

Public Finance

Public Power United States

Stable

Bonneville Power Administration (OR)

The upgrade of Bonneville Power Administration's (Bonneville) Issuer Default Rating (IDR) to 'AA' from 'AA-' reflects the application of Fitch Ratings' government-related entities (GRE) rating criteria, which incorporates the linkages and support between the U.S. government and Bonneville. Under the GRE criteria, Fitch assesses Bonneville's Standalone Credit Profile (SCP) at 'aa-', reflecting Fitch's view of Bonneville's creditworthiness without extraordinary government support.

The GRE criteria aggregate the United States as the supporting government IDR of 'AA+' with a Stable Outlook, and the issuer's SCP into a single value based on a support score assessed on the government's responsibilities and incentives to support the issuer. Fitch has assigned a support score of 'strong expectations', which results in Bonneville's IDR being one notch above Bonneville's SCP using the bottom-up methodology and reflects the two-notch difference between Bonneville's SCP and the U.S. government IDR.

Bonneville's upgraded IDR under the GRE criteria considers its linkages with the federal government, resulting from its role as the largest Power Marketing Administration within the U.S. Department of Energy (DOE). Although Bonneville is revenue self-supporting and does not receive funds or direct operational oversight from the DOE, linkages exist through congressional approval of the annual budget, Bonneville's reliance on federal debt access and short-term liquidity, ownership of the hydroelectric assets by parallel federal entities and the definition of preference customers that may purchase Bonneville's hydroelectric power resources at cost-based rates.

The 'AA' rating is affirmed on the non-federal debt listed above and issued by Energy Northwest (ENW), Idaho Energy Resources Authority, Port of Morrow and Lewis County Public Utility District (PUD) No. 1. The non-federal debt is rated one notch higher than Bonneville's SCP and is now on par with the IDR. The IDR and bond ratings consider the structural security feature specific to the priority of these obligations ahead of Bonneville's federal debt.

Security

Bonneville's payments to ENW for debt service on the bonds are unconditional and are made as an operating expense from the Bonneville Fund. All of Bonneville's revenues are required to be deposited in the Bonneville Fund, a separate fund within the U.S. Treasury. Expenditures from the Bonneville Fund, including the payment of non-federal debt service, do not require further federal appropriation. Non-federal debt obligations are consolidated as debt obligations on Bonneville's financial statements and included in Fitch's financial analysis.

Ratings

Long-Term IDR ΑА

Outlook

Long-Term IDR

New Issues

\$254.9 million project 1 Revenue Bonds, series 2025A AA \$456.9 million Columbia Generating Station (CGS) Revenue Bonds, series 2025A \$170.7 million project 3 Revenue Bonds, series 2025A AA \$109.0 million CGS Revenue Bonds, series 2025B AA

Sale Date

Bonds are expected to price on May 6, 2025, via negotiated sale.

Outstanding Debt

Energy Northwest (WA) (Columbia Generating Station) Electric Revenue Refunding Bonds Energy Northwest (WA) (Columbia Generating Station) Electric Revenue Bonds (Taxable) AA Energy Northwest (WA) (Columbia Generating Station) Electric Revenue Refunding Bonds (Taxable) AA Energy Northwest (WA) (Columbia Generating Station) Electric Revenue Refunding Bonds (Taxable Build America Bonds) Energy Northwest (WA) (Proi 1) Electric Revenue Refunding Bonds AA Energy Northwest (WA) (Proj 1) Electric Revenue Refunding Bonds (Taxable) Energy Northwest (WA) (Proj 3) Electric Revenue Refunding Bonds AA Energy Northwest (WA) (Proj 3) Electric Revenue Refunding Bonds (Taxable) Idaho Energy Resources Authority (ID) transmission Facilities Revenue Bonds (Taxable) Lewis County Public Utility District No. 1 (WA) (Cowlitz Falls Hydroelectric Project) Revenue Refunding Bonds AA Port of Morrow (OR) transmission Facilities Revenue Bonds AΑ

Applicable Criteria

Government-Related Entities Rating Criteria (July 2024)

U.S. Public Power Rating Criteria (February 2025)

U.S. Public Sector, Revenue-Supported Entities Rating Criteria (January 2025)

Related Research

Fitch Rates Energy Northwest Bonds 'AA'; Upgrades Bonneville IDR to 'AA'; Outlook Stable (April 2025)

Analysts

Kathy Masterson +15122153730 kathryn.masterson@fitchratings.com

Andrew DeStefano +1 212 908 0284 andrew.destefano@fitchratings.com

1

New Issue | April 28, 2025 fitchratings.com



Key Rating Drivers

Support Score Assessment: 'Strong Expectations'

Fitch believes there are strong expectations for support, if needed, from the U.S. government to Bonneville, a federal power marketing administration and component unit of DOE. Fitch's 'strong expectations' assessment reflects a support score of 20 (out of a maximum of 60) under Fitch's GRE criteria. The higher the score, the higher Fitch's expectation is for unconditional, extraordinary support from the government entity to the issuer. The score of 20 for Bonneville results from a combination of factors assessed below.

Responsibility to Support

Decision-Making and Oversight: 'Strong'

Bonneville is the largest of four federal Power Marketing Administrations (PMA). It markets the energy output of 31 federal dams owned by the Bureau of Reclamation and U.S. Army Corps of Engineers, along with the output of certain non-federal projects, and is the primary owner of high-voltage transmission infrastructure in the Pacific Northwest. Management of Bonneville is vested in the Administrator and Chief Executive Officer, who is appointed by the U.S. Secretary of Energy. Full decision-making authority resides with the Administrator. Historically, Bonneville's administrators have been career professionals from the utility industry and region, who do not change with the political administration.

Bonneville operates as a nonprofit and is self-supporting from revenues received for its products and services. Since 1974, Bonneville has been required to set rates sufficient to support its obligations and has not received annual appropriations from Congress. Federal decision-making and oversight are exercised through congressional budget approval, periodic participation in staffing decisions, and rate approval by the Federal Energy Regulatory Commission (FERC). In addition, Bonneville is constrained by federal statute to offer its low-cost federal hydropower first to entities defined as "preference customers".

Precedent of Support: 'Strong'

Access to capital is predominantly provided by direct federal lending since Bonneville does not have the authority to access public debt markets. Bonneville's federal borrowing authority was increased in 2021 by the Infrastructure Investment and Jobs Act (IIJA). The IIJA provided a permanent \$10 billion increase to Bonneville's Treasury Borrowing Authority, with the implementation staggered: \$6 billion was made available immediately, and the remaining \$4 billion will be available in fiscal 2028. The total increase will result in borrowing authority of \$17.7 billion in fiscal 2028. Short-term liquidity is provided by Bonneville's \$750 million line of credit with the U.S. Treasury, which can be drawn for any purpose. Finally, capital improvements at hydroelectric generation assets owned by the Bureau of Reclamation and the U.S. Army Corps of Engineers receive congressional appropriations to fund the capital expenditure (capex), which become a federal payment obligation of Bonneville once the capital projects are completed.

Bonneville's operating expenses and non-federal debt payments are made ahead of Treasury debt. If net proceeds are insufficient for the Treasury payment, the federal debt payment can be deferred. Although Bonneville has not exercised this option since 1983, the ability to reschedule debt service is a key structural support in Bonneville's overall debt burden.

As an additional indication of federal support, Bonneville has indicated that any court settlements or judgments from tort claims would be paid by the U.S. Judgment Fund, not the Bonneville Fund. The Holiday Farm Fire in 2020 resulted in over 2,000 administrative tort claims totaling around \$2.0 billion in damages. The cases are proceeding against the U.S., and any legal payments will be made from the Judgment Fund. A related wildfire claim alleging inverse condemnation has been filed, and Bonneville expects that payments related to this claim, if required, would also be made from the Judgment Fund.

Incentive to Support

Preservation of Government Policy Role: 'Strong'

Preservation of the government's policy role is viewed as strong based on the essential services Bonneville provides and the value of its owned transmission assets. Bonneville is a critical regional entity that provides essential wholesale power to a population of more than 15 million in the Pacific Northwest through a resource portfolio of low-cost hydropower and nuclear generation. Bonneville also provides transmission services to an eight-state region to a broader number of utilities.



Contagion Risk: 'Not Applicable"

We assess the Contagion Risk as 'Not Applicable' despite the importance of Bonneville's service in the provision of energy and transmission services. The impact of a Bonneville default on its obligations is not viewed as creating broader reputational issues for the U.S. government that would provide a meaningful incentive to cure the failure.

Non-federal debt is issued by other entities but paid for through Net Billing Agreements with publicly owned and community-owned utilities that are also Bonneville preference customers. Fitch does not see an incentive for the U.S. government to pay the non-federal debt. Government support is likely to be limited to FERC rate review and approval, supporting those obligations that are paid ahead of Treasury debt. As noted, federal Treasury debt is structured with the ability to reschedule payments if net proceeds are insufficient.

Standalone Credit Profile

The SCP assessment reflects Bonneville's distinct credit profile independent of extraordinary support from the U.S. government. The SCP considers Bonneville's very strong revenue defensibility, supported by long-term power supply contracts and transmission business line. Bonneville is in the process of extending its long-term power supply contracts through a regional process with numerous stakeholders, with new contracts expected to be for another 19-year term. The SCP also reflects very low operating costs of the federally owned hydroelectric assets and the non-federal assets, primarily the Columbia Generation Station nuclear project.

Bonneville's financial profile is very strong, but the power business line experiences variability in operating margins and liquidity, and leverage is elevated for the assessment. Financial performance variability results from fluctuations in hydrology and market energy prices. Liquidity pressures occur over time due to rates that limit the pace of recovery from budget underperformance and mandate the return of reserves to customers once reserves reach certain levels. Liquidity levels for both business lines declined in fiscal 2023 and fiscal 2024 due to low water conditions and extreme weather events that forced higher purchased power costs. Bonneville's leverage, measured as net adjusted debt-to-funds available for debt service, is expected to remain variable, ranging between 9.0x and 10.0x through Fitch's forward-looking rating case. Temporary periods where leverage exceeds 11.0x due to volatility in hydrological conditions and market energy prices are possible and factored into the rating.

Revenue Defensibility - 'aa'

Geographic and Revenue Diversity; New Wholesale Power Contracts Expected 2025

Bonneville's revenue defensibility is very strong. Long-term power sales contracts with approximately 135 preference customers, along with Bonneville's dominant role as the regional transmission provider, result in long-term revenue security. Renewal risk related to the power supply contracts expiring in 2028 is an asymmetric rating consideration but does not currently constrain the assessment. Bonneville is focused on its Provider of Choice initiative to secure new long-term power sales contracts are in place by December 2025. Current power sales contracts allocate around 20% of Bonneville's firm output through its Slice/Block product that transfers the hydrology risk to the customer.

Power and transmission rates are subject to FERC approval, ensuring that rates are sufficient to recover all of Bonneville's costs. The use of formal two- or three-year rate cases represents a lengthy and rigid process, but the rate structure has automatic adjustment features that can reset before the next rate case. These adjustments increase rates if reserves fall to critical levels and return reserves to customers if they exceed 120 days cash on hand (DCOH). Bonneville released its 2026 to 2028 Initial Rate Proposal in November 2024, which includes a proposed 10.8% power rate increase and 24.0% transmission rate increase. The rate period is set at three years to align with the final three years of existing power supply contracts.

The purchaser credit quality of power and transmission customers is strong, with the largest customers demonstrating favorable service area characteristics and very strong financial profiles. Power sales still account for most of Bonneville's revenues at approximately 72% in fiscal 2024.

Operating Risk - 'aa'

Very Low-Cost Hydroelectric Power Supply; Sharp Escalation in Capital Plan

Bonneville's operating cost burden, measured by total costs per kilowatt-hour (kWh) sold, is typically very low, averaging 4.8 cents per kWh from fiscal 2020 to fiscal 2024. This is largely due to a very low-cost, predominantly hydroelectric generation fleet. However, the operating cost burden fluctuates with hydrological conditions and energy production on the federal system. Over the past two fiscal years, the federal system's output has been quite low, with water conditions ranging from 76% to 77% of the average.

Operating cost flexibility is considered weaker given the dominance of a single fuel type in the fleet. However, hydroelectric generation provides protection against inflationary natural gas prices that have affected other generation sources in the market in recent years.



Capital needs are considered moderate based on a 10-year age of plant calculation. However, projected capex spending totals have doubled compared to planned spending from the previous year. Bonneville's projected capital spending is \$8.62 billion over the next five years, up from \$4.88 billion anticipated last year. The increase reflects a substantial rise in planned transmission-related capex (66% of five-year capex), which is factored into the proposed transmission rate increase.

These figures do not include another \$1.9 billion in planned spending at Columbia Generating Station (CGS) over the next five years, which includes evaluating a potential extended power uprate initiative at CGS. If ENW and Bonneville move forward with the uprate project, it could add another \$700 million to capex between 2027 and 2035 and increase capacity by 10% to 15%.

Financial Profile - 'aa'

Highly Leveraged; Tighter Financial Performance in fiscal 2023 and fiscal 2024

Financial performance tightened in fiscal 2023 and fiscal 2024 due to two successive very low water years, with 76% and 77% of the average, respectively — the lowest since 2001. In addition, the region experienced an extreme winter cold event in January 2024, during which Bonneville spent \$300 million purchasing power to meet demand that exceeded its generation capacity. In both years, the operating margin fell below 5%, compared to between 16% and 28% in the three years prior.

Fitch's liquidity calculation at fiscal year-end (YE) 2024 was \$1.3 billion, or 136 DCOH, down from \$1.8 billion, or 262 DCOH, in fiscal 2022. Bonneville's more narrow measure of reserves at risk (RAR) is lower, at \$823 million in fiscal 2024, or 116 DCOH. Bonneville's early spring projections indicate that RAR could potentially decline to as low as \$460 million for both business lines by fiscal YE 2025.

Bonneville's Financial Reserves Policy targets between 60 and 120 DCOH on a combined basis and for each individual business line based on RAR. Above-target cash balances exceeding 120 DCOH were returned to customers through a reserves distribution clause in fiscal 2023 and fiscal 2024, despite experiencing tighter operating conditions in those years. The Financial Reserves Policy offers a degree of protection to liquidity between rate cases but does not provide management with the ability to respond to current-year budget deviations. Fitch's analysis incorporates a degree of anticipated financial variability resulting from Bonneville's hydroelectric portfolio and vulnerability to market pricing.

Leverage shows a relatively high degree of variability, declining to 6.1x in fiscal 2022, but reaching as high as 12.0x in fiscal 2023 and 11.6x in fiscal 2024. However, leverage in fiscal 2023 and fiscal 2024 was adversely impacted by the return of the reserves distribution clause (RDC) funds. If those funds had been returned within the years the revenues were collected, leverage in those two years would have been lower, at 9.4x and 10.4x, respectively. Over the past five years, total outstanding debt increased only incrementally, but changes to annual cash flow and cash reserve levels also affect the leverage ratio.

Fitch's rating case expects Bonneville's leverage to range between 9.0x and 10.0x, given the increase in planned capex, which will be nearly entirely debt-financed, and assuming the initial proposed rate increases are implemented. Leverage could periodically increase to 11.0x under adverse water conditions, as occurred in fiscal 2023 and fiscal 2024. In Fitch's view, transmission business lines can support slightly higher leverage than the power business line, resulting in rating tolerance for leverage periodically trending slightly higher than Fitch's 10.0x 'aa' threshold.

Asymmetric Additive Risk Considerations

No overall asymmetric risk considerations affect the final rating.

Sensitivities

Factors that Could, Individually or Collectively, Lead to Negative Rating Action/Downgrade

- Leverage trending consistently above 11.0x in Fitch's rating case with limited expectation of reduction, which could occur if rate increases proposed in the 2026 to 2028 Initial Rate Proposal are not enacted or if debt reduction targets are weakened or abandoned;
- Continued trend of declining liquidity;
- Erosion of revenue defensibility, particularly related to unanticipated challenges extending power sales contracts;
- The potential for dilution could occur from sustained reductions in load or Bonneville's assumption of greater risk in the new power sales contracts.



Factors that Could, Individually or Collectively, Lead to Positive Rating Action/Upgrade

• While it is not expected, material and consistent declines in leverage below 8x in Fitch's rating case could lead to a positive rating action.

Profile

ENW is a joint operating agency formed in 1957, with 28-member utility systems. ENW owns and operates CGS, an operating nuclear plant with a license to operate until 2044. ENW also has financial responsibility for Projects 1 and 3, which are terminated nuclear projects. Bonneville is responsible for the repayment of ENW costs for these three projects, including debt service. Given Bonneville's unconditional payment obligation for ENW, Bonneville and ENW have agreed to a regional debt cooperation program that optimizes debt repayment and structuring across the two entities to achieve the lowest overall cost for Bonneville's preference customers.

Notable federal staffing reductions at Bonneville have occurred to date in 2025 with a decline in staff to around 3,100 from 3,500 through deferred resignations, retirements, rescinded job offers and layoffs. In addition to the workforce reductions, there is a federal hiring freeze that prevents Bonneville from filling key executive positions, including Chief Operating Officer, Chief Financial Officer and the Senior Vice President of Transmission roles. These roles remain open or filled with interim appointments. Credit concerns may arise over time if strategic areas of the organization are disproportionately understaffed, to the degree that the loss of expertise results in safety or reliability impacts or the financial profile weakens.

Revenue Defensibility

Revenue Source Characteristics

Bonneville has very strong revenue source characteristics, as 100% of its revenues come from wholesale power and transmission services. By statute, Bonneville is required to sell power at cost-based rates for the benefit of preference customers. Preference customers include approximately 135 publicly owned, cooperatively owned and tribal utilities, defined by federal stature as utilities that sell to end-use customers. Bonneville's preference customers accounted for around 88% of power sales in fiscal 2024 and are required to purchase nearly all their energy from Bonneville under power sales contracts that extend through Sept. 30, 2028.

The administration makes the remaining firm power sales, estimated based on critical water conditions, to federal entities (4%), direct service industrial customers (less than 1%) and contract sales outside of the region (8%). If water conditions are above critical levels, surplus energy is sold into the market as available as net secondary sales. Bonneville assumes average water conditions for rate setting and financial forecasting purposes, resulting in variability in financial performance when hydrology conditions are above or below average.

Transmission Revenues

The transmission business line is becoming an increasing share of consolidated operations. Bonneville's transmission assets consist of approximately 15,000 miles of high-voltage transmission lines and over 250 substations located across six states. Transmission revenues accounted for between 23% and 26% over the last five years. Transmission customers represent a wider group than Bonneville's preference customers and include investor-owned utilities (IOU) and power generators in the region. Although transmission customers do not hold long-term contracts, this business demonstrates very strong revenue defensibility given the monopolistic nature of high-voltage transmission, the absence of excess transmission capacity from other providers, and the prohibitive capital cost of building excess transmission lines.

Rate Flexibility

The administration establishes its own power and transmission rates, and Fitch views rate flexibility as very strong. However, determining a final federal record of decision on each rate case is a lengthy and rigid process, imposing practical limitations on Bonneville's ability to adjust rates outside the rate case process compared with public power peers. The FERC reviews and approves Bonneville's rates, but regulatory concerns are mitigated, as FERC provides oversight to ensure Bonneville's ability to cover its full costs, including debt service on U.S. Treasury obligations. FERC regulates transmission rates to further ensure they are non-discriminatory, just and reasonable.

Bonneville has established its power and transmission rates for two-year periods. The 2024 to 2025 rate case, effective Oct. 1, 2023, consisted of a power rate decrease of less than 1% and no change in transmission rates. Bonneville's Tier 1 power rate declined to 3.469 cents/kWh. Tier 1 power rates and transmission rates remained relatively constant due to the notable increase in Bonneville's expected net secondary revenues, despite inflationary and power market cost increases at Bonneville and across the industry. Bonneville's Tier 2 power rate increased 83% to reflect much higher market energy prices in the last two years, but Bonneville makes limited Tier 2 power sales.



The 2026 to 2028 Initial Rate Proposal includes substantial proposed rate increases for both business lines. This rate proposal covers a three-year period extending through the end of the existing wholesale power contract term. Bonneville and its preference customers engage in a lengthy formal administrative process to establish rates. Bonneville publicly disclosed its initial rate proposal in November 2024 and will hold multiple rate hearings and customer meetings to discuss the proposal and the underlying drivers of the rate increases. Bonneville expects to submit its formal proposal to FERC by the end of July 2025. Fitch expects that Bonneville will implement rates in the final proposal on Oct. 2, 2025, although a final Record of Decision from FERC may not be received until after that date.

Automatic Rate Mechanisms

Bonneville's rates include automatic rate mechanisms that allow rates to be adjusted, under specific circumstances, between the two-year rate periods. Automatic rate mechanisms include the following:

- Cost Recovery Adjustment Clause: Implemented to recover up to \$300 million annually if reserves are below zero at the beginning of the fiscal year;
- Financial Reserves Policy (FRP) Surcharge: Implemented to increase reserves to 60 DCOH for each business line, if reserves fall below this threshold at the end of the fiscal year;
- RDC: Implemented to decrease reserves by returning funds to customer if reserves are over 120 DCOH at each respective business line at the end of the fiscal year.

Inclusion of Capital Funding in Rates

The 2024 to 2025 rates included revenue funding of capex at \$89 million per year for both the power (\$34 million) and transmission (\$55 million) business lines. The 2026 to 2028 Initial Rate Proposal includes \$42 million per year for power and \$125 million per year for transmission revenue capex funding. The inclusion of revenue-funded capex in rate setting is a relatively recent policy shift that signals management's increased focus on its debt metrics and intent to reverse the increasing leverage trend.

This amount of revenue-funded capex is relatively modest, but Bonneville intends to gradually increase funding in future rate cases for the transmission business line, particularly where it expects the majority of planned capex to occur in the next decade. Bonneville has yet to reach its target debt-to-asset ratio target of 60% but is working to flatten the trend toward the target.

Purchaser Credit Quality

Purchaser credit quality is strong, with a collective Fitch Purchaser Credit Index Score between 1.5 and 2.0 over the past five years. Power and transmission customers are geographically and operationally diverse, reflecting a service area extending across Idaho, Oregon, Washington and portions of Montana, Wyoming, Nevada, Utah and California. Bonneville's system accounts for approximately 28% of the electricity sold in the region and a significant share of its transmission infrastructure.

The largest power and transmission customers, accounting for approximately 40% of Bonneville's total operating revenues, include Snohomish County PUD No. 1, WA (AA-/Positive), Portland General Electric Company; Puget Sound Energy, Inc.(BBB+/Stable), Seattle City Light, WA, Cowlitz County PUD No. 1, WA (A/Stable), Pacificorp, Tacoma, WA (AA-/Stable), Clark County PUD No. 1, WA (AA/Stable) and Eugene Water & Electric Board, OR (AA-/Stable). Most of these utilities are municipally or community-owned, have independent rate-setting authority, favorable service area characteristics, competitive rates and strong financial profiles.

Additional Considerations - Revenue Defensibility

Reliance on Wholesale Energy Revenues

Hydroelectric power supply depends on hydrology in the Columbia River Basin and the pace and timing of the snowpack melt and resulting runoff. Bonneville balances its firm load commitments with supply based on critical water conditions, which are provided to preference customer Tier 1 loads first. Bonneville can then make additional firm power sales commitments. Power produced in excess of critical water conditions can be considerable in above-average water years, but revenues largely depend on market prices received for those surplus energy sales.

Over the last five years, net surplus revenues accounted for just under 20% of total revenues. In fiscal 2022, the percentage increased with strong market energy prices. Bonneville's revenue reliance is inherent to the variable nature of its hydroelectric fuel supply, but it creates heightened revenue variability.

For rate-making and financial planning purposes, Bonneville considers the additional energy production available for sale under average water conditions. These wholesale sales, netted against market purchases made during certain months to shape the output of the federal system, form net secondary-system revenue. This budgeting practice carries revenue risk. Revenues can fall short of the budget if water conditions are below average, or if water conditions



are modestly above average but market prices fall below assumed levels. Bonneville incorporates the benefit of expected net secondary revenues into its established Tier 1 power rates to its contracted customers.

Asymmetric Factor Considerations

Power Supply Contract Renewal Credit Considerations

Bonneville's power supply contracts expire on Sept. 30, 2028, well before the final maturity of Bonneville's debt, and represent an asymmetric rating consideration. Credit risk from the contract and debt mismatch is mitigated by the regional depth of the existing preference customer base and Fitch's assessment that most, if not all, of the existing preference customers will elect to re-sign new contracts. A material reduction of purchaser load under long-term contracts or a notable change in contract terms could weaken of Bonneville's revenue source characteristics.

Bonneville does not anticipate significant differences between the long-term preference contracts and the current contracts. Negotiations are ongoing, but Bonneville expects to have executed contracts by December 2025. While the Bonneville Act defines the preference customers eligible to purchase low-cost energy through Bonneville, DOE does not have a direct approval role in the contract extension terms.

Current contracts allocate approximately 20% of the federal system's firm output in a block-and-slice product to ten customers, the slice portion of which shifts the risk of supply variability to the slice purchaser. Three of these ten customers intend to shift their contract from the block-and-slice product to a load-following contract in fiscal 2026, which will increase the share of hydrology managed directly by Bonneville. The remaining firm supply is delivered to the other 135 preference customers and all seven federal agency customers in load following contracts.

The 'slice' purchaser receives a percentage of the actual output of the federal system as generated, while the remaining 'block' portion is delivered in fixed amounts, or blocks, by month. If the 'slice' product is lower under the new wholesale power contracts, Bonneville could face increased hydro-variability and greater variability in financial performance. Management believes there will be enough customer interest in the slice product to maintain it at or above the minimum level needed to make it viable in the new contract term.

Operating Risk

Operating Cost Burden

The operating cost burden is very low. Bonneville sells energy produced by 31 low-cost hydroelectric plants owned and operated by the U.S. Army Corps of Engineers and the U.S. Bureau of Reclamation. The federal hydroelectric projects were built between 1941 and 1975. Bonneville has direct-funding agreements with both federal agencies to pay operating and capex costs. Direct funding of capital improvements allows Bonneville to direct decision making and prioritization of reinvestment in the hydroelectric fleet.

Output from the federally owned hydro assets and a small amount of hydroelectric power from non-federally owned projects accounts for approximately 87% of Bonneville's total firm power supply. Output is heavily affected by water conditions, which were at a historical low in 2023, reaching 76% of average, marking the seventh lowest water year on record since 1949, and 77% in 2024. As of early 2025, water conditions were below average, at around 88%.

Bonneville also markets energy from nonfederal projects, the largest of which is the CGS, a 1,178 megawatt (MW) nameplate nuclear plant that entered commercial operation in December 1984. CGS accounts for approximately 10% of Bonneville's power supply. Bonneville's resources are sufficient to meet projected preference customer loads, even under low water conditions, except for small energy deficits under low-water conditions, with deficits most pronounced in the winter and late summer. Bonneville manages these periods through its conservation investments and short-term power purchases from wholesale markets.

Operating Cost Flexibility

Reliance on hydroelectric power for over 80% of the power supply reduces operating flexibility because it relies on a single fuel type.

Environmental Considerations and Clean Energy Transition

Bonneville's predominantly carbon-free power supply positions its customers well for reducing greenhouse gas (GHG) emissions. Washington State passed the Clean Energy Transformation Act in 2019, requiring the state's power supply to be free of carbon emissions by 2045. Bonneville's stable power supply portfolio, supported by efficiency investments, positions its Washington preference customers to achieve the 2045 target.

Columbia River Fish Mitigation and Phase 2 Implementation Plan

Bonneville has a federal statutory obligation to protect, mitigate and enhance fish and wildlife resources, requiring it to fund projects that reduce the impact of federal hydroelectric projects on fish and wildlife mortality. The operation



of federal hydroelectric projects is subject to the Endangered Species Act (ESA), and environmental mitigation efforts face ongoing oversight and litigation. Over time, Bonneville's operational and financial obligations have increased. These costs are included in Bonneville's power rates, although it receives a credit against its U.S. Treasury obligations equal to a percentage of the amount spent on fish and wildlife mitigation.

Columbia River Treaty

The treaty governs the Canadian and U.S. entitlements to river flows and water storage in Canada, increasing power production and providing flood risk management for both countries. In May 2018, the U.S. and Canada began negotiations to modernize the treaty, with Bonneville and the Army Corps of Engineers designated to negotiate for the U.S. The parties reached an agreement in 2024 that meets both countries' needs. Bonneville will receive more water for power generation while allocating more of its transmission capacity in Canada. The additional firm power is helpful in meeting Bonneville's projected load growth.

Capital Planning and Management

Capital reinvestment is adequate, demonstrated by an average 10-year age of plant. Over the past five years, capital spending as a percentage of depreciation averaged a healthy 90% annually. However, despite continued investment, Bonneville faces issues such as aging infrastructure, capital reinvestment in its hydroelectric fleet and transmission business line growth needs. Bonneville projects increasing its capital spending from historical levels. Total capital spending over the past five years was approximately \$4.1 billion, with 69% directed toward transmission. Annual capex has increased annually from \$609 million in fiscal 2020 to \$1.2 billion in fiscal 2024.

Bonneville estimates that capital needs over the next five years will significantly exceed \$8.3 billion. These capital needs are identified through Bonneville's strategic asset management program, which is re-evaluated biannually. Projected annual spending is expected to continue increasing, reaching an annual spending peak of approximately \$2 billion in fiscal 2027. The project needs remain focused on transmission to address the integration of new generation sources and loads in the region. Additionally, ENW expects to spend an estimated \$1.9 billion on reinvestment in CGS.

Capital Funding Strategy

Bonneville's ability to fund its capital needs was enhanced by the increase in its Treasury Borrowing Authority enacted in 2021 through the IIJA. The IIJA provided a permanent \$10 billion increase to Bonneville's Treasury Borrowing Authority, staggered in implementation with \$6 billion in authority available immediately and the remaining \$4 billion available in fiscal 2028. This total increase will result in borrowing authority of \$17.7 billion in fiscal 2028. Notably, appropriation obligations do not count again the federal borrowing authority limit on Treasury debt. Bonneville also uses a taxable lease-financing program for transmission assets and created a regional cooperation debt program with ENW to preserve federal borrowing authority.

Financial Performance and Fitch Analytical Stress Test (FAST) Analysis

Bonneville's financial statements, issued as the Federal Columbia River Power System, include the accounts of Bonneville, the federal hydroelectric generating facilities of the U.S. Army Corps of Engineers and the Bureau of Reclamation dispatched by Bonneville, and the operations and maintenance (O&M) costs of the U.S. Fish and Wildlife Service for the lower Snake River facilities. The statements consolidate the activities of a financing corporation that finances transmission assets leased to Bonneville and nonfederal debt paid by Bonneville.

Fitch's calculated coverage of full obligations (COFO) is typically just below 1.0x and has been consistent in four out of the last five years. Strong financial performance in fiscal 2022 resulted in a COFO of 1.5x. The COFO calculation below 1.0x in most years is due to advance repayment of nonscheduled principal as part of Bonneville and ENW's regional debt cooperation strategy. Non-federal debt service coverage increased due to the regional debt cooperation strategy. Bonneville-calculated debt service coverage of non-federal debt was at or above 2.7x over the past four years due to refunding and restructuring performed for all three ENW projects on principal payments.

Bonneville's leverage exhibits variability due to regional hydrology conditions across the region, including the timing of snowmelt, market prices and the timing and fluctuations of contracted load. This trend reflects the variability in cash flow and reserves. Additionally, total outstanding debt balances incrementally increased over the period. Leverage over the past four fiscal years ranged between 6.1x in fiscal 2022 (slightly above average water, late snowmelt and very strong market energy prices) and 12.0x in fiscal 2023 (a very low water year and RDC revenue reduction of \$363 million). Leverage in fiscal 2024 was 11.6x, with similarly low water year and unusually high purchased power costs related to the January 2024 cold weather event.

Liquidity Profile and Financial Reserves Policy

Cash reserves play a key role in managing aspects of Bonneville's revenue variability related to hydrology risk and wholesale energy sales. The trajectory and pace of declines in the power business line RAR between 2015 and 2018



represented an ongoing weakness that contributed to Bonneville's decision to adopt the FRP and RDC. Prior declines in power business line reserves resulted from the underperformance of net secondary revenues and declining preference customer load. The implementation of the FRP was a credit positive, as it allows reserves to be built and maintained at minimum operating levels. Additional short-term liquidity flexibility is provided by Bonneville's \$750 million line of credit with the U.S. Treasury, which can be drawn for any purpose.

The FRP, implemented in 2018, is designed to maintain operating reserve balances between 60 days and 120 days for each business line — power and transmission — and on a combined basis. Bonneville's total cash reserves improved between fiscal 2020 and fiscal 2023 to build reserves to meet the FRP. With very strong cashflow in fiscal 2022 and fiscal 2023, reserves were substantially in excess of the FRP, which triggered the return of reserves in the subsequent years.

As a result of the RDC distributions and uses, combined with lower water conditions in fiscal 2023 and fiscal 2024 and higher purchased power costs, power RAR declined from \$1.2 billion at the end of fiscal 2022 to \$923 million at the end of fiscal 2023 and \$507 million at the end of fiscal 2024. The pace of decline in reserves is a concern given the slow permitted pace of build back permitted in rates. A substantial replenishment is only possible during high water conditions, strong market pricing for net secondary sales or a combination of both.

Bonneville estimates that the power RAR could decline to \$289 million at the end of fiscal 2025 based on early water conditions in calendar 2025. Declines in the transmission power business line are also projected but not as the same steep trajectory as the power business line.

FAST — Base Case and Stress Case

Fitch's FAST analysis indicates that Bonneville's financial performance under the base case should produce leverage between 9.0x and 10.0x, but the results will vary with hydroelectric conditions. Bonneville does not provide a financial forecast. Fitch's base case model assumptions include Bonneville's capex and ENW's planned capex for CGS, debt funding and rate increase assumptions as proposed in the 2026 to 2028 initial rate case and a potential return to more historical market energy prices.

The stress case imposes moderate stress based on Bonneville's historical movement in total sales, which can be large based on hydrological conditions. However, the ultimate impact to revenues will be determined by wholesale market prices at the time. Fitch's stress case includes large declines in total wholesale sales in the first two years, at 11.9% and 6.0% respectively, followed by a recovery to positive sales growth. An increase in overall wholesale prices is assumed in Year 1. In this stress case, leverage could temporarily rise above 10.0x in low-water years, as it did in fiscal 2023 and fiscal 2024. Given the uncertainties of annual hydrology and market prices, Fitch relies on the base case as our rating case but incorporates into our analysis the understanding that low-water conditions may intermittently tighten financial performance, with metrics more typical of the stress case.

Debt Profile

Total debt outstanding is split between Bonneville's federal debt and appropriations of roughly \$7.7 billion at the end of fiscal 2024 and nonfederal debt of approximately \$7.3 billion. Power business line debt is declining as a percentage of total debt. Power debt (\$8.6 billion) accounted for only 58% of total outstanding debt at the end of fiscal 2024, compared with 67% in fiscal 2015 (\$10.7 billion).

Bonneville's federal and appropriations debt offer a layer of structural support to nonfederal debt. Bonneville must defer payment on its federal obligation if revenues in the Bonneville Fund are insufficient to meet its nonfederal debt. This provision provides payment flexibility.

ESG Considerations

The ESG Relevance Score of '2' for GHG Emissions & Air Quality for Bonneville Power Administration varies from the public power sector guidance score of '3' since carbon-free systems (hydro, wind, nuclear, biomass and biowaste, geothermal) are not significantly exposed to the generation of GHG emissions from operations.

The highest level of ESG credit relevance is a score of '3', unless otherwise disclosed in this section. A score of '3' means ESG issues are credit-neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity. Fitch's ESG Relevance Scores are not inputs in the rating process; they are an observation on the relevance and materiality of ESG factors in the rating decision. For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/topics/esg/products#esg-relevance-scores.



Financial Summary

Financial Summary					
(Audited Fiscal Years Ended September 30)	2020	2021	2022	2023	2024
Net Adjusted Debt to Adjusted FADS (x)	9.31	9.63	6.07	11.98	11.62
Net Adjusted Debt Calculation (\$000)					
Total Short Term Debt	511,500	0	0	0	0
Total Current Maturities of Long Term Debt	1,125,900	1,030,000	762,500	704,500	635,900
Total Long—Term Debt	13,249,100	13,863,000	14,072,900	14,313,500	14,861,000
-Restricted Funds — Cushion of Credit					
Total Debt	14,886,500	14,893,000	14,835,400	15,018,000	15,496,900
+Capitalized Fixed Charge — Purchased Power & Gas	296,880	595,680	860,880	2,344,800	2,455,680
+Total Pension Obligation (GASB Fitch—Adj. NPL + FASB PBO)					
-Total Unrestricted Cash	889,500	1,055,800	1,834,500	1,727,300	1,298,800
-Restricted Funds for Debt Service					
Net Adjusted Debt	14,293,880	14,432,880	13,861,780	15,635,500	16,653,780
Adjusted FADS for Leverage Calculation (\$000)					
Total Operating Revenue (\$000)	3,683,700	3,823,000	4,721,500	4,247,900	4,569,200
Total Operating Expenses	3,008,100	3,227,300	3,395,500	4,153,900	4,357,200
Operating Income	675,600	595,700	1,326,000	94,000	212,000
Adjustment for Subsidy Revenue					
Depreciation	818,800	826,700	841,000	848,900	870,900
+Interest Income	3,300	1,500	10,600	69,400	43,900
Amortization					0
Funds Available for Debt Service	1,497,700	1,423,900	2,177,600	1,012,300	1,126,800
Adjustment for Purchased Power and Gas	37,110	74,460	107,610	293,100	306,960
-Total Transfers/Distributions					
+Pension Expense					
Adjusted FADS for Leverage	1,534,810	1,498,360	2,285,210	1,305,400	1,433,760
Coverage of Full Obligations (x)	0.97	0.95	1.49	0.89	0.95
Funds Available for Debt Service	1,497,700	1,423,900	2,177,600	1,012,300	1,126,800
Adjustment for Purchased Power and Gas	37,110	74,460	107,610	293,100	306,960
-Total Transfers/Distributions	07,110	7 1,100	107,010	270,200	
Adjusted FADS for Coverage	1,534,810	1,498,360	2,285,210	1,305,400	1,433,760
Full Obligations Calculation					
Full Obligations Calculation Cash Interest Paid	440,200	384,400	396,400	404,200	490,700
Prior Year Current Maturities	1,097,800	1,125,900	1,030,000	762,500	704,500
Total Annual Debt Service	1,538,000	1,510,300	1,426,400	1,166,700	1,195,200
Adjustment for Purchased Power and Gas	37,110	74,460	107,610	293,100	306,960
Total Fixed Obligations	1,575,110	1,584,760	1,534,010	1,459,800	1,502,160
Total Fixed Obligations	1,373,110	1,30 1,700	1,30 1,010	1,137,000	1,302,100
Liquidity Cushion (Days)	273	275	369	274	215
Unrestricted Cash (days)	148	161	262	191	136
Liquidity Calculation					
+Total Unrestricted Cash	889,500	1,055,800	1,834,500	1,727,300	1,298,800
+Total Borrowing Capacity	750,000	750,000	750,000	750,000	750,000
-Amounts Unavailable					
Total Liquidity	1,639,500	1,805,800	2,584,500	2,477,300	2,048,800



Financial Summary

(Audited Fiscal Years Ended September 30)	2020	2021	2022	2023	2024
Cash Operating Expense Calculation					
Total Operating Expense	3,008,100	3,227,300	3,395,500	4,153,900	4,357,200
-Depreciation and Amortization	818,800	826,700	841,000	848,900	870,900
Cash Operating Expenses	2,189,300	2,400,600	2,554,500	3,305,000	3,486,300



SOLICITATION & PARTICIPATION STATUS

For information on the solicitation status of the ratings included within this report, please refer to the solicitation status shown in the relevant entity's summary page of the Fitch Ratings website.

For information on the participation status in the rating process of an issuer listed in this report, please refer to the most recent rating action commentary for the relevant issuer, available on the Fitch Ratings website.

DISCLAIMER & DISCLOSURES

All Fitch Ratings (Fitch) credit ratings are subject to certain limitations and disclaimers. Please read these limitations and disclaimers by following this link: https://www.fitchratings.com/rating-definitions-document details Fitch's rating definitions for each rating scale and rating categories, including definitions relating to default. Published ratings, criteria, and methodologies are available from this site at all times. Fitch's code of conduct, confidentiality, conflicts of interest, affiliate firewall, compliance, and other relevant policies and procedures are also available from the Code of Conduct section of this site. Directors and shareholders' relevant interests are available at https://www.fitchratings.com/site/regulatory. Fitch may have provided another permissible or ancillary service to the rated entity or its related third parties. Details of permissible or ancillary service(s) for which the lead analyst is based in an ESMA- or FCA-registered Fitch Ratings company (or branch of such a company) can be found on the entity summary page for this issuer on the Fitch Ratings website.

In issuing and maintaining its ratings and in making other reports (including forecast information), Fitch relies on factual information it receives from issuers and underwriters and from other sources Fitch believes to be credible. Fitch conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information from independent sources, to the extent such sources are available for a given security or in a given jurisdiction. The manner of Fitch's factual investigation and the scope of the third-party verification it obtains will vary depending on the nature of the rated security and its issuer, the requirements and practices in the jurisdiction in which the rated security is offered and sold and/or the issuer is located, the availability and nature of relevant public information, access to the management of the issuer and its advisers, the availability of pre-existing third-party verifications such as audit reports, agreed-upon procedures letters, appraisals, actuarial reports, engineering reports, legal opinions and other reexisting third-party verification sources with respect to the particular security or in the particular jurisdiction of the issuer, and a variety of other factors. Users of Fitch's ratings and reports should understand that neither an enhanced factual investigation nor any third-party verification can ensure that all of the information Fitch relies on in connection with a rating or a report will be accurate and complete. Ultimately, the issuer and its advisers are responsible for the accuracy of the information they provide to Fitch and to the market in offering documents and other reports. In issuing its ratings and its reports, Fitch must rely on the work of experts, including independent auditors with respect to financial statements and attorneys with respect to legal and tax matters. Further, ratings and forecasts of financial and other information are inherently forward-looking and

The information in this report is provided "as is" without any representation or warranty of any kind, and Fitch does not represent or warrant that the report or any of its contents will meet any of the requirements of a recipient of the report. A Fitch rating is an opinion as to the creditworthiness of a security. This opinion and reports made by Fitch and no individual, or group of individuals, is solely responsible for a rating or a report. The rating does not address the risk of loss due to risks other than credit risk, unless such risk is specifically mentioned. Fitch is not engaged in the offer or sale of any security. All Fitch reports have shared authorship. Individuals identified in a Fitch report were involved in, but are not solely responsible for, the opinions stated therein. The individuals are named for contact purposes only. A report providing a Fitch rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. Ratings may be changed or withdrawn at any time for any reason in the sole discretion of Fitch. Fitch does not provide investment advice of any sort. Ratings are not a recommendation to buy, sell, or hold any security. Ratings do not comment on the adequacy of market price, the suitability of any security for a particular investor, or the tax-exempt nature or taxability vary from US\$1,000 to US\$750,000 (or the applicable currency equivalent) per issue. In certain cases, Fitch will rate all or a number of issues issued by a particular insurer or guarantor, for a single annual fee. Such fees are expected to vary from US\$1,000 to US\$1,500,000 (or the applicable currency equivalent). The assignment, publication, or dissemination of a rating by Fitch shall not constitute a consent by Fitch to use its name as an expert in connection with any registration statement filed under the United States securities laws, the Financial Services and Markets Act of 2000 of the Unit

For Australia, New Zealand, Taiwan and South Korea only: Fitch Australia Pty Ltd holds an Australian financial services license (AFS license no. 337123) which authorizes it to provide credit ratings to wholesale clients only. Credit ratings information published by Fitch is not intended to be used by persons who are retail clients within the meaning of the Corporations Act 2001.

Fitch Ratings, Inc. is registered with the U.S. Securities and Exchange Commission as a Nationally Recognized Statistical Rating Organization (the "NRSRO"). While certain of the NRSRO's credit rating subsidiaries are listed on Item 3 of Form NRSRO and as such are authorized to issue credit ratings on behalf of the NRSRO (see https://www.fitchratings.com/site/regulatory), other credit rating subsidiaries are not listed on Form NRSRO (the "non-NRSROs") and therefore credit ratings issued by those subsidiaries are not issued on behalf of the NRSRO. However, non-NRSRO personnel may participate in determining credit ratings issued by or on behalf of the NRSRO.

Copyright © 2025 by Fitch Ratings, Inc., Fitch Ratings Ltd. and its subsidiaries. 33 Whitehall Street, NY, NY 10004. Telephone: 1-800-753-4824, (212) 908-0500. Reproduction or retransmission in whole or in part is prohibited except by permission. All rights reserved.