Chelan County Public Utility District
No. 1, Washington; Retail Electric

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Rationale

S&P Global Ratings affirmed its 'AA+' long-term rating on Chelan County Public Utility District No. 1, Wash.’s various consolidated system revenue bonds. We also affirmed our ‘AA+/A-1’ dual rating on the district's series 2008B variable-rate bonds; these bonds are backed by a standby bond purchase agreement with Barclays Bank PLC. The outlook is stable.

The long-term rating reflects the application of our "U.S. Municipal Retail Electric And Gas Utilities: Methodology And Assumptions" criteria, published Sept. 27, 2018 on RatingsDirect.

The district's net revenue secures the bonds.

The rating reflects our opinion of the district's very strong enterprise risk profile mainly based on our view of its extremely strong market position and very strong operational management assessment, and our view of the district's extremely strong financial risk profile given extremely strong coverage and liquidity.

The enterprise risk profile reflects our view of the district's:

- Very strong operational and management assessment, highlighted by extremely strong operational assets, very strong environmental compliance, extremely strong management, policies, and planning, and very strong rate-setting practices;
- Strong service area economic fundamentals, with a largely residential retail revenue base, very strong customer diversity, and slightly above-average income levels, although we note that the majority of district energy sales are to purchasers outside of the direct service territory given its significant surplus sales;
- Extremely strong market position as a result of rates that are among the lowest in the nation at just over 3 cents per kilowatt-hour (kwh) according to our calculations; and
- Extremely strong industry risk assessment relative to other industries and sectors.

The financial risk profile reflects our view of the district's:

- Extremely strong coverage metrics, with fixed-charge coverage (FCC) in audited fiscal 2018 of 3.4x on a combined
basis, forecast at no less than 2x through fiscal 2023 under what we consider reasonable assumptions;

- Extremely strong liquidity and reserve position, with $457 million in available reserves, or 741 days' cash, as of fiscal 2018, with management projecting liquidity to decline somewhat to about $200 million, or about nine months' cash, by 2023 given capital spending plans; and

- Extremely strong debt and liabilities profile, suggested by the district's debt to capitalization of just 34% as of fiscal 2018, with minimal additional debt planned through fiscal 2023.

As of Dec. 31, 2018, Chelan had $293 million in consolidated system debt and $214 million in project debt at its Rocky Reach and Rock Island hydroelectric projects, although hydroelectric project off-takers under take-or-pay, cost-of-service contracts service more than half of project debt. The rates and charges of the retail utilities, as well as certain intersystem loan payments from the district's three large hydroelectric systems, secure the consolidated system bonds. In addition to direct debt, the district is responsible for approximately $3.7 million of off-balance-sheet debt attributable to its share of Nine Canyon Wind Phase I and II project debt.

Utility Description and Credit Overview

Chelan, established in 1936, owns and operates an electric distribution system, a telecommunications system, three major hydroelectric power generating projects (Rocky Reach, Rock Island, and Lake Chelan), and a small water and wastewater system. Chelan sells far more power to contractual off-takers and the wholesale market (85% in 2018) than to its own retail system (15%). Margins from surplus power sales contribute to the district's very low retail rates and provide critical funding for ongoing capital needs, especially renewal and repair projects at Rocky Reach and Rock Island.

Outlook

The stable outlook reflects our assessment of Chelan's extremely low-cost power supply; the benefits provided by significant debt acceleration in recent years, substantially below prevailing market prices, and the financial flexibility that that provides; and its exceptionally strong financial position and declining debt burden. The outlook also reflects our expectation that management will continue to enact budget or hedging measures to counter any revenue shortfalls that would occur in its wholesale operations, to achieve its financial targets.

Upside scenario

We don't expect to raise the rating over the next two years given our expectation that FCC and liquidity will likely erode somewhat but nonetheless remain at levels we consider extremely strong. Further constraining upside are Chelan's somewhat limited economic base, asset concentration, large capital plan, and exposure to variable hydrology.

Downside scenario

We don't expect to lower the rating during our two-year outlook period given the district's significant rate flexibility given its extremely low-cost power supply, and our view that the utility has considerable headroom for erosion in FCC and liquidity while sustaining extremely strong metrics.
Enterprise Risk Profile: Very Strong

Operational Management Assessment: Very strong
In our opinion, the district's operational management is very strong, highlighted by its extremely strong operational assets and management, policies, and planning, and its very strong environmental compliance and rate-setting practices.

We view the district's operational assets as extremely strong. The district's distribution system takes 48% of the aggregate output from its Lake Chelan (59 MW), Rocky Reach (1,300 MW), and Rock Island (629 MW) projects and sells 52% of the output from Rocky Reach and Rock Island to three counterparties in the region--Alcoa (although sales to Alcoa are suspended, as discussed below), Puget Sound Energy, and Douglas County Public Utility District No. 1--through long-term, take-or-pay contracts that expire in 2028, 2031, and 2021, respectively. The contract with Douglas is subject to extensions. Its distribution system has surplus capacity in nearly all months, even under very low water conditions. The district's long-term financial plan includes hedging a sizable portion of its hydrology risk by periodically selling slices of its system by auction or negotiation to various counterparties for up to 10 years on a rolling basis. We believe this strategy effectively minimizes revenue volatility and the financial risk related to low stream flows. In addition to hydropower, nominal resources come from the district's share of energy from the Nine Canyon Wind Project Phases I and II.

The Rocky Reach Project, with a license extending to 2052, has extremely low production costs of just 1.3 cents per kWh (2018) and has excellent shaft diversity with 11 turbines. The Rock Island Project likewise has shaft diversity with 19 turbines, with 2018 production costs of 2.8 cents per kWh. Its license expires in 2028. We believe the projects' low power costs should perpetuate high demand for output beyond the expiration dates of take-or-pay contracts covering about 52% of output. The district's resources also have good geographic dispersion. However, we take a negative view of the consolidated system's concentrated fuel mix in hydropower, which exposes it to streamflow variability, although the quality of the district's assets, including their strong project economics (low power cost), significantly offset these risks. We also view the consolidated system's resource adequacy and wholesale sales hedging strategy as significant credit strengths.

We view the district's environmental regulation and compliance assessment as very strong. The hydro project does not face looming greenhouse gas compliance costs that owners of conventional power plants do. Also, it is in compliance with the state's renewable energy mandate known as I-937. The district expects to meet all future requirements utilizing existing incremental hydro, Nine Canyon Wind Project output, and juvenile fish bypass/spill reductions, which the district reports are well in excess of the renewable portfolio standard requirements under any reasonably possible scenario. Also significant is that the district's entire resource portfolio is 100% non-carbon-emitting, so the portfolio would not have been subject to a carbon tax had state voters approved it in November 2018. The district must practice environmental stewardship with regard to actions in response to fish, wildlife, and other environmental regulations, but we view this exposure as minimal given substantial investments in these areas historically.

We view the district's management, policies, and planning as extremely strong. The district has a policy to maintain cash reserves at no less than 250 days, debt service coverage above 2x, debt at less than 35%, and nominal liquidity of
more than $175 million, and evaluates its base rates annually as part of the budget process. Updates to the district's financial forecast are completed more frequently than annually. The district also does a monthly budget-to-actual analysis, which it shares with the board on a quarterly basis. Management is especially proactive when it comes to management of generation, wholesale revenue volatility, and counterparty credit risk. This is key to mitigating price, stream flow, and operational risk.

The district's rate-setting practices are very strong, in our view, reflecting our view of its demonstrated ability and willingness to adjust rates, although no base rate increases have occurred since 2012. Substantially reducing debt and keeping rates low are key district objectives. The district's multilayered comprehensive approach to power supply management offsets the absence of a power cost adjustment mechanism. Over the next five years, an average of 96% of the district's forecast resources are committed.

**Economic fundamentals: Strong**
We view the district's economic fundamentals as strong, characterized by median household effective buying income that is slightly above the national average, stability provided by residential revenue accounting for 46% of retail revenue, and a very diverse customer base. The district's leading customer represents just 1.3% of operating revenue. The district's extremely low-cost power—whereby if the district experienced customer loss and was required to sell the power on the market, it would likely do so at a profit—supports our economic fundamentals assessment.

Chelan County's (population about 75,000) economic base, historically agricultural, continues to diversify and is generally stable with good employment opportunities. Nevertheless, in our view, it lacks the depth and breadth of more urban systems. Unemployment was 4.5% as of 2017, with median household effective buying income at 104% of the national average as of 2018. The electric utility served 51,381 retail customers in 2018, 75% of which were residential and accounted for 50% of retail energy sales. Retail energy demand fell 5% in 2018 on the heels of strong 11% growth in 2017 resulting from a surge in demand within the residential sector. Electric rates are extremely low with residential rates at just 3.2 cents per kilowatt-hour in 2018, a figure that has changed very little over the past 15 years. No base rate increases have been implemented for seven years, and none are included in projections. Given its very low rates, Chelan, as with neighboring utilities in Grant and Douglas counties, has seen increased requests for power to serve high-load cryptocurrency mining operations. The district has put in new rate schedules and has implemented policies to mitigate potential risks (and ensure cost recovery) that come with this increased demand given cryptocurrency mining's potential transient nature, but also given its heavy demands on system infrastructure.

**Market position: Extremely strong**
We consider the district's market position extremely strong, reflecting weighted average revenue per kWh that us among the lowest in the country at just 3.06 cents per kWh (about one-quarter of the national average), or a very attractive 37% of the state average (2017). This is largely a result of superior project economics from its largest baseload units, the Rock Island and Rocky Reach Projects. The district's average power cost was just $20 per megawatt-hour (MWh) in 2018, well below prevailing market prices, and in line with previous years.

**Industry risk: Extremely strong**
Consistent with our criteria "Methodology: Industry Risk," published Nov. 19, 2013, we consider industry risk for municipal retail electric and gas utilities covered under these criteria very low, and therefore extremely strong.
compared with that of other industries and sectors.

**Financial Risk Profile: Extremely Strong**

**Coverage metrics: Extremely strong**
The district had another very strong year financially in fiscal 2018, exceeding budgeted net revenue and all financial policy targets. Actual FCC ratios on a combined basis at the consolidated system ranged from 1.2x to 3.4x and averaged 2x during fiscal years 2011 to 2018. However, when debt service is adjusted to remove optional debt prepayments (which totaled $238 million during this period), FCC was much stronger, ranging from 1.4x to 3.4x (averaging 2.5x), and was most recently 3.4x in fiscal 2018. Likewise, consolidated system unrestricted cash would be at least $238 million higher without such prepayments. The district’s coverage ratios continue to benefit from its recent practice of debt reduction, which has reduced annual debt service requirements. FCC treats off-balance-sheet debt service (e.g., the system’s share of the Nine Canyon Wind project) as debt service rather than as operating expenses. In our view, the district’s forecast assumptions are reasonable, especially given the district’s recent track record. Forecast FCC through 2023 is no less than 2x and assumes no rate increases and no additional debt except for potential $16 million and $18 million borrowings in 2022 and 2023, respectively. We view the district’s projections as conservative and realistic, including assumptions on wholesale slice sales activity, expense growth, and market prices. The district’s forecast additionally assumes hydrology at 84% of average in 2019 and 100% of average thereafter.

FCC demonstrated some volatility several years ago, including a decline in FCC to 1.4x in fiscal 2014 from 2.7x the year prior, and these fluctuations typically result from variability in debt service requirements, streamflow or declines in wholesale prices. More recently, management has placed greater emphasis on managing wholesale revenue volatility and counterparty credit risk by entering into five- to 10-year contracts with various counterparties for "slices" of system output. These agreements add stability and predictability to the district wholesale revenue given that the purchasers assume hydro variability risk but also benefit from upside.

**Liquidity and reserves: Extremely strong**
We consider the district’s liquidity and reserves extremely strong, with $457 million in available reserves, or 741 days’ cash, as of fiscal 2018. The district’s internal policy requires it to maintain no less than 250 days’ cash of operating expenses. Based on the district’s forecast, it anticipates generating significant cash flow that will significantly bolster liquidity, a portion of which it intends to use for significant capital projects, such as projects at the Rock Island or Rocky Reach. Nevertheless, the district projects cash balances to decline to about $200 million, or about nine months’ operation expenses, by 2023.

**Debt and liabilities: Extremely strong**
In our opinion, the district’s debt and liabilities profile is extremely strong, suggested by debt to capitalization of 34%, which we consider very low, as of fiscal 2018. With no debt issuances planned for the next three years, we anticipate debt balances continuing to decline. Through fiscal 2023, the district combined has budgeted $673 million in capital spending, with the Rock Island Project budgeting $237 million. We view the district’s pension benefit obligations as manageable, with a funded ratio of 96% and unfunded liability of $36 million in fiscal 2018.
Alcoa curtailment

Alcoa Inc., the former parent company of Alcoa Corp., curtailed operations at Wenatchee Works smelter in December 2015, and about 425 employees were laid off in connection with the shutdown. When Alcoa separated from its former parent company, it kept its main aluminum operation, which includes the local Wenatchee Works smelter. The district assigned the existing power contract for the smelter to the new company in November 2016, when the separation occurred, after receiving additional performance assurances including a minimum collateral requirement of $40 million. In May 2017, given Alcoa’s and the district’s desire to preserve the prospect for a restart (as a benefit to the local economy), the district’s commission approved a one-year deferral of what is known as the Shutdown Settlement Amount to June 2018. This contract amendment required that Alcoa pay the district $7.3 million in June 2017. If the plant remained curtailed in June 2018, Alcoa owed a $62 million Shutdown Settlement payment; this indeed was the case and the payment was made. These funds count toward the district’s unrestricted cash balance. Even if Alcoa remains shut down, it is contractually obligated to pay its share of monthly operating costs and debt service, although any revenue generated by the sale of its share of power would be netted against such payments. In addition, the district continues to hold $48 million in collateral for protection against default. The Alcoa plant remains idle as of this report.

Bond provisions

The bond resolution has different provisions that were improvements from a credit perspective. These improvements include the addition of flow-of-funds provisions and a rate stabilization fund, as well as tighter language on the additional bonds test and rate covenants. The rate covenant for the consolidated system bonds requires Chelan to collect revenue that provides annual revenue sufficient to pay operating expenses of the consolidated system and cover debt service by 1x, and together with other unencumbered funds by 1.25x. The district maintains a debt service reserve for the consolidated system bonds in the amount of maximum annual interest payable in any year. The consolidated system is the ultimate obligor for the district’s utility systems and hydroelectric projects issuing debt through the consolidated system’s bond resolution. The resolution that created the operating lien effectively closed what had been the senior lien, and all senior-lien debt was paid off in 2015.