

FITCH RATES ENERGY NORTHWEST, WA'S ELECTRIC REVENUE REFUNDING BONDS 'AA'; ASSIGNS 'AA-' IDR ON CRITERIA CHANGE

Fitch Ratings-Austin-30 April 2019: Fitch Ratings has assigned a 'AA-' Issuer Default Rating (IDR) to Bonneville Power Administration and a 'AA' rating to the following revenue refunding bonds issued by Energy Northwest, Washington (ENW) and secured by payments from Bonneville:

--Approximately \$275 million Columbia Generating Station Electric Revenue and Refunding bonds, series 2019-A&B.

In addition, Fitch has affirmed the 'AA' debt ratings on the following bonds, which are secured on parity through payments from Bonneville:

- \$795.6 million ENW Project 1 revenue bonds;
- \$3.5 billion ENW Columbia Generating Station revenue bonds;
- \$914.1 million ENW Project 3 revenue bonds;
- \$200.7 million Idaho Energy Resources Authority transmission facilities revenue bonds, series 2017;
- \$811.6 million Port of Morrow transmission facilities revenue bonds, series 2012, 2014, 2015 and 2016-1& 2016-2;
- \$72.1 million Lewis County Public Utility District No. 1 Cowlitz Falls hydroelectric project revenue refunding bonds, series 2013.

The ratings on the debt listed above and issued by Energy Northwest, Idaho Energy Resources Authority, Port of Morrow and Lewis County PUD No. 1, reflect Bonneville's unconditional obligation to pay debt service, as well as structural security features specific to the priority of these obligations ahead of Bonneville's federal debt (approximately \$5.5 billion Treasury debt and \$1.8 billion federal appropriations debt as of Sept. 30, 2018).

Fitch had designated all the above ratings as 'Under Criteria Observation', or 'UCO' on April 9, 2019 following the publication of Fitch's revised rating criteria. Fitch has removed and resolved the UCO designation on all the ratings.

Fitch has downgraded Bonneville's implied revenue obligation rating to 'AA-' from 'AA'. The downgrade reflects Bonneville's leverage profile and the heightened emphasis on leverage through the business cycle in the context of Fitch's revised rating criteria "U.S. Public Power Rating Criteria" released on April 3, 2019.

Finally, Fitch's implied revenue obligation rating has been withdrawn due to the replacement of this rating with the equivalent IDR for Bonneville, which considers all of Bonneville's financial obligations, including federal debt obligations, which are not publicly rated.

The Rating Outlook on all ratings has been revised to Stable from Negative.

The 2019A&B bonds are scheduled to price on May 8, 2019, via negotiation. Bond proceeds will refund existing Columbia Generating Station debt, fund capital expenditures in fiscal 2020 and pay costs of issuance.

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, which is a separate fund within the U.S. Treasury. Expenditures from the Bonneville Fund do not require further federal appropriation. The non-federal debt obligations are consolidated as obligations on Bonneville's financial statements and are paid prior to Bonneville's payments on its borrowings from the U.S. Treasury and federal appropriations debt.

ANALYTICAL CONCLUSION

The affirmation of the 'AA' rating on non-federal debt and the revision of the Outlook to Stable, reflects steps taken by Bonneville and its customers to implement a financial reserves policy and include specific steps within the rate setting process designed to build liquidity and maintain minimum reserves specific to each of the power and transmission business lines. While the initial funding timeline selected (estimated 10 years) to reach the minimum 60-day reserve minimum threshold is considered slow, the proposed reallocation of reserves between the two business lines in fiscal 2019 is expected to bring the power business line relatively near the 60-day minimum; the transmission business line should remain above the minimum.

The downgrade of the implied revenue bond rating and Bonneville's IDR assignment are based on the application of Fitch's new criteria with greater emphasis on leverage in relation to an entity's overall risk framework. Despite Bonneville's strong profile, which is supported by revenues from power and transmission sales across six states, broad rate setting flexibility, and wholesale customers that exhibit healthy underlying credit quality, current and anticipated leverage is more consistent with the 'AA-' rating. The subsequent withdrawal of Fitch's implied revenue bond rating is due to the assignment of an IDR, which obviates the need for the implied rating as the two ratings convey the same assessment of Bonneville's credit quality incorporating all its obligations.

The 'AA' ratings on the non-federal debt obligations reflect Bonneville's obligation to make those payments ahead of its federal debt, and the structural ability to defer federal debt repayments and interest due in the event revenues are insufficient after meeting Bonneville's other obligations, including the non-federal debt.

KEY RATING DRIVERS

Revenue Defensibility: 'aa'; Geographic and Operational Revenue Diversity

Bonneville's revenue defensibility is very strong. Power sales contracts with 125 customers and Bonneville's dominant role as the regional transmission provider result in long-term revenue security, notwithstanding some degree of renewal risk related to the power supply contracts. Bonneville establishes its own rates, subject to FERC review, and has adopted a consistent two-year rate making process. Finally, the purchaser credit quality of Bonneville's wholesale customers is strong. The largest customers exhibit favorable service area characteristics and very strong financial profiles.

Operating Risk: 'aa'; Hydroelectric Dominant Power Supply

Operating costs are very low, largely due to a predominantly hydroelectric generation fleet. Capital needs relate to reinvestment in the aging generation assets and transmission investment across the six- state service area.

Financial Profile: 'aa'; Highly Leveraged; Declining Power Reserves but Adequate Total Liquidity

Bonneville's financial profile is very strong although highly leveraged. Given planned capital spending and debt issuance, Fitch expects leverage to decline slightly over the next five years, further supporting the ratings. Variability is likely in the short term as a result of variable hydroelectric sales, but is considered in the rating. Liquidity is adequate with the proposed reallocation of reserves and implementation of a financial reserves policy.

Asymmetric Additional Risk Considerations

No asymmetric risk considerations affected the rating.

RATING SENSITIVITIES

Higher Leverage: Bonneville's overall leverage is near the upper end of the 'aa' range given its revenue defensibility and operating risk profile assessments. Financial projections indicate that overall leverage should remain flat or trend down slightly. However, sustained leverage that is higher than anticipated could result in downward rating pressure.

Weakened Revenue Defensibility: A potential dilution of revenue defensibility over the medium term, driven by reductions in Bonneville's power customer base during the contract renewal process, could also reduce Bonneville's ability to support existing leverage levels at the current rating.

CREDIT PROFILE

Bonneville provides wholesale power to a population of more than 14 million in the Pacific Northwest through a resource portfolio consisting of low-cost hydropower and nuclear generation. Transmission services are provided to a similar six-state region but to a broader cast of utilities. Bonneville is the largest of four federal power marketing administrations (PMAs) within the U.S. Department of Energy (DOE). Power supply needs are met through a fleet of hydroelectric projects and one nuclear project. Bonneville's predominantly hydroelectric generation portfolio (86% of total owned capacity) results in hydrology risk and a variable energy supply. Low market energy prices in the region are placing competitive pressure on Bonneville to keep rate increases as low as possible and have driven net secondary revenues lower over the past decade.

Revenue Defensibility

Bonneville exhibits very strong revenue source characteristics with 100% of its revenues provided from power and transmission services. Bonneville is required by statute to sell power at cost-based rates, with a preference given to public utility districts and cooperatives. These 125 publicly owned and cooperatively owned utilities, referred to as Bonneville's preference customers, account for around 87% of power sales and are required to purchase nearly all of their energy requirements from Bonneville pursuant to power sales contracts that extend through 2028. Bonneville and its preference customers are expected to hold negotiations regarding contract extension in the next few years. Fitch's analysis assumes that many of Bonneville's preference customers will sign long-term contract extensions, providing long-term revenue security for Bonneville's power business line.

Bonneville's transmission business line has grown from around 16% of revenues in fiscal 2008 to 26% of overall system revenues in fiscal 2018. Transmission customers are a wider group than Bonneville's preference customers and include investor-owned utilities and power generators in the region. While transmission customers do not have long-term contracts, Fitch views this business as providing strong revenue defensibility given the monopolistic nature of high voltage transmission and the absence of excess transmission capacity.

Rate Flexibility

Bonneville's establishes its own power and transmission rates, and rate flexibility is viewed as very strong. Bonneville's preference rate is approximately 3.6 cents per kilowatt hour in fiscal 2019. Although the Federal Energy Regulatory Commission (FERC) reviews and approves Bonneville's rates, regulatory concerns are mitigated as oversight is provided to ensure full cost recovery and revenue sufficient to pay debt service on the non-federal debt and federal Treasury obligations. Transmission rates are regulated by FERC to further ensure they are non-discriminatory, as well as just and reasonable.

Bonneville establishes its power and transmission rates for two-year periods. The last rate increase consisted of a 5.4% power rate increase and 0.7% transmission rate decrease effective Oct. 1, 2017 (fiscal 2018). Bonneville has released its preliminary indication for the next rate increase of 2.9% power rate increase and 3.6% transmission rate increase that will become effective Oct. 1, 2019. However, the rate case is still proceeding and the final adopted increase may be different than the initial indication. The power rate increase reflects Bonneville's work to decrease O&M expenses, capital expenses related to reinvestment in the federal generation assets, funding of the new financial reserve policy (see below), and assumptions regarding net secondary revenue provided by surplus energy sales to the market. The transmission rate increase primarily reflects increased capital costs.

Purchaser Credit Quality

Bonneville's purchaser credit quality is strong. Power and transmission customers are geographically and operationally diverse reflecting a service area that extends across Idaho, Oregon, Washington, and portions of Montana, Wyoming, Nevada, Utah, and California. Bonneville's system accounts for approximately 27% of the electricity sold in the region and 75% of the transmission infrastructure.

The largest power and transmission customers, accounting for approximately 40% of Bonneville's revenues, include Snohomish County Public Utility District No. 1 (AA-/Stable), Seattle City Light (not rated by Fitch), Eugene Water and Electric Board (AA-/Stable), Tacoma (AA-/Stable), Benton County Public Utility District No. 1 (A+/Stable) and Cowlitz County Public Utility District No 1 (A/Stable) as well as Puget Sound Energy, Inc. (IDR 'BBB+'). Each of the municipal utilities exhibit strong revenue defensibility as evidenced by their independent rate setting, favorable service area characteristics, competitive rates and strong financial profiles.

Reliance on Wholesale Energy Sales

Bonneville is reliant on uncontracted wholesale energy sales for a portion of its revenue. While this reliance is inherent to the variable nature of its hydroelectric power supply, it creates heightened revenue variability that informs Fitch's assessment of revenue defensibility. For ratemaking 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 by Bonneville during certain months of the year to shape the output of the federal system, compose net secondary system revenue.

The risk to revenues in this budgeting practice is that revenues can be lower than budget if water conditions are below average. Net secondary revenues have been lower than budgeted in two of the last three years due to below average water conditions in certain years and depressed market energy prices. These results have been one of the factors behind the decline in financial reserves for the power business over the same timeframe.

Power Supply Contract Term Considerations

Bonneville's power supply contracts expire in 2028, which is well before the final maturity of Bonneville's debt. Fitch's concern regarding the short term of the Bonneville's power supply contracts is partially mitigated by the regional depth of the existing customer base and the likelihood that many of the existing preference customers will elect to resign new contracts. However, Bonneville's ability to offer competitively priced power supply services will be a key factor during the upcoming extension of its power sales contracts, with negotiations expected to occur between 2021 and 2026 .

Operating Risk

Bonneville sells energy produced from 31 low-cost hydroelectric plants owned and operated by the U.S. Army Corps of Engineers and the Bureau of Reclamation. The federal hydroelectric projects were constructed between 1941 and 1975. Bonneville has direct-funding agreements with both agencies to pay operating and capex costs. The direct funding of capital improvements allows Bonneville to direct decision making and prioritization of reinvestment in the hydroelectric fleet. Bonneville also markets energy from nonfederal projects, the largest of which is CGS, 1,157 MW nuclear plant that commenced operation in December 1984. CGS accounts for around 10% of Bonneville's power supply. Bonneville's resources, even under low water conditions, are sufficient to meet projected preference customer loads.

Bonneville's very low operating cost burden (at less than 5 cents/kWh) also includes payments related to the residential exchange program. Bonneville is legally required to provide power to meet the residential load within the Pacific Northwest, including load served by the investor owned utilities. Bonneville makes financial payments to the investor owned utilities to comply with this obligation.

Operating Cost Flexibility

The reliance on hydroelectric power for over 80% of power supply reflects a weak operating flexibility, given the dominance of a single fuel type. However, Bonneville's power supply portfolio is predominately carbon free, which positions Bonneville's customers well in regard to efforts aimed at reducing greenhouse gas emissions. The state of Washington has had various carbon tax initiatives proposed but they have all been unsuccessful to date. The portfolio is relatively stable and not expected to change or grow other than efficiency investments.

Bonneville is required to protect, mitigate and enhance fish and wildlife resources to the extent they are affected by federal hydroelectric projects on the Columbia River and its tributaries. Environmental costs are the subject of ongoing litigation and have generally increased over time. These costs are included in Bonneville's power rates for its preference customers. Furthermore, the power sales contracts have a cost recovery adjustment mechanism that allows for additional rate recovery for fish-related cost increases in between rate cases. This is viewed positively given ongoing uncertainty with environmental costs.

Capital Needs

Bonneville's capital planning and management is adequate with capital spending to depreciation that has averaged 172% annually over the past five years. However, Bonneville faces the issue of aging infrastructure and delayed capital reinvestment in its hydroelectric fleet and growth needs in the transmission business line. Capital needs over the next five years are estimated at \$4.16 billion, with 54% of the spending, or around \$2.24 billion, occurring in the transmission business line. These capital amounts do not include approximately \$1.2 billion ENW estimates will be needed at CGS through 2030. Although the hydroelectric assets are owned by the Reclamation and Corps, Bonneville makes the funding decisions regarding the pace and scope of capital reinvestment.

Bonneville's historical capital funding practice has been to debt finance nearly all of its capital spending. In 2018, Bonneville adopted a new leverage policy that will make a modest change to this historical practice and require the transmission business line to use revenue financing for a portion of its capital needs. Bonneville's overall goal is to reduce the debt to asset ratio from 90% to between 75%-85% by 2028. The initial rate case proposal 2020-2021 includes \$23 million per year in revenue financing for the transmission business line, which is minimal in relation to the total planned capital spending. No revenue funding is included for the power business line since scheduled amortization is outpacing new debt and the debt to asset ratio is declining on its own; power will continue to debt finance 100% of its planned capital spending.

Financial Profile

Bonneville's financial statements, issued as the Federal Columbia River Power System, include the accounts of Bonneville, the federal hydroelectric generating facilities of the Corps and Reclamation dispatched by Bonneville, and the operation and maintenance costs of the U.S. Fish and Wildlife Service for the lower Snake River facilities. The financial statements consolidate the activity of financing corporations used to finance transmission assets leased to Bonneville.

Bonneville's consolidated coverage of full obligations is typically modest at around 1.0x but has fallen below 1.0x in the last three fiscal years resulting from the practice of repaying non-scheduled principal in advance as part of the regional cooperation debt strategy. Fitch's analysis of Bonneville's IDR focuses on the calculation of coverage all obligations, including Bonneville's federal obligations.

Debt service coverage (DSC) of the ENW debt is increasing as a result of the regional debt cooperation strategy. DSC, as calculated by Bonneville, has increased is over 5.0x as a result of the refunding and restructurings performed for all three ENW projects on principal payments.

Bonneville's total indebtedness is significant at \$15 billion, but has declined from \$16 billion at the end of fiscal 2015. Net adjusted debt to adjusted FADS was 9.7x and has declined from 10.7x over the same time period. Even with the sizable capital needs and additional debt, leverage is slowly declining.

Fitch Base Case and Rating Case

Fitch's analysis indicates that Bonneville's financial performance should be stable through the base case and rating case, including variability that can occur on Bonneville's hydroelectric system. Leverage should continue to decline slightly over time. Fitch has assumed 0% growth in total wholesale sales in the base case. The rating case includes large declines in total wholesale sales in the first two years of 9.1% and 3.5%, respectively, followed by a recovery to positive sales growth. The rating case imposes a moderate stress case based on Bonneville's historical movement in total sales, which can be large based on hydrological conditions, although the ultimate impact to revenues will be determined by wholesale market prices at the time. In the rating case, leverage would be elevated in the initial years but return to between 8x and 9x in the later years. Additional assumption used in both the base and rating case include Bonneville's planned amounts of capital spending, debt funding of nearly all capital spending and rate increases in line with historical levels.

Liquidity

Bonneville's liquidity profile is neutral. Overall cash reserves provided 136 days cash at the end of fiscal 2018 and the liquidity cushion, including the \$750 million line of credit with the U.S. Department of Treasury, was 257 days. Cash reserves play a key role in managing aspects of Bonneville's revenue variability related to wholesale energy sales. Bonneville's risk of revenue variability is managed primarily through power business line cash reserves for risk, which are

a subset of the overall reserves. The trajectory and pace of declines in recent years in the power business line's reserves have been a credit concern and resulted in the Negative Outlook on the ratings in 2017. The reserves are all co-mingled in the Bonneville Fund and total reserves are healthy but the declines indicate the extent of under-recovery in the power business due to underperformance of net secondary sales and declining preference customer load.

Power business reserves declined again in fiscal 2018 to \$13 million from \$105 million in fiscal 2017 and from a high point of \$395 million two years prior in fiscal 2015. However, two factors result in shoring up the power business line's financial reserve position in fiscals 2019 and 2020.

First, power reserves will receive a one-time boost from the proposed reallocation of \$330 million from transmission reserves to the power business in fiscal 2019. The decision stems from an internal study Bonneville performed that has concluded an error has occurred in prior years regarding the allocations of reserves between the two business lines. Since transmission reserves were very strong, the proposed reallocation should leave the transmission business with continued adequate reserves. Bonneville projects that, with the proposed reallocation, reserves for the power business line could end fiscal 2019 at \$288 million, up from \$13 million at the end of fiscal 2018. Transmission business reserves could end at \$207 million (down from \$538 million at the end of fiscal 2018). Total reserves are still projected to be down from fiscal 2018 (\$495 million vs. \$551 million).

Second, and more importantly for long-term credit quality, Bonneville and its customers worked diligently in 2018 to adopt a financial reserves policy. The policy established a minimum threshold of 60 days reserves for risk at each business line, or approximately \$300 million for power and \$100 million for transmission. The proposed power rate increase includes funding of \$30 million per year in fiscals 2020 and 2021 if power reserves are below the minimum threshold. Transmission reserves are above the threshold, even with the proposed reallocation. Finally, the policy includes a recovery mechanism to replenish reserves in a more rapid manner than the prior cost recovery adjustment clause.

Debt Profile

Bonneville had a total of approximately \$15 billion in debt obligations outstanding at the end of fiscal 2018, including all of its non-federal obligations, which accounted for 51% of total debt. The debt is almost entirely fixed rate. Bonneville does not have authority to issue its own debt to the public and has a statutory limit on the bonds it may issue to the Treasury of \$7.7 billion, complicating capital funding decisions. IERA and the Port of Morrow financing structures provide financing for transmission assets while the regional cooperation debt strategy frees up ongoing treasury capacity.

Bonneville and ENW collectively manage Bonneville's non-federal and federal obligations to minimize debt costs and maximize access to capital. The regional cooperation debt plan that extends the maturity of outstanding ENW debt (CGS and projects 1 and 3) and uses the revenues made available from not paying debt service costs on those projects to prepay, dollar for dollar, higher interest rate debt to the U.S. Treasury.

While this plan effectively accelerates payment of Bonneville's subordinate lien obligations by extending the structurally senior ENW debt maturity, it makes available federal borrowing capacity and provides economic benefit to Bonneville's customers, who are the ultimate ratepayers that repay both types of debt.

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Additional information is available on www.fitchratings.com

Applicable Criteria

Rating Criteria for Public-Sector, Revenue-Supported Debt (pub. 26 Feb 2018)

<https://www.fitchratings.com/site/re/10020113>

U.S. Public Power Rating Criteria (pub. 03 Apr 2019)

<https://www.fitchratings.com/site/re/10066654>

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