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Update

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Chelan County Public Util. Dist 1, WA

Moody's maintains Aa3 on Chelan County Public Util. Dist 1, WA's revenue bonds. Outlook Stable.

Summary Rating Rationale

Moody's Investors Service maintains the Aa3 rating on Chelan County Public Util. Dist 1, WA (Chelan PUD) revenue bonds. The rating outlook is stable.

Chelan PUD's Aa3 rating is supported by the district's strong liquidity position at over 450 days cash on hand, robust risk management including ongoing hedging program, and 40% debt reduction since 2009. Additional credit supportive considerations include expected debt service coverage ratios (DSCR) at around 2.0 times or higher, continued debt reduction through at least 2020, low retail rates, and highly competitive hydro generation.

The rating also considers the district's considerable long-term exposure to wholesale power prices and hydrology risk, the district's reliance on non-retail revenue to subsidize its retail business, mixed history of its willingness to raise rates, and counterparty concentration with a below investment grade entity.

Credit Strengths

» High liquidity

» Strong risk management including hedging

» Substantial debt reduction since 2009

» Highly competitive, hydro generation

» Expected DSCR of at least 2.0 times

» Low retail rates

Credit Challenges

» Long term hydrology and wholesale price exposure

» Offtaker concentration

» Mixed history of willingness to raise rates

» Operational issues at hydro dams

Rating Outlook

The stable outlook considers the district's forecast of high liquidity, expected debt service ratio around 2.0x or higher on average, significant deleveraging over time, and the continuation of its risk management policies including hedging.

Factors that Could Lead to an Upgrade

- Maintenance of high liquidity and DSCR comfortably exceeding 3.0x times on a sustained basis
- Execution of additional long-term contracts with creditworthy counterparties that mitigates hydrology and market price risk

Factors that Could Lead to a Downgrade

- Significant decline in liquidity or debt service coverage below 2.0 times on a sustained basis
- Weakening of the district's risk management
- Major operational problems
- Significant decline in counterparty credit quality or termination of major, long-term contracts

Key Indicators

Exhibit 1

CHELAN COUNTY PUBLIC UTILITY DISTRICT 1, WA

	2011	2012	2013	2014	2015
Total Sales (mWh)	11,524,049	12,223,409	12,981,528	15,096,167	13,666,860
Debt Outstanding ($'000)	957,258	875,791	827,341	743,604	619,456
Debt Ratio (%)	73.4	64.5	58.2	48.0	40.3
Adjusted Days Liquidity on Hand (incl. Bank Lines)(days)	527	621	543	421	456
Adjusted Debt Service Coverage (x) (Post Transfers/PILOTs - All Debt)	1.60	1.91	2.21	1.27	1.81

Source: Moody's Investors Service and Audited Financial Statements

Recent Developments

Recent developments are incorporated in the Detailed Rating Consideration.

Detailed Rating Considerations

Revenue Generating Base

Retail Business (10%-15% of revenues)

Chelan PUD's retail utility business delivers electricity to approximately 49,700 retail customers in Chelan county (not rated), which is located in the central part of Washington state. The county has a median family income of $60K, which is modestly below the US median of $65K. Major economic activities in the Chelan/Douglas county area are agriculture, healthcare, and manufacturing.

While the district's rate process is not regulated by the state regulatory board, Chelan PUD has shown a mixed history of its willingness to raise rates. In April 2009, Chelan PUD's elected commissioners approved a temporary 12-month increase in rates by only 9% compared to the 18% rate increase recommended by management and the 38% increase necessary to ensure 'pay as you go' for the retail electric business. Since then, the district has taken numerous actions to better communicate with its customers and has implemented rate increases primarily for its non-electric services such as water. Chelan PUD's electric rates are substantially below the state average that has contributed to increased demand from large load customers like data centers and cryptocurrency operators.

Long-Term, Take Or Pay Contracts (30% to 35% of revenues)

Chelan PUD sells power from the combined Rocky Reach (1,300 MW) and Rock Island (629 MW) hydroelectric power plants under long-term, take or pay 'plus' contracts with a 25% share sold to Puget Sound Energy, Inc (PSE, Baa1 stable) until 2031 and a 26% share sold to Alcoa, Inc (Alcoa, Ba1 under review for downgrade) until 2028. The district also sells 5.54% of Rocky Reach's output to Douglas County Public Utility District 1, WA (Douglas PUD, Aa3 stable) until 2021 with four 10-year extension options. Under the PSE and Alcoa contracts, the off-takers are responsible for their proportionate share of costs including assumed debt service payments and also are subject to various charges at the district's discretion. While the contracts provide stable cash flows, Alcoa's credit deterioration since 2012 and decision to idle its Wenatchee smelter in December 2015 are credit negative and represent a material credit risk for the district. Partially mitigating this risk are the district's low costs and Alcoa's posted collateral totaling around $86 million as of December 2015. We note Alcoa remains obligated under its contract even through the smelter is idled.

Wholesale Business (45% to 55% of revenues)

Chelan PUD's net share of its hydroelectric generation greatly exceed the needs of its retail customers, which results in substantial excess power sales into the wholesale market. The district significantly relies on wholesale energy sales to mainly subsidize its retail businesses and the combined hydrology and wholesale price uncertainty remains one of the most significant risks for the district. For example, power prices fell steeply to below $20/MWh in 2012 compared to nearly $60/MWh in 2008 while regional hydrology has ranged from around 60% to 130% of average since 2000.

Since 2009, Chelan PUD has implemented a robust risk management plan to manage wholesale and hydrology exposure. Key mitigation measures include power hedges and 'slice' auctions of the district's hydro system output on a rolling forward basis. The district seeks to have less than 5% of the total hydro output completely exposed to price and hydro volatility in the prompt year. While firm energy sales only transfers price risk, 'slice' sales transfer operational, hydrology and price risk to the counterparty resulting in greater cash flow certainty. As part of its risk management, the district also retains robust liquidity and has paid down debt extensively since 2009 (see 'Improving Debt Service Coverage Ratios and Declining Debt' and 'Liquidity' sections for further details).

Financial Operations and Position

Low Cost Hydro System

Anchoring Chelan PUD's low costs are ownership of three hydroelectric plants totaling 1,988 MW of capacity, which also benefit as a zero emission resource. The largest hydro plant is the 1,300 MW Rocky Reach facility followed by the 629 MW Rock Island plant and lastly the 59 MW Lake Chelan plant. These plants reached commercial operations from 1920 to 1979 depending on the unit. Over the last few years, the hydro plants have incurred outages due to various issues including cracked servo rods, winding failures, cracked turbine blades, and stator rotor problems. Financially, the impact of these issues have been fairly mitigated through a combination of the cost sharing under the take-or-pay contracts, 'slice' contract terms, insurance proceeds, and the district's strong liquidity. Additionally, the average resource cost of the hydro fleet remained very competitive at $17.6/MWh in 2015 and averaging around $16.2/MWh over the last five years. That said, we expect the district will increase its operating and capital spending over at least the next five years to resolve the aforementioned issues.

Improving Debt Service Coverage Ratios and Declining Debt

Chelan PUD's DSCR at year-end 2015 and 2014 was at 1.81 times and 1.27 times, respectively, and these ratios conservatively includes mini-balloon maturities. Excluding the mini-balloon maturities, the district had DSCR well above 2.0x and looking forward, we expect the district will have DSCR above 2.0 times through at least 2019. While the district's net revenue is expected to decrease over time due to a combination of higher forecasted operating costs and decreasing wholesale revenue, Chelan PUD's aggressive debt reduction has materially reduced its ongoing debt service requirements.

The district had around $619 million of debt at year-end 2015 compared to over $1 billion at year-end 2009. We view the extensive debt pay down as credit positive and an important source of financial flexibility especially as the utility faces ongoing challenges such as weakening counterparty credit quality, declining wholesale revenue, and increased operating and capital costs at its hydro fleet. Looking forward, Chelan PUD expects further substantial debt reduction through 2020 that should provide the utility with additional, long-term financial flexibility.

LIQUIDITY

At year-end 2015, Chelan PUD had robust liquidity totaling 456 days cash on hand and the district's strong liquidity is supported by the district's policy target of $175 million of liquidity of which $150 million consists of unrestricted cash and investments. It also has cash funded debt service reserves equal to maximum annual interest across its different bond pledges.

Looking forward, we expect the district will maintain liquidity of around 400 days cash on hand through 2017 and for the district to maintain liquidity commensurate with its policy through at least 2020.

Debt and Other Liabilities

DEBT STRUCTURE

More than half of Chelan's debts consist of traditional fixed rate bonds. The two exceptions consist of $61 million of variable rate debt and $226.6 million of capital appreciation bonds. The former is supported by a standby bond purchase agreement with MUFG Union Bank, N.A.(A2, stable) expiring on April 17,2019. The latter accretes interest and both principal and accumulated interest are paid as the bonds amortize annually through 2029.

DEBT-RELATED DERIVATIVES

None. The district terminated its last three interest rate swaps in 2013 and paid a $15.9 million termination fee.

PENSIONS AND OPEB

The district participates in Washington State's statewide, multiple employer Public Employees Retirement System (PERS) pension plan. As of year-end 2015, the district has reported a net pension liability of $51.8 million and its 2015 pension contribution was around 2% of its operating revenues.

Management and Governance

The district's governing body is comprised of a five member independent board of commissioners who are elected under staggered four and six year terms. The next election is in November 2016 for two commissioner positions.

Legal Security

The Consolidated System (Consolidated System) revenue bonds are secured by a lien on the net revenues of the Consolidated System, which consists Electric Distribution System, Lake Chelan Hydro project, Water System, Waste Water System, and the Fiber Optic system. The rate covenant and additional bonds test is 1.00 times based net revenue and 1.25 times including other available funds, respectively. The Consolidated System revenue bonds have a cash funded debt service reserve equal to maximum annual interest.

The Rock Island revenue bonds are secured by a pledge of the net revenues of the Rock Island system. The 2009A series are subordinate to the prior Rock Island bonds, which are closed to new debt issuances but represent nearly all of the debt. The revenue from the sale of output from Rock Island can be commingled with the output from the other electric utility systems of the district. The rate covenant requires 1.0 times coverage and there is no additional bonds test. The debt service reserve requirement is sized to maximum annual interest and is cash funded.

The Rocky Reach System revenue bonds are secured by a pledge of revenues. Pledged revenues include all revenues, rates and charges from the district's operation of the Rocky Reach system; the rate covenant requires a 1.0 times coverage test and each bond series has a cash funded debt service reserve requirement sized to maximum annual interest.

An unusual provision in the 2008 Rock Island and Rocky Reach master resolutions for the 2009 bond series require the Distribution System to pay for its share of the costs only if Rock Island or Rocky Reach provides power. Moody's views this as a weakness though it only affects a small amount of debt affected totaling only $21 million of debt as of year-end 2015.

Use of Proceeds

Not Applicable

Obligor Profile

Chelan County Public Utility District is a public power utility that provides electric, water, wastewater and fiber-optic services in Chelan county (unrated), Washington. The combined electric and hydro systems represent nearly all of the revenues and assets of the consolidated enterprise. The utility owns three hydro projects totaling 1,988 MW.

Scorecard Factors and Other Considerations

The grid indicated rating is A1, which is one notch lower than the its Aa3 rating. Chelan PUD's high liquidity position, strong risk management, and expected improvement in financial profile over time are factors that support the Aa3 assigned rating.

The grid is a reference tool that can be used to approximate credit profiles for public power with generation ownership in most cases. However, the grid is a summary that does not include every rating consideration. Please see US Public Power Electric Utilities with Generation Ownership Exposure for more information about the limitations inherent to grids.

Exhibit 2

Factor	Subfactor	Score	Metric
1. Cost Recovery Framework Within Service Territory		A	
2. Wllingness and Ability to Recover Costs with Sound Financial Metrics		A	
3. Generation and Power Procurement Risk Exposure		A	
4. Competitiveness	Rate Competitiveness	Aaa	
5. Financial Strength and Liquidity	a) Adjusted days liquidity on hand (3-year avg) (days)	Aaa	474
	b) Debt ratio (3-year avg) (%)	Aa	48%
	c) Adjusted Debt Service Coverage or Fixed Obligation Charge Coverage (3-year avg) (x)	A	1.76x
Preliminary Grid Indicated rating from Grid factors 1-5		**A1**	
		Notch	
6. Operational Considerations		0.0	
7. Debt Structure and Reserves		0.0	
8. Revenue Stability and Diversity		-0.5	
Grid Indicated Rating:		**A1**	

Source: Moody's Investors Service

Methodology

The principal methodology used in this rating was U.S. Public Power Electric Utilities with Generation Ownership Exposure published in March 2016. Please see the Credit Policy page on www.moodys.com for a copy of this methodology.

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