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

Primary Credit Analyst:
Paul J Dyson, San Francisco (1) 415-371-5079; paul.dyson@spglobal.com

Secondary Contact:
Peter V Murphy, New York (1) 212-438-2065; peter.murphy@spglobal.com

Table Of Contents
Rationale
Outlook
Summary:

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

Credit Profile

<table>
<thead>
<tr>
<th>Bond Type</th>
<th>Rating</th>
<th>Outlook</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chelan County Public Utility District #1 con sys</td>
<td>AA+/Stable</td>
<td></td>
<td>Upgraded</td>
</tr>
<tr>
<td>Chelan Cnty Pub Util Dist #1 rev bnds</td>
<td>AA+/A-1/Stable</td>
<td></td>
<td>Upgraded</td>
</tr>
<tr>
<td>Chelan Cnty Pub Util Dist #1 (Chelan Hydroelec Cons Sys) jr lien</td>
<td>AA+/Stable</td>
<td></td>
<td>Upgraded</td>
</tr>
<tr>
<td>Chelan Cnty Pub Util Dist #1 cons sys rev</td>
<td>AA+(SPUR)/Stable</td>
<td></td>
<td>Upgraded</td>
</tr>
<tr>
<td>Chelan Cnty Pub Util Dist #1 (Chelan Hydroelec Cons Sys) cons sys rev</td>
<td>AA+(SPUR)/Stable</td>
<td></td>
<td>Upgraded</td>
</tr>
</tbody>
</table>

Many issues are enhanced by bond insurance.

Rationale

S&P Global Ratings raised its long-term rating and underlying rating (SPUR) to 'AA+' from 'AA' on Chelan County Public Utility District No. 1, Wash.'s various consolidated system revenue bonds. We also raised our dual rating to 'AA+/A-1' from 'AA/A-1' on the district's series 2008B variable-rate bonds; these bonds are backed by a standby bond purchase agreement with MUFG Union Bank N.A., but is anticipated to be replaced by Barclays Bank PLC effective mid-June 2018. The outlook is stable.

The rating action reflects our view of the district's rapidly declining leverage, maintenance of extremely strong fixed-charge coverage, and improving liquidity position. Contributing to the district's strong performance is our view of the district's very strong risk management and financial policies, its experienced management team, and its extremely low-cost power supply. We note that the district has achieved these metrics without a retail electric base rate increase for almost six years, and no electric system base rate increases are included in current projections.

The rating further reflects our view of the district's

• Extremely strong financial flexibility given its extremely low rates, which are among the lowest in the country with residential rates at about one-quarter the national average;

• Very low operating costs that arise from strong hydroelectric generating assets totaling 1,988 megawatts (MW), with an average power cost of just $18.50 per megawatt-hour (MWh) in 2017, well below prevailing market prices;

• Very strong fixed-charge coverage (FCC) of scheduled debt service at 3.4x on a consolidated basis (or actual FCC of 2.2x when including accelerated principal) in fiscal 2017, and, given management's forecast, FCC at no less than
2.3x per our calculations through fiscal 2022;

- Extremely strong unrestricted cash position, with $347 million, or 623 days' operating cash, as of fiscal 2017, projected at no less than $200 million, or 314 days, through 2022;

- Strong financial policies and risk management techniques, including hedging practices for the district's abundant surplus generation that are aimed to reduced wholesale revenue volatility resulting from variations in volume and price risk; and

- Rapidly declining leverage, with significant debt prepayments during 2011 to 2017 of $238 million, with debt to capitalization declining to a low 38% as of fiscal 2017 from 73% in 2010.

Partly offsetting the above strengths, in our view, are a local economic base that lacks breadth and depth, and some exposure to variable hydrology, which can affect net wholesale revenue, although the district has significantly reduced this risk in recent years.

The district's net revenue secures the bonds. As of Dec. 31, 2017, Chelan had $304 million in hydroelectric consolidated system debt and $226 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.

The rating also reflects our view of Chelan's strong business profile in its consolidated system, which consists of its electric, water, and wastewater utility; telecommunications unit; and the Lake Chelan hydroelectric project. Chelan's business profile score is '3' on a 10-point scale on which '1' is the strongest. Its business profile score reflects the district's very strong rate-setting ability, extremely low-cost power supply, moderate asset and resource concentration, and low degree of merchant-risk-related non-firm surplus sales. Its low-cost power supply comes from its three hydroelectric plants, which produced power at an average $18.50 per MWh in 2017. Officials project that generation assets will maintain their competitive advantage in the region, assuming average hydrological conditions, with a projected production cost of $18.70 per MWh by 2022. Furthermore, given the size of the district's resources compared with its native load demand, Chelan has surplus power under almost all hydrological conditions. 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.

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 1.0x, 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.
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 (83% in 2017) than to its own retail system (17%). 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 currently 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. 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.

Chelan County's (population about 75,000) economic base, historically agriculturally based, continues to diversify and is generally stable with good employment opportunities. Unemployment as of 2016 was 5.9%, with median household effective buying income at 98% of the national average. The electric utility served 50,680 retail customers in 2017, 75% of which were residential and accounted for 50% of retail energy sales. Retail energy demand rose a strong 11% in 2017 on 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 2017, a figure that has changed very little over the past 15 years. No base rate increases have been implemented for almost six years, and none are included in current projections. Given its very low rates, Chelan, as with other neighboring utilities in Grant and Douglas counties, has seen increased requests for power to serve high-load cryptocurrency mining operations. The district has been working 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. The district has a moratorium in place for new high-density loads until August 2018 as it works to determine how to best structure rates and fees for this growing customer class.

The district had another very strong year financially in fiscal 2017, exceeding budgeted net revenue and all financial policy targets. Financial policy targets include maintenance of liquidity at more than $175 million, and 250 days' cash on hand, a debt ratio of less than 45% in 2017 and less than 35% by 2019, and debt service coverage (DSC) greater than 2x. Streamflow in fiscal 2017 was 126% of the historical average, up from 98% of average in 2016, contributing to the strong year. Actual FCC ratios at the consolidated system ranged from 1.2x to 3.3x and averaged 1.8x during fiscal years 2011 to 2017. 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 2.4x), and was most recently 3.4x in fiscal 2017. Likewise, consolidated system unrestricted cash would be at least $238 million higher without such prepayments, but nonetheless totaled a very strong $347 million, or 623 days' cash, as of fiscal 2017 when including such prepayment.

In our view, the district's forecast assumptions are reasonable, especially given the district's recent track record. Forecast FCC through 2022 is no less than 2.2x and assumes no rate increases and no additional debt except for a potential $42 million borrowing in 2022. Unrestricted cash is forecast to remain strong at no less than 314 days of operating costs (more than $200 million).
Consolidated DSC has historically been more sensitive to wholesale sales, including spot market sales not made under long-term contracts. But the district’s improved risk management and off-system sales hedging strategy has reduced wholesale revenue volatility, and budget adjustments to both revenue and expenditures have contributed to much stronger coverage in recent years. In addition, with the provisions of two long-term contracts that took effect in 2011 and 2012 as well as the increased share available for market sales benefiting the consolidated system, a portion of surplus generation has been sold through a series of medium-term contracts on a rolling five- and 10-year basis, we believe the district has hedged a significant portion of its volume and price risk.

Chelan’s capital improvement plan for 2018 to 2022 averages $116 million in annual spending for a total of $578 million; this represents a sizable increase versus its 2016-2020 plan of $78 million annually, or $392 million total. Capital projects planned include distribution, generation, and fiber-optic systems. About 42% of planned capital spending represents projects at Rock Island, including modernization work on units B1-B4 and B5-B8 in Powerhouse 1 and the early stages of unit rehabilitation work in Powerhouse 2. Management expects to fund the plan almost entirely from available funds and ongoing net revenue, with potentially $42 million, or 7% of funding, to come from a bond issue tentatively planned for 2022 (subject to interim district financial performance). District debt service requirements average a very steady and manageable $51 million annually through 2022, and overall system leverage will continue its rapid decline. Debt to capitalization was 38% as of fiscal 2017, down from 73% in 2010, and is forecast to decline to 25% by 2022.

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 future 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 remains curtailed in June 2018, Alcoa will owe a $62 million Shutdown Settlement payment. These funds would 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 $83 million in collateral for protection against default. Alcoa has not yet notified the district of its operational plans for June 2018 but a decision is expected soon.

**Outlook**

The stable outlook reflects our assessment of Chelan’s extremely low-cost power supply, substantially below prevailing market prices, and the financial flexibility that that provides, as well as its 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 view of limited upside in Chelan's key metrics such as FCC and liquidity, especially given that the district plans to spend down a portion of its cash balances for capital needs through 2022. Further constraining upside are Chelan's somewhat limited economic base, asset concentration, large capital plan, and persistent 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 because we believe coverage and liquidity will remain at levels we consider very strong.

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.standardandpoors.com for further information. Complete ratings information is available to subscribers of RatingsDirect at www.capitaliq.com. All ratings affected by this rating action can be found on S&P Global Ratings' public website at www.standardandpoors.com. Use the Ratings search box located in the left column.