Introduction

Everything BPA does — from maintaining the region’s extraordinarily valuable hydropower and transmission assets to investing in fish and wildlife mitigation — hinges on its financial health and providing low, competitive rates.

Poor financial health would put BPA’s mission at risk, limiting its ability to provide low rates, high reliability and responsible environmental stewardship. Conversely, good financial health will allow BPA to continue to deliver on its multi-purpose mission, providing significant value to the Pacific Northwest and its citizens.

Good financial health for BPA requires disciplined cost management, while maintaining the reliability, environmental sustainability and revenue-generating capability of the uniquely valuable assets that produce and deliver federal hydropower — the Federal Columbia River Power System and more than 15,000 miles of BPA-owned and operated high-voltage transmission lines. BPA must also be financially resilient so that it can withstand disruptive events that impact revenues or expenses and continue to deliver on its mission. For BPA, financial resiliency is directly related to a strong balance sheet and is achieved by having sufficient liquidity, a prudent amount of leverage, and enough debt capacity to be able to plan for and fund BPA’s essential and ongoing capital investments with certainty and at low cost.

Good financial health will allow BPA to continue to deliver on its multi-purpose mission, providing significant value to the Pacific Northwest and its citizens.

Competitive power and transmission rates — driven by disciplined cost management, healthy assets and a strong balance sheet — are necessary conditions for BPA to be financially healthy and sustain its role as an engine of the Northwest’s economic prosperity and environmental sustainability.

Overview

The 2018 Financial Plan establishes a guiding framework for decision-making by defining the financial constraints within which BPA operates, and outlines objectives BPA has established to strengthen its financial health. The plan contains three sections that build from and support each other:

1. Statutory obligations and authorities.
2. Financial policies and established practices.

The 2018 Financial Plan is an important companion to BPA’s 2018-2023 Strategic Plan, which describes the measures BPA will take to improve its commercial performance and sustain its vital role within the region. The objectives in this financial plan are foundational to, and included in, the strategic plan in Strategic Goal 1: Strengthen Financial Health.

BPA will revise and update its financial and strategic plans periodically, depending upon actual financial performance or material changes in market conditions.
The 2018 Financial Plan is organized in order of flexibility, beginning with the foundational and least flexible elements — BPA’s statutory obligations and authorities — followed by active financial policies and practices, and ending with financial health objectives.
## Statutory Obligations and Authorities

Four concepts within BPA's statutes guide nearly all BPA rate-making and financial decisions:

1. Establishing the lowest possible rates consistent with sound business principles.
2. Repaying the federal investment over a reasonable number of years.
4. Establishing BPA’s authorized forms of capital financing.

This list is not exhaustive. Other elements of BPA’s organic statutes are relevant to the agency’s financial and rate-making decisions. For example, under the Pacific Northwest Electric Power Planning and Conservation Act, BPA is obligated to fund fish and wildlife mitigation “consistent with” both a regionally developed Columbia Basin Fish and Wildlife Program and the Act’s purposes, which include assuring the Pacific Northwest an “adequate, efficient, economical, and reliable power supply.”

However, these statutes are generally applicable to nearly all of BPA’s rate-making and financial decisions.

One of BPA’s most fundamental financial requirements is to establish cost-based rates to encourage “the widest possible diversified use of electric power at the lowest possible rates to consumers consistent with sound business principles.” Such rates must be based on BPA’s total system costs, including the costs of producing and transmitting electric energy, and the risk associated with doing so.

The rates must also be sufficient to assure repayment of the federal investment in the FCRPS over a reasonable number of years. In this way, BPA customers and their consumers — rather than taxpayers — bear the cost and risk of the system.

All of BPA’s costs are allocated to the revenue-generating business units — Power Services or Transmission Services — and are recovered, in the aggregate, through their respective rates. The Federal Energy Regulatory Commission requires BPA to account for the financial activities of each business unit independently and report the results in each BPA rate filing.

Each business unit is responsible for the costs allocated to it, and its revenues must be adequate to recover those costs and to repay its share of the federal investment. BPA transmission rates, as outlined in the Northwest Power Act, must also ensure the equitable allocation of costs between federal and nonfederal users of the transmission system.

BPA is self-financing, meaning it does not depend on annual appropriations from Congress to fund its operations. Rather, BPA’s operations are funded by revenues from power and transmission customers.

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2. 16 U.S.C. 839(b).
5. Bonneville Power Administration, 20 FERC ¶ 61,142, at P 61,315 (August 1982).
customers and does not depend on further appropriations from Congress. All receipts are deposited into the Bonneville Fund, an account held by the U.S. Treasury, and all disbursements are made from this account.

BPA has the authority to issue bonds and other debt securities to the U.S. Treasury — currently limited to $7.7 billion on a revolving basis — to finance capital investments and expenses associated with implementing the Northwest Power Act. BPA also can raise revenues through rates to finance capital investments and enter into lease purchases with third parties to fund investments in transmission facilities.

Financial Policies and Established Practices

BPA financial policies and established practices provide clarity and consistency around how the agency will operate, make decisions and set power and transmission rates consistent with its organic statutes.

Cost Recovery Demonstration

BPA is required to establish rates to recover the costs of producing and transmitting electricity, including operating and capital costs, and the cost to repay the federal investment in the system. BPA includes these costs, as well as the costs necessary to operate the agency consistent with sound business principles, in its revenue requirements that are used for setting rates.

As described below, the rest of BPA's policies and practices support the cost recovery demonstration. Through a public review of BPA's expected cost levels, known as the Integrated Program Review, and application of BPA's repayment methodology, BPA establishes base cost levels. Currently, BPA's Treasury payment probability standard and Financial Reserves Policy provide for additional costs under certain circumstances to establish rates consistent with sound business principles and ultimately support BPA's financial health.

Integrated Program Review

The IPR plays a significant role in BPA's overall financial planning process. It provides the public an opportunity to review and comment on BPA's spending levels for its capital and expense programs before establishing them in rate cases. This 2018 Financial Plan includes targets for expense program spending levels, which are described in the financial health objectives section below.

Not all costs are determined in the IPR process. For example, BPA agreed to implement a legal settlement with its power customers on the Residential Exchange Program. The settlement has a fixed cost schedule that determines the amount BPA must pay each rate period and is therefore excluded from the IPR. Others costs and revenues that are predominately dependent on external factors, such as market, load or hydrologic conditions, are modeled and determined in the rate case. This includes surplus power sales, balancing power purchases, transmission service purchases, 4(h)(10)(C) credits, and irrigation rate and low-density discounts.

Repayment Methodology

Following the Northwest Power Act, BPA must repay the federal investment in the FCRPS over a reasonable number of years. FERC has traditionally

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considered that repayment period to be 50 years.\textsuperscript{12} The maximum repayment period for the federal investment is 50 years or shorter for assets with average service lives less than 50 years. In addition, BPA can repay federal investments sooner if it makes sound business sense to do so. There is no fixed schedule of repayment.

Instead, each rate period, BPA uses the repayment methodology to set the minimum level of repayment, which BPA might increase for other business reasons, to meet the statutory requirement to repay the federal investment over a reasonable number of years.

**Treasury Payment Probability Standard (TPP)**

The TPP standard\textsuperscript{13} helps ensure BPA has enough liquidity over a rate period to establish a very high probability of making the planned U.S. Treasury principal and interest payments in full and on time each year of the rate period.

BPA establishes power and transmission rates independently to maintain at least a 95 percent probability of making all payments to the U.S. Treasury in full and on time in each two-year rate period. The equivalent TPP standard for a one-year rate period is 97.5 percent and the equivalent for a three-year rate period is 92.6 percent. Because U.S. Treasury payments are by law BPA’s lowest priority payment obligation, the TPP standard ensures a high likelihood that all other payments, including nonfederal debt service, will be made throughout each fiscal year.

The TPP standard also supports BPA’s statutory obligation to repay the federal investment over a reasonable number of years because it requires a very high likelihood of doing so each rate period. In addition, it is a sound financial practice to measure and ensure short-term (rate period) solvency.

**Financial Reserves Policy**

The Financial Reserves Policy\textsuperscript{14} provides a framework for managing business line and agency financial reserves using the industry-standard metric of days cash on hand. This metric relates the amount of cash on hand to the overall size of the business, measured by operating expenses. It is a common measure of liquidity in the utility industry.

Financial reserves refer to “reserves available for risk,” a BPA term representing the amount of unobligated cash, short-term investments and deferred borrowing, which are all highly liquid and considered the same as cash. Thus, for BPA, financial reserves are used in lieu of cash for computing the days cash on hand metric.

The Financial Reserves Policy ensures BPA has enough financial reserves to sustain basic financial health, including day-to-day operations, and to support its credit rating. It also ensures financial reserves are used efficiently when they grow to a healthy level.

The policy establishes upper and lower thresholds for managing financial reserves. The lower threshold for each business line is 60 days cash on hand. When financial reserves drop below this point, BPA takes rate action to begin raising financial reserves levels back to the 60 days cash on hand minimum.

The upper threshold, also called the reserves distribution clause, guides the administrator’s decisions about whether financial reserves should be used for other high-value investment purposes when two conditions are met: the agency is above 90 days cash on hand and a business line is above 120 days cash on hand. Meeting both conditions ensures that the agency and a business line have sufficient financial reserves before they are considered to be used for other high-value investment purposes, such as repaying debt, returning cash to customers or making additional capital investments.

\textsuperscript{12} See 141 FERC P 62,234 (2012) ; See also RA 6120.2.

\textsuperscript{13} See BP-18-FS-BPA-05 Power and Transmission Risk Study, section 2.3 BPA’s Treasury Payment Probability Standard.

Financial Health Objectives

This section builds on the foundation of BPA’s statutory obligations and authorities, as well as its existing financial policies and practices.

It identifies the essential objectives for assuring financial health. BPA will monitor its progress toward meeting these objectives and factor them into business decisions to continue to meet its obligation to provide the lowest possible rates consistent with sound business principles. Executing on these objectives over time will firmly place BPA in a position to provide rates at the lowest possible cost, delivering long-term value to BPA customers and the communities they serve.

THE THREE KEY FINANCIAL HEALTH OBJECTIVES ARE:

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<tr>
<th>Financial Health Objective</th>
<th>Purpose</th>
<th>Metric</th>
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| Cost Management Discipline:  
  • Program Costs  
  • Capital Investments | Lowest possible rates  
  Maintain value and reliability of assets | Rate-period change in program costs  
  Leading industry-standard asset management |
| Financial Resiliency:  
  • Liquidity  
  • Debt Utilization  
  • Debt Capacity | Solvency and stability  
  Low interest expense and financial flexibility  
  Secure and low-cost debt financing available to fund capital program | Days cash on hand and Treasury payment probability  
  Debt-to-asset ratio  
  Remaining borrowing authority |
| Independent financial health assessment | Maintain high investment-grade credit ratings | Credit rating |

Improve cost-management discipline

Program costs: Hold the sum of program costs, by business line, at or below the rate of inflation through 2028.

BPA is taking aggressive steps to manage the rising costs of operating the federal power and transmission systems and has started by establishing a cost-management goal to hold the sum of program costs, by business line, at or below the rate of inflation through 2028. This means that the rate period average of program costs identified below for each business line will not grow faster than the annual rate of inflation from rate period to rate period. These program costs are commonly known in our rate case proceedings as IPR costs. Our efforts to manage these costs at or below the rate of inflation during this period will be an explicit
demonstration of our commitment and capacity to deliver competitive and stable rates over the longer term and to maintain BPA's position as the provider of choice for regional public power customers when new power sales contracts are negotiated prior to 2028.

BPA's IPR costs represent the financial resources necessary to maintain the day-to-day operations of the power and transmission systems and meet BPA's environmental responsibilities.

The programs included in this goal for each business line include:

**Power Services**
- Columbia Generating Station
- Bureau of Reclamation
- Corps of Engineers
- Renewables
- Energy Efficiency
- Nongeneration Operations
- Fish and Wildlife, Lower Snake River
  - Compensation Plan
- Northwest Power and Conservation Council
- Corporate Costs

**Transmission Services**
- Operations
- Maintenance
- Engineering
- Acquisition and Ancillary Services
- Corporate Costs

To meet this overarching cost-management goal, BPA is initiating a new approach for setting spending levels during the Integrated Program Review, the public process where costs that will be charged in power and transmission rates are established for the following two-year rate period. BPA will establish firm constraints in alignment with this cost-management goal at the start of the process, in contrast to BPA's past practice of determining program costs through a bottom-up approach. The allocation of funding to BPA's various programs will be guided by the 2018–2023 Strategic Plan and could change from rate period to rate period, but the total amount for each business line will remain within the goal.

Additional significant measures to be taken include:

- **Strategic prioritization and planning:** BPA will produce an agency cost-management plan that directly links its strategic objectives with spending levels and budgeting processes, and establishes new policies to maintain these changing practices.

- **Corporate costs:** Reduce corporate costs, where appropriate, through functional consolidation, outsourcing and process improvements.

- **Operational excellence lifecycle:** BPA will improve methods to identify, evaluate, implement and verify cost savings.

- **Data-driven decision-making:** BPA will improve business processes to capture and organize relevant data for analysis and reporting to support improved decision-making.

- **Organization and people:** BPA will improve workforce planning, increase accountability, establish appropriate incentives to manage costs, and make disciplined cost management an essential element of BPA's management culture.

**Capital Investments: Manage the lifecycle cost and value of assets based on industry-leading standards.**

The need for capital investments to replace and modernize aging federal power and transmission infrastructure and support fish and wildlife restoration have grown to unprecedented levels. Maintaining these assets is essential to delivering value to BPA's customers and their communities. Capital investment discipline is fundamental to ensure that BPA invests the right amount of money in the right assets at the right time.

BPA assets are diverse in age, geography and function, which makes the planning and prioritization of investments challenging. That is why it is
critically important to ensure that capital investment needs are identified, prioritized and funded systematically. To that end, BPA has identified a strategic goal to modernize assets in line with industry-leading standards.

Central to this effort is the development of strategic asset management plans for each asset category. These plans inform capital investment level requirements by:

• Understanding our assets’ criticality, health and risks.
• Establishing risk-based asset performance objectives (such as lost generation and reliability).
• Using leading analytical methods to prioritize maintenance activities and capital investments for safe and reliable asset performance.

The strategic asset management plans are key inputs to the IPR process. The IPR process is where capital investment levels are determined for the following rate case, and a forecast is developed for the following eight years — totaling 10 years of anticipated capital investments. These capital investment levels are sized and prioritized to achieve BPA’s strategic objectives and are the basis for the 10-year capital-financing plan (discussed below) to ensure low-cost and reliable financing is available.

Build financial resiliency

_Liquidity: Maintain a minimum of 60 days cash on hand for each business line, and maintain a 97.5 percent annual Treasury payment probability._

BPA is a self-funded federal entity holding a single bank account with the U.S. Treasury. All of BPA’s sales revenues are deposited into this account, and all of BPA’s expenditures are made from this account. BPA is limited to financial reserves and a short-term line of credit with the U.S. Treasury to manage its operational liquidity. BPA does not have the statutory authority to access other traditional forms of operational liquidity, such as commercial paper.

Maintaining a prudent level of financial reserves and overall liquidity is an important element to BPA’s long-term financial health.

BPA’s primary source of liquidity is its financial reserves. Financial reserves are used to meet financial obligations in the face of potential cash flow uncertainty. BPA faces both short-term uncertainty, such as when bills are paid before revenues are received, and long-term uncertainty, such as financial losses that could result from poor market or hydropower conditions.

BPA measures the sufficiency of its financial reserves by the industry-standard metric of days cash, which is how long BPA can continue to pay its operating expenses given the amount of cash it has available. BPA’s Financial Reserves Policy provides guidance to ensure both business lines have a minimum of 60 days cash on hand for basic liquidity needs and to support its credit ratings. The policy also includes a maximum of 120 days cash on hand so that financial reserves do not grow too high and become inefficient from an investment standpoint.

In addition to financial reserves, BPA retains a $750 million line of credit with the U.S. Treasury for Northwest Power Act-related operating expenses, and sets its power and transmission rates to achieve a very high likelihood of repaying all financial obligations in each rate period (Treasury payment probability standard). Both of these tools add further support to BPA’s overall liquidity.

Currently, Power Services’ days cash on hand is far below the desired minimum threshold, while Transmission Services’ far exceeds the minimum. BPA’s last rate filing included $20 million per year to increase Power’s financial reserves over time until it reaches the minimum of 60 days cash on hand; but at that pace it could take 15 years. BPA will hold a series of workshops in 2018 to explore how to build Power’s financial reserves more quickly and discuss other issues, including the cost recovery adjustment clause that would trigger when
reserves fall below a certain threshold, and opportunities to use reserves for greater rate stabilization.

**Debt utilization: Achieve a debt-to-asset ratio of 75 to 85 percent within 10 years and 60 to 70 percent in the long term.**

The term debt utilization describes how BPA uses debt to fund capital investments and how BPA repays that debt. BPA has historically used debt to finance nearly 100 percent of all capital investments and repaid that debt according to statutory requirements, which is generally 50 years or less.

This practice has led to a high debt-to-asset ratio — the ratio of total outstanding debt to revenue-generating assets that ultimately repay all debt — relative to the utility industry average. The debt-to-asset ratio is also known as leverage.

As a federal agency with unique statutory obligations and authorities, BPA is unable to raise equity capital. One result is that BPA has traditionally placed less emphasis on leverage as a measure of financial health. We are now giving this issue more consideration, because a high debt-to-asset ratio has broad impacts to BPA’s financial health, including these primary areas:

- **Interest expense:** As the debt-to-asset ratio increases, so does the amount of debt service that BPA must recover in Power and Transmission rates, which either takes from other programs or increases rates now and in the future.

- **Debt capacity:** BPA’s debt utilization practices impact the amount of borrowing authority BPA has remaining. A higher debt-to-asset ratio likely results in less borrowing authority available to fund future capital investments.

- **Financial flexibility:** A higher debt-to-asset ratio limits financial flexibility because it results in higher fixed costs. Financial flexibility becomes critically important during times of financial stress and increased uncertainty.

- **Credit ratings:** A higher debt-to-asset ratio increases the likelihood of BPA missing future debt payments, which negatively impacts credit ratings and can result in higher interest rates.

- **Capital spending levels:** Managing to a debt-to-asset ratio goal will help govern the overall use of debt to fund capital investments, creating an appropriate tension between capital spending levels and rate impacts.

BPA is highly leveraged, with a current debt-to-asset ratio of about 90 percent, compared to the industry average of 54 percent. By business line, the debt-to-asset ratio breaks down to 99 percent for Power Services and 80 percent for Transmission Services. The result is that about 33 percent of all costs charged in Power rates and 42 percent of all costs charged in Transmission rates are for capital related costs, including debt service.

Even under current practices, based on projections from BPA’s last rate filing, Power Service’s debt-to-asset ratio is on track to decline over the next decade primarily because, following the repayment policy, it will repay as much or more debt than it borrows each year. Transmission Services, on the other hand, is projected to borrow over $3 billion more debt than it will repay as a result of the repayment methodology, resulting in a significant increase to its debt-to-asset ratio. While the downward debt-to-asset ratio trajectory for Power Services is positive, the upward trajectory for Transmission Services is a significant risk to the future financial health of the agency.

BPA’s goal is to maintain its debt-to-asset ratio for each business line and the agency in the range of 75 to 85 percent over the next 10 years, with a longer-term goal of 60 to 70 percent. BPA will hold a debt-management public process in the spring of 2018 to discuss these goals and potential measures to achieve them.
While the downward debt-to-asset ratio trajectory for Power Services is positive, the upward trajectory for Transmission Services is a significant risk to the future financial health of BPA.

### Debt capacity: Maintain sufficient debt capacity to fund BPA’s capital program on a rolling 10-year basis, and preserve $1.5 billion of available financing from the U.S. Treasury.

Bonneville’s primary source of debt financing is its U.S. Treasury borrowing authority, which works like a revolving line of credit and is capped at $7.7 billion. At the end of 2017, BPA had consumed $5 billion of this line of credit, leaving $2.7 billion remaining. Based on projections from BPA’s most recent rate filing, it will be depleted by 2023, meaning BPA will not have sufficient debt capacity to fund its ongoing capital program beyond 2023. This poses a significant financial risk to the agency, heightening the prospect of having to use revenue financing, which would increase rates, beyond what may be needed to meet debt utilization goals or reducing essential capital programs.

BPA will meet planned capital needs on a rolling 10-year basis and intends to preserve $1.5 billion of available borrowing authority. BPA plans to retain $750 million of the $1.5 billion for operational liquidity needs that may be required in addition to financial reserves to manage short-term unexpected changes in expenses or revenues, including changes in market, load or hydrological conditions. The $750 million retained for operational liquidity will also be used to support meeting the Treasury payment probability standard in rate setting, discussed previously.
BPA’s goal is to maintain $1.5 billion of U.S. Treasury borrowing authority. Based on the BP-I8 rate filing, BPA currently anticipates its borrowing authority will be exhausted by 2023.

BPA plans to retain the remaining $750 million for capital liquidity, to be able to mitigate changes in capital needs if necessary as a result of BPA planning decisions or factors outside of BPA’s control. This could include weather or other natural disaster-related damages to BPA assets that require additional unexpected capital investment. The $750 million retained for capital liquidity is equivalent to approximately one year of total capital investment. Based on BPA’s last rate filing, all borrowing authority will be exhausted by 2023. The primary intent of this goal is to begin planning for and evaluating alternative courses of action so that BPA can continue to meet its ongoing capital needs at the lowest possible cost.

To continue investing in and maintaining the tremendously valuable assets of the FCRPS, BPA will need to look beyond its traditional financing sources and consider an “all of the above” capital-financing strategy, including:

1. Revenue financing.
2. Regional Cooperation Debt.
3. Reserves financing.
4. Lease-purchase.
5. Additional borrowing authority.
6. Authority to issue debt directly to capital markets.

To ensure BPA has sufficient debt capacity, BPA will host a debt-management workshop before each rate case to develop a 10-year capital-financing plan that considers the cost and certainty of financing instruments while meeting stated financial objectives.
Independent financial health assessment

*Maintain high investment-grade credit ratings from all three ratings agencies.*

A credit rating is an independent assessment of financial health that directly impacts the cost of BPA’s future nonfederal debt obligations, including BPA-backed Energy Northwest debt and transmission lease-purchases. BPA’s current nonfederal debt obligations represent about $8 billion of BPA’s roughly $15 billion total outstanding debt.

By pursuing the financial health objectives outlined above, BPA seeks to maintain a high investment-grade credit rating on its nonfederal debt from all three ratings agencies.

Conclusion

The 2018 Financial Plan organizes BPA’s existing statutes and polices and establishes a set of financial health objectives that are foundational to BPA’s 2018–2023 Strategic Plan.

The plan outlines steps BPA needs to take to maintain and strengthen its financial health so that BPA continues to be a sound business partner and deliver on its mission under various future conditions.

BPA will continue to work collaboratively with its customers and stakeholders to determine the best possible course of action toward meeting these objectives.

**Summary of near-term actions:**

1. BPA will set planning guidance for the 2018 IPR process (which will set costs for the FY 2020–2021 rate period) to hold the sum of program costs, by business line, at or below the rate of inflation.

2. BPA will hold a public process in 2018 to determine how to best phase in the lower threshold for Power Services’ financial reserves. It also will determine how to best use financial reserves to manage long-term wholesale market price exposure and promote greater rate stability.

3. BPA will hold a debt-management public process in the spring/summer of 2018 to discuss the debt-utilization and debt-capacity goals outlined in this plan and develop potential measures and actions to achieve them. Also in these workshops, BPA will develop a 10-year capital financing plan consistent with these goals.