

Summary:

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

Primary Credit Analyst:

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

Secondary Contact:

Doug Snider, Centennial + 1 (303) 721 4709; doug.snider@spglobal.com

Table Of Contents

Rationale

Outlook

Summary:

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

Credit Profile

Chelan Cnty Pub Util Dist #1 WHLELC (Rocky Reach)		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Chelan Cnty Pub Util Dist #1 WHLELC (Rock Island)		
<i>Long Term Rating</i>	AA-/Stable	Affirmed
Chelan Cnty Pub Util Dist #1 WHLELC (Rock Island) (MBIA) (National)		
<i>Unenhanced Rating</i>	AA(SPUR)/Stable	Affirmed

Many issues are enhanced by bond insurance.

Rationale

S&P Global Ratings affirmed its 'AA' long-term rating and underlying rating (SPUR) on Chelan County Public Utility District No. 1 (Chelan, or the district), Wash.'s series 1997A senior-lien Rock Island hydroelectric system revenue bonds and its 'AA' long-term rating on the district's series 2009A Rocky Reach hydroelectric system revenue bonds. At the same time, we affirmed our 'AA-' long-term rating on the district's series 2009A and subordinate-lien Rock Island hydroelectric system revenue bonds. The outlook is stable.

The series 2009A Rock Island hydroelectric system revenue bonds are subordinate to the series 1997A senior-lien Rock Island hydroelectric system revenue bonds. Although the senior lien is closed, 97% of the debt outstanding is on the senior lien.

The respective project's output secures each project's debt.

The ratings reflect our view of the two projects':

- Historical production costs that are extremely low and that we expect to remain highly competitive, even in the event of below-average streamflow conditions;
- Strong operating performance and flexibility from their multiple turbines, which together partly mitigate single-asset risk;
- Ability to pass through 100% of costs to off-takers, which have signed take-or-pay contracts; and
- Ability to reassign or remarket surplus energy in the event of payment default by a contractual off-taker.

Securing the bonds are project revenue from long-term contracts with contracted off-takers as well as payments by project owner Chelan (AA+/Stable consolidated system bonds rating) on behalf of its electric distribution system. Project costs, including debt service, are passed through to Chelan and to the off-takers.

The business profile score for each project is '3' on a 10-point scale on which '1' is the strongest, reflecting our view of each project's superior competitiveness, somewhat limited economic base, take-or-pay off-taker contracts for most of its capacity, strong and proactive management team, and physical attributes and operational practices that substantially mitigate the risk of production curtailment resulting from unit outage or environmental requirements.

Bond provisions under the master bond resolution are weak, in our view, and include a 1x debt service coverage (DSC) additional bonds test based on operating revenue and a 1x DSC rate covenant based on net revenue adjusted for contingency funds withdrawals and deposits. The district is required to fund a debt service reserve at maximum annual interest.

The Rock Island hydroelectric project had approximately \$202 million in direct debt outstanding, including \$196 million in senior-lien debt and \$6 million in subordinate-lien debt as of Dec. 31, 2018, not including interfund loans due to the consolidated system totaling an additional \$134 million. Chelan's capital improvement plan indicates an average of \$46 million in annual spending at the project during fiscal years 2019 to 2023, a sizable increase from \$26 million from 2014 to 2018.

The Rocky Reach hydroelectric project had approximately \$12 million in direct debt outstanding as of Dec. 31, 2018, all senior-lien debt, not including interfund loans due to the consolidated system totaling an additional \$133 million. Chelan's capital improvement plan indicates an annual average of \$6 million in spending at the project during fiscal years 2019 to 2023, a decline from about \$13 million per year in the 2014-2018 period.

The district will fund both projects' capital needs largely from available and recurring net revenue. No additional debt is planned over the next five years except for a potential \$16 million borrowing in 2022 and an \$18 million borrowing in 2023, likely by the consolidated system.

Rocky Reach project

The Rocky Reach project is a "run-of-the-river" hydroelectric project located on the Columbia River, and has a maximum capability of 1,300 megawatts (MW). Its high number of turbine generators, 11 in all, provides significant operational flexibility and enhances project availability. The average cost of production, including debt service, was 13.5 mills per kilowatt-hour (kWh) in 2018, compared with 12 mills per kWh in 2013. The district operates the Rocky Reach facility under a long-term license from the Federal Energy Regulatory Commission that the commission renewed in 2009 and that extends to 2052.

We believe the Rocky Reach project's extremely strong project economics provide strong assurance of cost recovery from the project's direct off-takers. Production costs have averaged about 14 mills per kWh over the past five years. The availability factor was 79% in 2018 and averaged 80% over the 2014-2018 period. Production costs are still competitive even in years of low streamflow, as the 14-mills-per-kWh cost of production in 2001, a year of extremely poor water conditions, would indicate. The project's 11 turbine-generator units operate independently, allowing continued operations even in the event of forced outage at one or multiple units.

We view the project's financial risk profile as very strong. DSC of direct system debt, treating interfund loans as deductions to net revenue, was 15.1x in fiscal 2018, and DSC for all direct debt and loans was 1.68x. Debt to capitalization has moderated in recent years, declining to 42% in 2018 from 61% in 2014. Debt per kW of installed

capacity was \$112 in 2018, down from \$165 in 2014.

Rock Island project

The Rock Island project is a "run-of-the-river" hydroelectric project on the Columbia River and has a capacity of 629 MW. We believe its 19 turbine generators provide significant operational flexibility and enhance project availability. The average cost of production was substantially higher than that of Rocky Reach at about 28 mills per kWh in 2018, compared with 30 mills in 2014, and these figures fluctuate based on streamflow conditions. The district operates the facility under a long-term license from the Federal Energy Regulatory Commission that extends to Dec. 31, 2028.

The Rock Island project's strong project economics provide strong assurance of cost recovery from the project's direct off-takers. Production costs averaged 27 mills per kWh over the past five years, including 28.4 mills in kWh in 2018, and availability factors 69%, although project availability dipped to 59% in 2018 from 82% in 2014 as a result of several units' being out of service for repair or turbine replacement. As with Rocky Reach, the project's units operate independently, allowing continued operations even in the event of forced outage at one or multiple units. Capacity factor was 50% in fiscal 2018 versus 51% on average from 2014 to 2017.

The project's financial profile is solid, in our opinion. DSC of both senior- and subordinate-lien debt, treating interfund loans as deductions to net revenue, was 1.94x in fiscal 2018, and DSC for all debt and loans was 1.57x. Debt to capitalization remains moderately high at 74% in fiscal 2018 but has improved over the years, from 98% in 2014. Debt per kW of installed capacity was \$534 in 2018, down from \$641 in 2014.

Contract terms

Rocky Reach has power sales contracts with purchasers as follows:

- Puget Sound Energy Inc. (25% share through 2031)
- Alcoa (26% share through 2028)
- Douglas County Public Utility District No. 1 (5.54% share through 2021, subject to extensions)

Rock Island has power sales contracts with purchasers as follows:

- Puget Sound Energy Inc. (25% share through 2031)
- Alcoa (26% share through 2028)

Chelan will use the remaining output in its own retail electric system or sell it into the market, including "slice" sales out up to 10 years with various counterparties that are designed to reduce wholesale revenue volatility and uncertainty.

The contracts with Puget Sound Energy and Alcoa are cost-plus, take-or-pay contracts that recoup operating and debt costs, 15% excess coverage, and capital recovery costs. This provides the district financing flexibility and full operational control. There is a mandatory step-up by purchasers if another defaults. Regardless, should one or more of the power purchasers default, the low-cost power can readily be resold into the wholesale power markets, ensuring adequate funds for debt service. The "plus" components of the contracts include various charges for debt reduction and pay-as-you-go capital. In addition, the district has already received upfront capacity reservation payments totaling

\$179 million from Puget and Alcoa. Furthermore, the district's contract with Alcoa contains financial incentives to maintain specified production levels at its Wenatchee smelter.

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 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 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.

Outlook

The stable outlook reflects our view of the projects' strong operating performance and low production costs, with costs particularly low at Rocky Reach. Long-term contracts provide a stable revenue stream, and strong project economics provide credit stability and mitigate credit risks regarding regulation, environmental mandates, and off-taker credit quality. We anticipate that the projects will remain competitive with other generators or resource options in the region, even at Rock Island, where particularly high capital investments are required over the next five years.

Upside scenario

For Rock Island, given significant capital needs, which could drive up per-unit power costs, and given high project debt, and we do not anticipate raising the ratings during the next two years. Also limiting rating upside is our expectation that DSC is unlikely to materially improve.

For Rocky Reach, although leverage is favorable and capital spending needs are relatively low, we also don't anticipate raising the rating given our expectation that DSC is unlikely to materially improve.

Downside scenario

We do not anticipate lowering the ratings for either projects' bonds over the next two years, given the competitive cost of power from both projects, but we could do so in the unlikely event that costs become uncompetitive on a sustained basis, such as if market prices in the region continue their recent decline and materially disrupt project competitiveness.

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed

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

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.

Copyright © 2019 by Standard & Poor's Financial Services LLC. All rights reserved.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Rating-related publications may be published for a variety of reasons that are not necessarily dependent on action by rating committees, including, but not limited to, the publication of a periodic update on a credit rating and related analyses.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw or suspend such acknowledgment at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

STANDARD & POOR'S, S&P and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.