FITCH AFFIRMS CHELAN COUNTY PUD, WA'S CONSOLIDATED SYS REV BONDS AT 'AA+'; OUTLOOK STABLE

Fitch Ratings-New York-25 November 2019: Fitch Ratings has affirmed the following ratings for Chelan County Public Utility District No. 1 (the district), WA at 'AA+':

--\$280.6 million consolidated system revenue bonds;

--\$187.3 million Rock Island Hydroelectric project revenue bonds (separately secured by project revenues only);

--\$11.7 million Rocky Reach Hydroelectric project revenue bonds (separately secured by project revenues only).

In addition, Fitch has assigned the district a long-term Issuer Default Rating (IDR) of 'AA+'.

The Rating Outlook is Stable.

ANALYTICAL CONCLUSION

Fitch's 'AA+' rating reflects the district's sizable portfolio of hydro generating resources producing very inexpensive power as well as solid revenue defensibility benefitting from the independent ability to adjust retail rates that are among the lowest in the nation. The district's very low leverage profile is supported by the continued rapid amortization of debt and the accumulation of reserves that are near historical highs.

Fitch views the district and its separately secured hydro projects as a consolidated, integrated system. While the distribution system and the hydro-generating projects are accounted for and can be financed separately, they are managed and operated as an integrated system, with the same management team and loans flowing between the systems. Outstanding project revenue bonds are supported by the consolidated system with the exception of a modest amount that matures in 2034 and is further supported by posted collateral. Additionally, a cross-default provision links all three resolutions in the unlikely event of a default. As such, Fitch rates all the outstanding bonds in line with the district's 'AA+' IDR.

CREDIT PROFILE

The district provides electric, water, wastewater, and wholesale telecommunications service throughout Chelan County, WA, and wholesale power supply to a variety of regional electric customers. The integrated electric system accounts for approximately 90% of operating revenues, and serves as the primary driver of the rating. Additional revenues are derived from the water and wastewater utility at just under 2% of revenue, followed by a more minimal portion of revenues from the fiber telecom network. The electric system serves approximately 51,000 retail customers in the county.

The integrated electric system consists of its retail distribution system and hydroelectric generation on the Columbia River in central Washington State, which are the Rocky Reach (1,300 MW), Rock Island (629 MW), and Lake Chelan (59 MW) hydroelectric projects.

KEY RATING DRIVERS

Revenue Defensibility: 'a'; Significant Wholesale Sales; Largely Contracted

Of the district's very ample 1,988 MW capacity, only 21% is used to meet the needs of the district's retail customers with the vast majority of excess long power sold to third parties through long- or medium-term contracts. The reliance on revenue from competitive sources is considered modest and manageable as the wholesale contracts are designed to insulate the district from price and hydro-variability risks. The district remains exposed to counterparty risk, which Fitch believes is largely mitigated through contractual step-up provisions, collateral postings and the ability to remarket the very low cost power upon counterparty default.

Operating Risk: 'aa'; Exceptionally Inexpensive and Robust Hydro Resources

The district's rating reflects its valuable hydropower generation resources at Rocky Reach, Rock Island and Lake Chelan that provide exceptionally low-cost electric power. While declines in market prices have eroded the district's cost advantage relative to the market prices, wholesale demand for the district's hydropower products remains solid, and district products sell at a premium to market prices. Fitch's operating cost burden metric is a very low 2.5 cents per KWh. Capital plans are significant but manageable and will largely be funded from cash.

Financial Profile: 'aa'; Very Strong Financial Profile

The district's financial metrics remain very strong with coverage of full obligations at a healthy 2.9x for a third consecutive year in fiscal 2018, and cash on hand of 741 days. The district is prudently using margin from wholesale sales and surplus cash flow to rapidly decrease leverage through optional and scheduled debt payments while preparing for a period of increased capital spending. Fitch's forward look and stress scenario includes a higher leverage ratio of just under 3x through 2023 that remains supportive of the rating.

Asymmetric Additional Risk Considerations

There are no asymmetric additional risk considerations associated with this rating.

RATING SENSITIVITIES

Management of Wholesale Sales: the district's rating is supported by its ability to successfully manage exposure to variable wholesale revenue through long and medium-term contracts that largely reduce price and hydro-variability risks. Reduced demand for the district's wholesale products for any reason, including persistently low market prices, could result in negative rating action.

SECURITY

The consolidated system revenue/refunding bonds are secured by a net revenue pledge of the consolidated system, which includes the electric distribution, water, wastewater and fiber optics systems, and the Lake Chelan hydroelectric project. The consolidated system bonds have been issued with a subordinated lien, but the senior lien is closed and no senior bonds are outstanding. The Rock Island and Rocky Reach project-specific bonds are secured by a separate net revenue pledge for each project.

Revenue Defensibility

Retail Revenues

An important, but smallest portion of the consolidated revenues are provided by the district's retail electric customers. Retail customers accounted for only 13% of revenues in 2018. Fitch views retail electric revenues as a business line that exhibits monopolistic characteristics and provides a high degree of revenue consistency. The retail customer base is heavily weighted towards residential customers that provided 52% of retail revenues in 2018.

Wholesale Contract Revenues

The largest source of the district's revenues (\$138 million or 36% of 2018 revenue) is provided through long-term, take-or-pay contracts priced at cost plus margin, which Fitch believes sufficiently addresses hydrological, renewal, and merchant risks. Through fiscal 2018, the three counterparties of these contracts are Alcoa Corp (Alcoa; BB+/Stable) contracted for 26% of the combined output of Rocky Reach and Rock Island through 2028, Puget Sound Energy (PSE; BBB +/Stable) contracted for 25% of the combined output of the combined output of Rocky Reach and Rock Island through 2031, and Douglas County PUD (privately rated by Fitch) contracted for 5.5% fo the output of Rocky Reach through 2031. A similar contract with Microsoft (AA+/Stable) for up to 50 average megawatts (aMW) began in April 2019, is contracted through March 2024, and is estimated to provide roughly 6% of revenue on average.

Another approximately 21% of 2018 revenue was derived from market-based slice of the system contracts that expire over the next 1 to 10 years. The slice contracts are with investment grade counterparties and require some portion of posted collateral under 1-way margining agreements. These contracts are monitored and continually updated under a five year laddered power supply management program. While the majority of these sales are under longer term contracts, the contracts expire on a rolling schedule, and as such a portion of these revenues contracted under shorter terms would be up for renewal and exposed to market-based pricing.

The remaining portion (roughly \$25 million or 7%) of net wholesale revenues remains potentially subject to short-term price and demand risks, but this level of exposure is considered manageable and in line with the 'a' revenue defensibility assessment.

Other revenues including retail water, wastewater, transmission, RECs, and fiber telecom services each make up a much smaller portion of revenue, but totaled 11% of revenue in fiscal 2018.

Service Area Characteristics

The service area's economic and demographic metrics of the retail customer base are generally midrange compared with national and state averages. Chelan County is historically anchored by the agriculture industry with some diversification into manufacturing, healthcare, education, and more recently data centers and other technology as the county has grown and served as the regional economic hub.

The district's customer base is stable and management projects retail load growth of nearly 3% through the forecast time period including new large industrial customer contracts. Unemployment in the county is low and in line with the national rate at 4.5% in 2018. However, unemployment is seasonal reflecting the narrow economy given the agricultural focus and generally peaks in January/February. The median household income (MHI) is reflective of these trends and just behind the national average.

New Advanced Technology Loads

There has been significant interest from a combination of computing, data processing, and other new technology related businesses looking for large, low-priced energy supply. In 2015, the district imposed a one-year moratorium on any new, large industrial customers in order to investigate

the implication to retail customers, ultimately implementing a new high density load (HDL) rate structure for these customers. An additional one year moratorium went into place in early 2018, largely to address the growth of cryptocurrency related load requests, and the HDL rate schedule was eventually updated to ensure these operators carry the full operational and financial risks of providing this power. Going forward, these rates will be updated to reflect market conditions, but include market based pricing including the value of the environmental attributes and transmission costs.

The district entered into an agreement beginning April 2019 to provide Microsoft of carbon free hydroelectric energy to power their Puget Sound region campuses through March 2024. The contract is to supply market rate power, plus environmental and transmission costs, largely offsetting any concentration concerns as the district's cost of power is well-below market. Additionally, the Diamond Foundry, a San Francisco based 2015 startup creating laboratory fabricated diamonds moved to Chelan County and signed a contract to obtain a 19MW carbon-free load.

Rate Flexibility

Fitch considers the district's retail rate flexibility very strong with the independent ability to set rates that are among the most competitive and affordable in the nation. Rates consistently trend at 40% of the state average according to EIA data, and Fitch calculates the average customer bill is a very affordable 1.3% of median household income.

Counterparty Exposure

The district is also protected from its exposure to either Alcoa or Puget Sound Energy through contractual step-ups that are required in the event that either counterparty defaults. In the event that Alcoa defaults, Puget Sound Energy would be required to step-up and take a proportional share of Alcoa's slice contract, while the district's distribution system would retain the remainder. Under the power sales contract, Alcoa remains responsible for the costs at Rocky Reach and Rock Island regardless of the actual amount of power used. The district holds \$48 million in collateral from Alcoa for protection against default (minimum requirement in contract is \$40 million) plus letters of credit, in addition to the \$62 million received in June 2018 after the curtailment of the smelting plant.

For the market-based slice contracts, the district requires that all posting requirements be met with a letter of credit, unless the counterparty holds a senior unsecured credit rating of 'A+' from at least one of the nationally recognized rating agencies.

Fitch believes the credit of the counterparties, the credit management provisions, and guarantees from the distribution system support the revenue defensibility assessment.

Operating Risk

Fitch calculates a very low operating cost burden for the district at 2.5 cents per KWh, anchoring the 'aa' operating risk assessment. A key credit strength of the district is the exceptionally low cost of production at the district's hydro developments. Rock Island was the first hydroelectric facility spanning the Columbia River and was placed into operation in 1933, followed by the larger Rocky Reach Dam in 1961. The district meets the majority of its power requirements from its share of the combined output of these hydroelectric facilities and uses market purchases to smooth load.

Operating Cost Flexibility

While the district's cost advantage relative to the market has diminished significantly in recent years as wholesale power prices in the Northwest have declined with the introduction of abundant wind resources and other renewables, the district's stable and low production costs remain attractive to counterparties. Demand for the district's medium- and long-term slice products has been solid. The district calculates a combined hydro cost of power at \$18.9/MWh, and forecasts a slight increase to \$20.6/MWh in 2023. However these levels remain well-below the cost of power in the regional market or Bonneville Power Administration (BPA), which provided power to preference customers an average cost of \$35.6/MWh in 2019.

Environmental Initiatives

Under Washington State's renewable portfolio standards (RPS), utilities that serve 25,000 customers or more are required to obtain 3% of their load from renewable resources by 2012, 9% by 2016 and 15% by 2020. Eligible resources include incremental hydro, wind, solar or renewable energy credits. In 2020 the district will be required to have approximately 31 aMW of renewable resources. The district is in compliance and remains well positioned to meet additional required state RPS targets by a substantial margin. A portion of Rocky Reach, Rock Island, and Lake Chelan output was affirmed by Washington Department of Commerce as incremental hydro, providing the district with excess supply of renewable resources.

Washington also passed the Clean Energy Transformation Act (CETA) in 2019 that requires the state to achieve a power supply free of carbon emissions by 2045. The district is well positioned given its carbon-free power supply.

Capital Planning and Management

Age of plant has increased to 23 years, indicating high lifecycle investments needs. Fitch believes these needs are being sufficiently addressed in the capital plan. The capital improvement plan (CIP) for 2019-2023 totals over \$700 million, up from about \$440 million in the 2017-2021 plan. The largest component of the plan, approximately \$215 million, will finance the Rock Island unit modernization and the FERC relicensing plan.

Modernization and replacement of the generating units at both Rock Island and Rocky Reach is ongoing. At Rock Island, the last of the original generating units were taken out of service in 2016 due to corrosion fatigue on the blades. This work, in addition to the FERC relicensing is expected to cost the district over \$700 million by 2029 including the current repairs that will be credited to relicensing. FERC has approved over \$600 million of investments immediately (as of October 2019).

A new operations and service center facility (roughly \$135 million) has been added to the CIP at an estimated cost of \$135 million, along with modernization at the distribution system that rounds out the CIP. Environmental work is also ongoing, in partnership with Douglas County PUD. The districts have committed to a joint Habitat Conservation Plan for salmon and steelhead, committing to a 50-year plan for no net impact on fish runs. The CIP will largely be funded through revenues and reserves, with a currently estimated \$67 million new money financings likely beginning in 2022.

Financial Profile

The district ended fiscal 2018, a fourth consecutive year of very strong performance, with net revenues of \$105 million, or \$32.5 million better than budget, and all financial policy targets exceeded. Wholesale sales increased year-over-year by \$20 million due to both an increase in volume of energy sold and higher average wholesale prices on the sale of the district's surplus energy. Year-to-date 2019 results have also been favorable with a combination of higher revenues

and lower expenses resulting in a forecasted 2019 year-end operating income of \$103 million, or \$26 million better than budget.

Available cash reserves exceeded a very high 700 days on hand at year-end fiscal 2018. Scheduled amortization, some debt prepayment, plus an extended period of no debt issuance have allowed the district to continue to reduce leverage by rapidly paying nearly \$300 million, or over a third of outstanding debt, over the past five years. At its peak at fiscal year-end 2009, outstanding debt totaled \$1.04 billion, but had declined to \$517 million in 2018. Leverage has continued to decline as the district amortized debt ahead of schedule and built up cash reserves. In fiscal 2018, the district's Fitch-calculated leverage ratio was 1.5x signaling the very robust financial flexibility in cash flows available to service current and potential obligations throughout the business cycle.

Fitch Analytical Stress Test (FAST) Base Case and Rating Case

Fiscal 2019 water conditions are weaker at 82% of the annual average flow, though the district expects strong operating income and some draw down of cash after capex. Going forward Fitch expects the district's increased capex to be funded from a combination of rate increases and new money borrowing that increases leverage only moderately from its very low position. Inflationary-based rate increases, the first since 2010, are included in the district's updated 2020-2024 strategic plan. Fitch's base case includes cash balances remaining healthy and in line with the district's policy target of 250 unrestricted days cash on hand. Coverage levels are also expected to exceed the district's 2.0x target.

Despite the historical volatility in sales, primarily on the wholesale side, the results of Fitch's rating case does not deviate meaningfully from the base case primarily due to strategies in place to hedge price and hydro risk on the majority of the district's wholesale sales. In Fitch's rating case, a significant amount of the district's margin is preserved due to the wholesale sales that include take-or-pay agreements with costs that include margin stabilization, and the laddering of expiration of shorter-term market-based contracts that secure sales over the next five years. Overall, Fitch believes the very healthy leverage profile will be maintained at a level providing sufficient financial flexibility for the rating level throughout the business cycle.

Debt Profile

The district had a total of \$517 million in long-term debt outstanding at year-end fiscal 2018. The debt is nearly entirely fixed rate and amortizes through 2039. A small portion of debt including the \$61.2 million outstanding 2008B consolidated system revenue bonds are variable rate. A majority of debt (\$280.6 million) is issued on a subordinated lien of the consolidated system revenue, which has covenanted net revenues to provide a bond coverage ratio of at least 1.25x annual debt service, together with available funds, or 1.00x without available funds. The senior lien of the consolidated system is closed and the no debt remains outstanding. The remaining debt consists of separately secured Rocky Reach revenue bonds and Rock Island revenue bonds. Fitch views the district and its separately secured hydro developments as a single integrated system with the consolidated system as the ultimate obligor.

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Sources of Information

In addition to the sources of information identified in Fitch's applicable criteria specified below, this action was informed by information from Lumesis.

ESG Considerations

Unless otherwise disclosed in this section, the highest level of ESG credit relevance is a score of 3 - 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.

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Additional information is available on www.fitchratings.com

Applicable Criteria Public Sector, Revenue-Supported Entities Rating Criteria (pub. 07 Nov 2019) https://www.fitchratings.com/site/re/10099396 U.S. Public Power Rating Criteria (pub. 03 Apr 2019) https://www.fitchratings.com/site/re/10066654

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