

CREDIT OPINION

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Chelan County Public Util. Dist 1, WA

Update to credit analysis

Summary

[Chelan PUD's](#) (Aa2 stable) credit profile reflects the strength of its long-term contracts, its demonstrated conservative risk management, and the extensive deleveraging by the district resulting in 60% lower funded debt at year-end 2023 compared to 2009. In 2021, the district entered into a 20 -year, 'cost plus' contractual arrangement with [Avista Corp.](#) (Avista: Baa2 stable) that starts in 2026. Under this contract, Avista initially receives 5% of the Rocky Reach and Rock Island's (RRR) hydro dams combined output that rises to 10% in 2031 in exchange for paying its pro-rata share of costs plus additional charges. Also in 2021, Chelan PUD executed a 10-year slice agreement with Avista and, in 2023, a 20-year cost-plus agreement with [Puget Sound Energy](#) (PSE, Baa1 stable). Chelan PUD also entered into additional five and one-year slice arrangements in fiscal 2023 with PSE. These contracts substantially increase the duration of the district's hedging program that transfers both hydrology and market price risk to creditworthy 3rd parties while ensuring greater predictability of cash flow over the long term. Furthermore, these contracts highlight the demand and value of proven hydropower given the state of Washington and Oregon's mandate for 100% clean electricity in 2045 and 2040, respectively.

Further supporting the district's credit quality are low retail rates, major progress on its capital program for its key hydro dams and strong financial metrics. For 2023, the utility had Moody's adjusted debt service coverage ratio (DSCR) of 2.52x, adjusted debt ratio of 21%, and 480 days cash on hand.

The utility's credit quality further considers its service area's relative weaker socio-economic characteristics for the utility's rating and exposure to volatile wholesale market and hydrology conditions, which remain the district's most significant long-term risk especially as the utility relies on non-retail revenue to subsidize its retail business. That said, the district has demonstrated its ability to manage market and hydrology risk through maintenance of strong liquidity, extensive deleveraging, strong financial metrics and execution of a medium to long term hedging program.

Credit strengths

- » Strong financial metrics in 'Aa' to 'Aaa' category
- » Strong risk management including longer term hedging program
- » Highly competitive, hydro generation located in a state with 100% clean energy mandate
- » Investment grade offtakers

- » Low retail rates

Credit challenges

- » Longer term hydrology and wholesale price exposure
- » Some offtaker concentration
- » Ongoing capital spending to repair and modernize major hydro dams
- » Relatively weaker economic strength of the service territory

Rating outlook

The stable outlook considers the district's forecast of maintaining 250-300 days cash on hand, expected debt service ratio in the 2.0x-2.50x range, and the continuation of its risk management policies including hedging.

Factors that could lead to an upgrade

- » Service area's economic strength substantially improves
- » Sustained high liquidity and DSCR comfortably exceeding 3.0x.

Factors that could lead to a downgrade

- » Liquidity declines below 250 days cash on hand or debt service coverage is below 2.0x on a sustained basis
- » Risk management weakens or its key assets have major operational problems
- » There is a significant decline to overall counterparty credit quality or termination of major, long-term contracts.

Key indicators

Exhibit 1

Chelan PUD, WA

	2019	2020	2021	2022	2023
Debt Outstanding	476,011	534,227	415,916	367,377	338,539
Debt Ratio (%)	25.66	26.31	21.93	17.22	15.07
Adjusted Debt Ratio (%)	41.66	45.08	37.20	26.39	21.32
Adjusted Days Liquidity on Hand (incl. Bank Lines) (Days)	896	834	416	480	480
Adjusted Debt Service Coverage (x) (Post Transfers/Pilots - All Debt)	2.53	1.89	2.29	3.83	2.52

Source: Moody's Ratings

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 2,037 MW.

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Detailed credit considerations

Revenue Generating Base

Unlike more traditional public power utilities, the district derives most of its revenues under long term contracts with 3rd parties followed by wholesale market sales either on a short to long term basis. These two sources represent around 80% of revenues while the more traditional retail business is the remainder.

Retail business (15%-20% of revenues)

Chelan PUD's retail utility business delivers electricity to approximately 50,000 retail customers in Chelan county, which is located in the central part of Washington state. The county has a median household income of around \$61,000, which is moderately below the US median. Major economic activities in the Chelan/Douglas county area are agriculture, healthcare, data centers, and manufacturing and power intensive customers like data centers are expected to be a source of major load growth in the district's service area.

The district's rate process is not regulated by the state regulatory board. In February 2020, Chelan PUD adopted a plan of annual rate increases from 2020 through 2024 for its customers to align with its strategy of moderate increases over time. The increases are 3% annually for electric, 4% for water and waste water, and 3% for wholesale fiber customers. The district has implemented the rate increases as planned except in 2020, which was temporarily delayed due to the COVID related economic downturn.

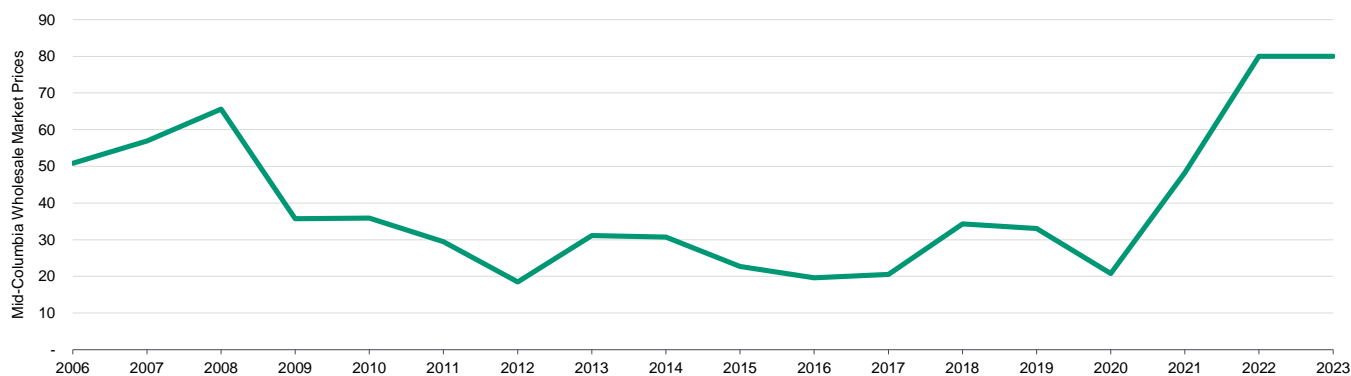
Chelan PUD's electric rates are substantially below the state average, which has contributed to increased demand from large load customers like data centers and cryptocurrency operators. For the latter, we see cryptocurrency operators as higher risk for the utility compared to the average customer given cryptocurrencies' high price volatility, uncertain regulatory environment, short history, and a miner's relatively easy ability to relocate. The district implemented conservative policies to address the cryptocurrency demand which have protected the utility's credit quality. The utility's subsidization of retail rates by using profits earned from the wholesale and long term contract business is a key reason for its highly competitive retail rates.

Wholesale business (30% to 35% of revenues)

Chelan PUD's net share of its hydroelectric generation greatly exceeds 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 long term hydrology and wholesale price uncertainty remains the most significant risk for the district. For example, power prices have ranged widely from a low of less than \$19/MWh in 2012 compared to a high of around \$80/MWh from 2006 through 2024 (see exhibit 2 below for historical prices).

Exhibit 2

Power prices have spiked in recent years



Source: Chelan PUD

Chelan PUD has 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 current 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. Historically, the district had a hedging program over a 3 to 5 year horizon although more recently, they have substantially increased the duration. In 2021, the district entered into a 20-year, 'cost plus' contractual arrangement with Avista that starts in 2026. Under this contract, Avista initially receives 5% of the RRR hydro dams combined output that rises to 10% in 2031 in exchange for paying its pro-rata share of costs plus additional charges. Also in 2021, Chelan PUD executed a 10-year slice agreement with Avista and, in 2023, a 20-year cost-plus agreement with [Puget Sound Energy](#) (PSE, Baa1 stable). Chelan PUD also entered into additional five and one-year slice arrangements in fiscal 2023 with PSE. These contracts substantially increase the duration of the district's hedging program that transfers both hydrology and market price risk to creditworthy 3rd parties which ensures greater predictability of cash flow over the long term. Furthermore, these contracts highlight the demand and value of proven hydropower given the state of Washington and Oregon's mandate for 100% clean electricity in 2045 and 2040, respectively.

As part of its risk management program, the district also retains robust liquidity and has paid down debt by around 60% since 2009 (see 'Major Debt Reduction Leads to Strong Debt Service Coverage Ratios' and 'Liquidity' sections for further details).

Long-term, take-or-pay contracts (35% to 40% of revenues)

Chelan PUD sells power from the combined RRR hydroelectric power plants under long-term, take or pay 'plus' contracts with a 25% share sold to PSE until 2031 and a 26% share sold to Alcoa Corp until 2028. The district also sells 5.54% of Rocky Reach's output to [Douglas County Public Utility District 1, WA](#) (Douglas PUD, Aa2 stable) until 2031 with three 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 Alcoa Corp has closed its smelter in the region that was intended to use the contracted power, they still remain obligated under its contract. Currently, the district sells Alcoa's share of the hydro power into the wholesale market and applies the proceeds against Alcoa's payment obligations. Any excess proceeds are retained by the utility.

Financial Operations and Position

Low cost hydro system

Anchoring Chelan PUD's low costs are ownership of three hydroelectric plants totaling 2,037 MW of capacity, which also benefit as a zero emission resource. The largest hydro plant is the 1,349 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 ranging from 1920 to 1979 depending on the unit. Since 2013, the RRR hydro plants have incurred outages due to various issues including cracked servo rods, winding failures, cracked turbine blades, and stator rotor problems. These issues have been largely addressed with most of the outstanding repairs or refurbishments expected to be completed by early 2025. Currently, the modernization of Rock Island's powerhouse 2 remains a large, long term capital program that is scheduled to be completed by the end of 2031. Financially, the impact of these issues have been partially 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.

Major debt reduction leads to 'Aa' category DSCRs

Chelan PUD's Moody's adjusted DSCR since 2016 has ranged between 2.0x to 2.5x for most years and excluding the mini-balloon maturities, the district had senior DSCR above 2.0x since 2013. The district's DSCR for 2023 was 2.5x. The strong sustained DSCR is partly supported by the utility's debt reduction program that has materially reduced its ongoing debt service requirements.

At year-end 2023, the district had around \$338 million of debt compared to over \$1 billion at year-end 2009. We view the debt pay down as a substantial credit positive that contributes to the district's financial flexibility. Looking forward, we expect the district's DSCR will be between 2.0x-2.5x. On a cash basis, the DSCR range is higher at a 2.5x-3.0x range since this does not take into interest accruing on the capital appreciation bonds.

Liquidity

The district's policy target of \$175 million of liquidity and 250 days of unrestricted cash and investments supports the utility's robust liquidity totaling 480 days cash on hand and cash to debt of 77% at year-end 2021. The utility also has cash funded debt service reserves equal to maximum annual interest across its different bond pledges.

Debt and Other Liabilities

Legal security

The Consolidated System (Consolidated System) revenue bonds are secured by a lien on the net revenues of the Consolidated System, which consists of the electric distribution system, Lake Chelan hydro project, the water and waste water system, and the fiber optic system. The rate covenant and additional bonds test is 1.0x based on net revenue and 1.25x 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, which includes the district's electric distribution system. Chelan PUD is obligated to pay for its share of Rock Island's costs including debt service whether or not the dam is suspended or interrupted and the district is required to take any portion of the output not sold to others. The rate covenant requires 1.0x coverage and there is no additional bonds test. The debt service reserve requirement is sized to maximum annual interest and is cash funded.

Debt structure

As of year end 2023, the district had \$338 million of debt primarily consisting of traditional fixed rate, Consolidated System revenue bonds, \$40 million of variable rate Consolidated System revenue bonds, and capital appreciation bonds (CABs) at the Rock Island project.

Debt-related derivatives

None.

Pensions

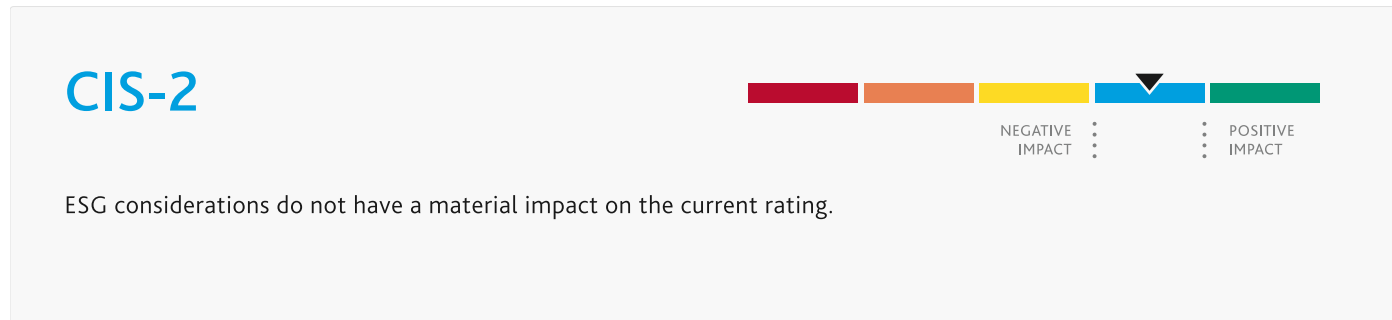
The district participates in Washington State's statewide, multiple employer Public Employees Retirement System (PERS) pension plan. Moody's calculates the district's adjusted net pension liability (ANPL) for FY 2023 relating to its proportionate share of PERS to be around \$127 million.

ESG considerations

Chelan County Public Util. Dist 1, WA's ESG credit impact score is CIS-2

Exhibit 3

ESG credit impact score

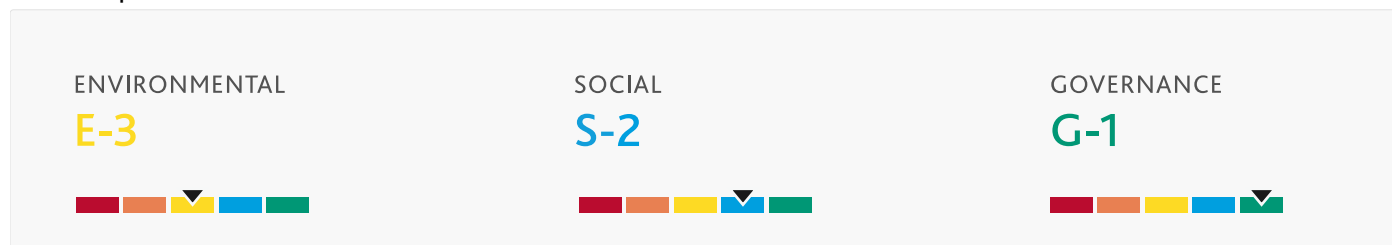


Source: Moody's Ratings

S-2. Chelan PUD has limited exposure to social risks given the carbon-free nature of its hydroelectric facilities and very low-cost power.

Exhibit 4

ESG issuer profile scores



Source: Moody's Ratings

Environmental

E-3. The district has negative exposure to physical climate risks mostly in the form of volatile weather patterns and the inherent risks in operating around 2 GW of hydroelectric power plants whose power output is subject to regional hydrology conditions. These are partially offset by positive carbon transition exposure since the company has nearly all of its power supplies coming from carbon emissions free resources.

Social

S-2. Chelan PUD has limited exposure to social risks given the carbon-free nature of its hydroelectric facilities and very low cost power.

Governance

G-1. The influence of governance risk (**G-1**) is positive which reflects a positive financial strategy and risk management given Chelan PUD's extensive deleveraging since 2009 and strong liquidity.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moody's.com. In order to view the latest scores, please click [here](#) to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

Rating methodology and scorecard factors

The scorecard indicated outcome is Aa2, which is on target with the Aa2 rating. Chelan PUD's strong risk management actions, expectations for further delveraging, and higher cash coverage of debt service support the Aa2 assigned rating.

Exhibit 5

Factor	Subfactor	Score	Metric
1. Cost Recovery Framework Within Service Territory		A	
2. Willingness and Ability to Recover Costs with Sound Financial Metrics		Aa	
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	459
	b) Debt ratio (3-year avg) (%)	Aaa	28%
	c) Adjusted Debt Service Coverage or Fixed Obligation Charge Coverage (3-year avg) (x)	Aaa	2.88
Preliminary grid Indicated outcome from Grid factors 1-5		Aa2	
		Notch	
6. Operational Considerations		0.0	
7. Debt Structure and Reserves		0.0	
8. Revenue Stability and Diversity		0.0	
Grid Indicated Outcome:		Aa2	

Source: Moody's Ratings

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