provides strategic planning, analytics and technology support. This organization manages initiatives and provides BPA-wide support for personal property and vendor management, as well as provides business support for the 18 Supply Chain-centric applications.

Program Objectives in IPR

For the BP-26 IPR period, Supply Chain costs are projected to marginally increase. Supply Chain will continue to deliver on the core business of procurement, materials management, logistics services and fleet management while implementing cost-savings opportunities and collaborating with internal customers to improve processes and procedures across BPA. The areas of focus in BP-26 are the following:

- Meet BPA's growing contracting needs, especially Transmission support.
- Maintain materials, equipment and transportation support to meet expanding Transmission asset management needs.
- Support implementation of the sustainability federal mandates.

7.2.5 Workplace Services

Program Overview

Workplace Services, also referred to as Facilities, manages \$1.6 billion of assets comprised of control centers, control houses, radio stations, warehouses, and administrative offices. While most facilities directly support Transmission Services, many also enable other facets of BPA business, including Power Services and the full range of Enterprise Services, including Environment, Fish and Wildlife, Compliance and Finance. The <u>Facilities SAMP</u> supports BPA operations by providing quality support services and full life-cycle management of assets in accordance with BPA strategic goals.

Program Objectives in IPR

For the BP-26 rate period, Workplace Services will focus on sustainment and recapitalization efforts to minimize safety and operational risks over the next 10 years. Currently, the average age of the Facilities portfolio is 44 years old and requires elevated levels of maintenance, repair or replacement, which represents higher-cost maintenance and an increased risk to safety and operations. Expansion of Facilities work will focus on:

- Replacing end-of-life and failing equipment with newer, lower-cost equipment.
- Meeting needs of ongoing large projects, such as the Vancouver Control Center and Grand Coulee updates.
- Meeting sustainability-driven federal mandates.

Progress against these objectives will be measured by tracking portfolio Facility Condition Index scores for assets. Investment and maintenance will prioritize actions to maintain personnel safety and essential business while minimizing the degradation of essential facilities assets. Sustainment activities will focus on providing preventative maintenance and repair, while recapitalization activities will include the restoration, modernization or replacement of facilities.

7.2.6 Information Technology

Program Overview

Leading into the BP-26 rate period, Information Technology (IT) is at a pivotal moment. IT will focus on improving internal service delivery methods, core system stabilization, mitigation of technical debt, enhancing cyber situational awareness, improving key processes and procedures, and filling critical resource gaps. These efforts will facilitate enhanced throughput and ultimately position IT to better enable BPA's strategic initiatives.

- Modernizing baseline capabilities (such as unified communications) to enable improved collaboration internally and with federal partners, industry, and our customers.
- Improving architecture and engineering capabilities; facilitating a more forwardlooking department that is more capable of anticipating and responding to future agency needs.
- Continuing maturation of security capabilities such as the Continuous Diagnostics and Mitigation program; enhancing real-time situational awareness and ability to respond to key threats.
- Enhancing project throughput; mitigating critical resource gaps, single points of failure, workforce composition, and acquisition strategy; enabling more robust support for strategic initiatives such as day-ahead markets, corporate modernization, etc.

IT Capital

An <u>IT Strategic Asset Management Plan</u> (SAMP) was developed to ensure resourcing for optimal throughput nests with BPA's Strategic Plan. IT's objectives consider current and emerging business requirements across Power, Transmission and Corporate, and are centered on purposely modernizing assets, managing life-cycle costs, and maximizing asset value. Additionally, emphasis is being placed on reducing asset performance risks to more acceptable levels. For example, planning and investments are needed to reduce risk in delivering viable disaster recovery services for enterprise systems to ensure continuity of operations in the event of a disaster.

Program Objectives in IPR

Several application upgrades supporting BPA's strategy and core business functions are underway. More work is needed in the coming years to enable BPA to continue to find efficiencies in internal processes and serve the region effectively. IT is projecting an increase to BP-26 IPR costs in support of maturing IT's capacity to meet currently defined and emerging business needs. IT's initiatives aim to improve service delivery methods, the integration of enterprise security, situational awareness and technology rationalization, processes for requirements intake and prioritization, and to enable the business to progress by supporting key modernization efforts.

7.3 Chief Operating Office Organizations

Program Overview

The Chief Operating Office (COO) provides policy and strategic guidance concerning BPA's business operations and executive-level leadership for strategic direction and policymaking. The COO organization provides internal management oversight and leadership to enable successful execution of the agency mission in accordance with

statutory and contractual obligations and to achieve the agency's strategic business objectives. The COO oversees and provides direction and guidance for Power Services, Transmission Services, Environment, Fish and Wildlife, and the newly created Business Management and Development organization. Because the latter is a new organization with cost implications, it is discussed further below.

Figure 28 provides an overview of recent, current, and forecast expenses for the overall COO organization.

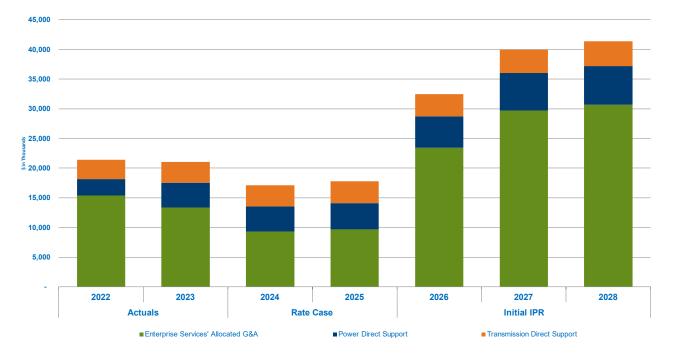


Figure 28: Chief Operating Office Organizations, Expense Overview

Program Objectives in IPR

The cost forecast for the COO organization, apart from the Business Management & Development organization described below, includes staff only.

7.3.1 Business Management & Development

The Business Management and Development organization includes Operational Performance, Customer Support Service, and the Business Transformation Office. The purpose of this organization is to manage and synthesize the efforts of organizations with cross-BPA functions. Coordinated management of these organizations is essential to maximizing benefits for BPA. The organization provides leadership in the planning, development and administration of programs, systems and processes, which are functionally critical for BPA to manage customer-facing issues as well as emerging market initiatives, and to conduct its core business in a cost-effective manner.

Program Overview

Operational Performance

Operational Performance was established in early FY 2024 to plan, prioritize, manage, and oversee an enterprise-wide governance, structure, and standardization in the areas of Asset Management, Business Process Management, Data Management, Governance and Analytics strategies, policies, and programs to improve fundamental business capabilities across BPA. The Operational Performance organization did not exist in previous IPR rate periods. Some elements of Operational Performance's existing costs were previously in the COO organization and were moved during the establishment of the Business Management and Development organization.

Customer Support Services

Customer Support Services provides Load Forecasting and Analysis, Customer Contract Management and Administration, Customer Billing, Customer Metering Services, agency policy direction, governance, and oversight of BPA's customer (non-Supply Chain) contracting services, and interfaces with business line organizations. Customer Support Services provides overall business management and integration for customer service systems. It manages multiple IT systems supporting customer engagement, including the Agency Enterprise portal, which provides a single location for customers' digital touchpoint with BPA. Using this portal, customers can access data related to metering, billing, contracts and forecasting as well as other agency and customer specific information.

Business Transformation Office

The Business Transformation Office's mission is to successfully execute on BPA's key strategic initiatives by partnering with agency business units and using value-based Portfolio/Program/Project Management, Enterprise Architecture, Business Analysis, and Change Management methodologies for project execution, thereby positioning BPA for long-term competitiveness and financial strength. The BTO embodies a structured approach to program management and execution of programs within the portfolios of cross-agency transformational initiatives. It is responsible for the successful development and execution of critical business initiatives designed to ensure BPA will be an engine of the Northwest's economic prosperity and environmental sustainability.

Program Objectives in IPR

Operational Performance

BPA's 2024-2028 Strategic Plan guides BPA to become more competitive and responsive to customer needs and to leverage and enable industry change through modernized assets and system operations, including enhancements to enterprise-wide business processes and data. The Operational Performance team will provide enterprise-wide support to strategic planning initiatives by providing direction and leadership on the maturation of asset management, data governance and management, and in the creation of a data analytic organization.

In the upcoming rate period, Operational Performance's projected costs are primarily associated with ongoing agency activity and the creation of the data analytic organization.

Customer Support Services

In the upcoming rate period, Customer Support Services will focus on execution of core functions along with necessary system and process updates related to changes from strategic initiatives, such as Provider of Choice and day-ahead markets.

Business Transformation Office

BTO's projected costs include two main elements: key strategic initiative (KSI) and ongoing agency activities. The KSI element includes incremental costs (e.g., contractors and IT systems) associated with achieving the agency's KSIs, and ongoing agency activities including the costs associated with the BTO's existing staff and capabilities.

BTO has begun developing and supporting a new key strategic initiative known as Corporate Modernization. Additionally, the BTO continues to focus on market development and is currently exploring potential participation in a day-ahead market. While that decision is pending, BPA has begun forecasting the necessary implementation work and costs. Both strategic efforts are described further in BPA's Strategic Plan.

7.4 Chief Workforce and Strategy Office Organizations

Program Overview

In 2021, BPA reorganized its executive structure to align several functions under the new Chief Workforce and Strategy Office (CWSO). This office's mission is to strengthen the agency's strategic capabilities and enhance BPA's commitment to its workforce and organizational culture. Figure 29 provides an overview of recent, current, and forecast expenses for the overall CWSO organization.

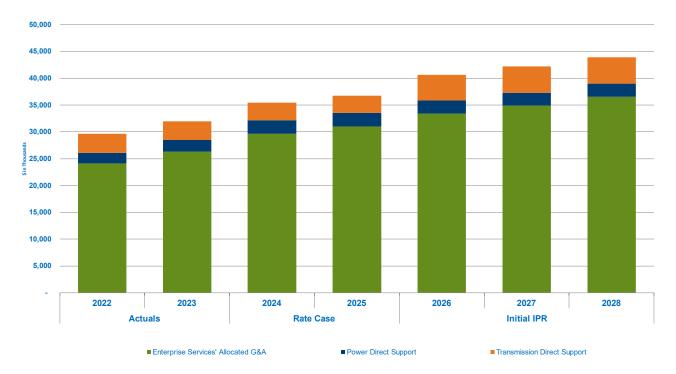
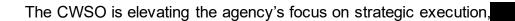


Figure 29: CWSO Organizations, Expense Overview



The office is led by the Chief Workforce and Strategy Officer and includes five functional areas: the Chief Culture Office, Civil Rights and Equal Employment Opportunity (CREEO) Office, Chief Communications Office, Chief Technology Innovation and Strategy Office, and Human Resources. The CWSO is projecting increased costs in BP-26 that largely support growth in demand for some core work. The projected increase in costs have strategically significant purposes:

- Additional personnel to support recruitment and retention activities, and ensure CREEO compliance program requirements.
- Growth in internal operations functions that support efficient operations and reporting for the organization.

Functional area priorities during BP-26 are discussed in the following narrative.

Program Objectives in IPR



The Chief Culture Office plans, directs, and manages a comprehensive agencywide employment brand, and employee engagement program aligned for the accomplishment of BPA's mission. The office also provides executive leadership and direction in planning, development, and administration of programs, systems, and processes,

The Chief Culture Office's projected costs for the upcoming rate period reflect a slight increase related to hiring additional staff to support significant strategic work. Specific priorities for the BP-26 rate period include:

- Roll out the new Culture Strategy 2024-2028.
- •
- Roll out refreshed Well-Being Program.
- Development of the first Retention Strategy (in partnership with HR).
- Implement of hybrid strategies and initiatives to support leaders with changes in work environments.
- Continue to build an internal team of experts to teach, implement and drive cultures at BPA.

Civil Rights and EEO (CREEO)

Civil Rights and EEO is responsible for Equal Employment Opportunity (EEO) Title VI and VII compliance and conflict resolution programs. Its priorities in the upcoming rate period are to meet federal requirements and support BPA's overarching people and culture goals where possible.

CREEO's projected costs contain a modest increase for additional personnel and inflation on existing costs that will permit BPA to meet its federal requirements and support the development and implementation of BPA's culture and strategy goals. Specific programs include Section 508 compliance, MD-715, Limited English Proficiency (LEP), and Reasonable Accommodations.

Communications Office

The Communications organization is responsible for developing and executing comprehensive communications and outreach strategies that will foster awareness, knowledge and support of BPA's mission, strategies and activities. This includes engaging with employees, customer utilities, the public, regional groups and other impacted or interested stakeholders. Communications is also responsible for engaging with local, regional, national and industry news media. It ensures that programs and processes are in place to secure appropriate and meaningful public and stakeholder input into BPA's decision-making processes.

In the upcoming rate period, Communications will continue to develop and implement strategies that inform and educate audiences about BPA's strategic direction, priorities, policies, projects, initiatives, and activities. A number of projects will require significant support from Communications, including the Provider of Choice Initiative, continuity events (extreme weather, wildfires, and other threats), new market initiatives, and public financial processes (Public Rate Design Methodology, BP-26 rate case).

Communications' projected costs for the upcoming rate period reflect the impacts of inflation on the organization.

The Communications offices' near-term priorities are:

- Implement communication and engagement strategies that promote the implementation of BPA's 2024-2028 Strategic Plan, support BPA's new Culture Strategy, and advance corporate communications goals.
- Position BPA as a responsible and trusted partner that drives the region's clean energy future and economic success and supports a broad range of regional needs and interests.
- Promote how BPA is transforming its business and operations to meet the evolving and long-term needs of its customers while prudently managing costs.
- Showcase BPA as an "Employer of Choice" with a diverse workforce that's dedicated to responsibly and safely delivering clean, reliable, affordable power to the customers and communities we serve.

Chief Technology Innovation and Strategy Office

The Technology Innovation and Strategy Office is led by the Chief Technology Innovation and Strategy Officer (CTISO). The CTISO facilitates and coordinates agency and business unit strategies, performance measures and multi-year targets and related work products while incorporating the application of new and emerging technologies, systems, and actions to support BPA's strategic business objectives and the long-range strategic plan. For the upcoming rate period:

- Technology Innovation will strive to expand the technology and innovation resources available to BPA SMEs through relationships with associations, national laboratories, and academic bodies.
- Strategic Planning will implement planning methodologies, tools and training that enable forward-looking activities across BPA to better integrate needs and better express their objectives.
- Internal Operations will seek to mature measures and reporting capabilities that enhance existing performance reporting and foster the skills, capabilities and services that enable and improve measurement and reporting by business lines and programs across the agency.

Human Resources

BPA's Human Resources Service Center plans, directs and manages a comprehensive human capital management strategy and program aligned to meet agency mission and objectives. The function provides oversight of all HR programs. This organization is responsible for developing, communicating, and coordinating HR policies and initiatives. It manages the development and evaluation of HR programs to ensure compliance and operational excellence.

HR's projected costs for the upcoming rate period reflect an increase in personnel costs. These additional resources are needed to support anticipated hiring action increases in other business areas. Specific priorities during this period include:

- Evaluate and explore available workforce flexibilities to recruit and retain top talent; manage high-volume recruitments quickly.
- Research and explore compensation flexibilities, informed by market research, to remain competitive.
- Explore and implement tools to ensure BPA has mechanisms for knowledge transfer/succession planning for critical skills.

7.5 Corporate Services

Corporate Services makes up the remaining Enterprise Services organizations, which report directly to the Administrator and are not covered in the other Chief level organizations.

Figure 30 provides an overview of recent, current, and forecast expenses for the Corporate Services organizations.

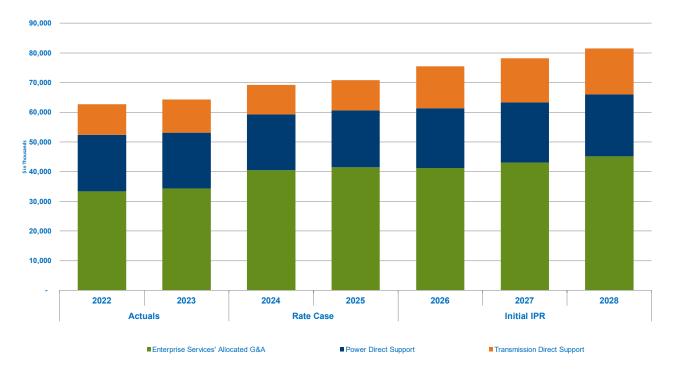


Figure 30: Corporate Services, Expense Overview

7.5.1 Finance

Program Overview

Finance provides leadership and services in financial planning, budgeting and analysis, treasury operations, debt and investment portfolio management, investor relations, financial systems, accounting, and financial reporting for the FCRPS and BPA. Finance is responsible for preparing audited financial statements for the consolidated FCRPS and separate federal financial statements, as well as capital and expense budgets and forecasts. In addition, Finance performs payables and receivables for approximately \$4 billion in annual revenues and expenses. Finance manages strategic functions, including the issuance and repayment of approximately \$15 billion in outstanding debt, \$1 billion in cash and investments, and a \$500 million investment portfolio related to the Columbia Generating Station decommissioning trust fund.

Program Objectives in IPR

Finance's projected costs reflect the resources necessary to provide the services to support BPA's mission in the upcoming rate period, and an increase in personnel to mitigate risk of single points of failure in support of the execution of BPA's mission and strategic objectives. As discussed in Section 2, BPA's Strategic Plan will require staffing and support from Finance, and those forecast costs are described as part of the strategic goals they are supporting in Section 2.

7.5.2 Compliance, Audit, and Risk Management

Program Overview

The Compliance, Audit, and Risk Management Organization is comprised of four organizations headed by the executive vice president of Compliance, Audit and Risk Management.

Compliance, Governance, and Internal Controls establishes and maintains a comprehensive regulatory compliance and ethics program which is aligned with and fully supports BPA's mission and objectives.

Internal Audit supports the governance objectives of BPA by providing audits, reviews, surveys, analysis, testing, and investigations.

Risk Management facilitates risk-based strategic direction, evaluates risks associated with BPA's commercial transaction activity, manages BPA's credit exposure, and administers BPA's property insurance programs.

Purchasing and Property Governance provides management direction to conduct BPA's business in a cost-effective manner and provides oversight to BPA's acquisition, financial assistance, and personal property operations to assure conformance with established law, regulations, policies, procedures, and good business practice.

Program Objectives in IPR

The projected costs associated with Compliance, Audit, and Risk Management reflect the services necessary to support BPA's mission in the upcoming rate period. Compliance, Audit, and Risk Management forecast costs are primarily related to personnel costs and property insurance, which are forecast to increase due to projected inflation and other factors.

In addition to inflation, property insurance is forecast to increase because of other market factors. After years of historically soft markets, insurance carriers have been trying to gain back some ground. The commercial property insurance market has been in a very hard cycle since 2019. The continued impacts of natural catastrophic events, increased supply chain and labor costs, increasing cost of capital and financial market volatility are also major factors driving up costs and resulting in higher insurance rates and premiums.

7.5.3 General Counsel

Program Overview

The Office of General Counsel (OGC) provides legal advice and representation in connection with all BPA activities.

OGC work performed in support of Power and Transmission is charged to the respective business units. OGC has costs in support of general agency initiatives that are also functionalized to the business units. Support includes legal advice and representation of the agency in all areas of claims, and administrative or judicial litigation.

Program Objectives in IPR

OGC's forecast costs reflect the legal services necessary to support BPA's mission in the upcoming rate period. OGC's forecast costs are primarily related to personnel costs, which are forecast to increase due to projected inflation.

OGC's goals and priorities in the upcoming rate period are to continue to provide advice related to, and defend actions associated with, the widely varying functional areas that comprise BPA. During this period, more activity is expected with power sales contract policy development; power and transmission rate case preparation and processing; a transmission tariff Section 212 hearing; Columbia River Treaty negotiations; changing energy market environments (e.g., EIM, day-ahead markets, resource adequacy); torts and personnel litigation; litigation and activities associated with biological opinions, CRSO, and other environmental and tribal processes.

7.5.4 Intergovernmental Affairs

Program Overview

Intergovernmental Affairs serves as the primary liaison with federal, state, local governments and elected officials, federally recognized tribal government entities, and other regional organized constituents. The organization assures that BPA matters and issues that arise externally that may impact BPA are managed internally and externally with BPA's mission objectives and strategy in mind. This leads to mutual understanding of BPA business interests and needs while the agency considers external objectives that may benefit it. The desired result of these engagements is win-win, neutral, or "do no harm." Intergovernmental Affairs manages effective BPA engagements across overlapping and occasionally conflicting policy choices and process timelines.

Intergovernmental Affairs accomplishes its goals by:

- Engaging in a "no surprises" culture with all constituents.
- Providing and creating educational opportunities.
- Building and managing effective working relationships built on mutual trust.

Program Objectives in IPR

The forecast for the upcoming rate period reflects what Intergovernmental Affairs needs to accomplish the organizational objectives and maintain current program offerings.

8 Disclaimer

The capital and expense forecasts in this document reflect BPA's current estimate of its costs. These cost estimates do not constitute final spending levels for any BPA program or represent actual budget decisions made in the budgetary process proposed by the executive branch. Rather, the IPR cost estimates are designed to provide the basis for part of the projected costs to be recovered in rates for power and transmission. Actual spending levels may be further revised or adjusted through BPA's internal or other federal budgetary processes.

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