MOODY'S
INVESTORS SERVICE

New Issue: MOODY'S ASSIGNS Aa2 RATING TO CHELAN PUD'S CONSOLIDATED SYSTEM REFUNDING BONDS. CONSOLIDATED SYSTEM NOTES ARE DOWNGRADED TO Aa3 AND REMAINING BONDS AFFIRMED AT Aa2. OUTLOOK IS NEGATIVE.

Global Credit Research - 25 Apr 2011

Approximately $1.23 billion of debt securities affected

Electric Utilities
WA

Moody's Rating

ISSUE		RATING
Consolidated System Revenue Bonds, Refunding Series 2011A (AMT)		Aa2
Sale Amount	$122,300,000	
Expected Sale Date	05/09/11	
Rating Description	Revenue	
Consolidated System Revenue Bonds, Refunding Series 2011B (AMT)		Aa2
Sale Amount	$78,400,000	
Expected Sale Date	05/09/11	
Rating Description	Revenue	

Opinion

NEW YORK, Apr 25, 2011 -- Moody's Investors Service has assigned a Aa2 long-term rating to Chelan County Public Utility District (District or Chelan PUD) No. 1's $122.3 million Consolidated System Revenue Bonds, Refunding Series 2011A (AMT) and $78.4 million of Consolidated System Revenue Bonds, Refunding Series 2011B (AMT).

Moody's downgraded the $82.7 million of Consolidated System subordinated revenue notes to Aa3 from Aa2. Moody's also affirmed the District's remaining $946.9 million of outstanding bonds including $278.7 million of Rock Island Hydroelectric Project revenue bonds, $21.1 million of Rocky Reach Hydroelectric Project revenue bonds, $445.4 million of Chelan Hydro Consolidated System revenue bonds and $201.7 million of Consolidated System revenue bonds.

SUMMARY RATING RATIONALE

The affirmation of the Aa2 for Chelan PUD reflects highly competitive hydro generation, strong liquidity position, low retail rates, and long-term contracts for more than 50% of Rocky Reach and Rock Island's output with investment grade offtakers after July 2012. Additionally, the District forecasts debt reduction of at least 16% by 2015, forecasts maintenance of strong internal liquidity, expects improvement in debt service coverage ratios starting in 2012 to at least 2.0 times and has made substantial improvement in risk management including the implementation of an expansive hedging program,

That said the District's credit quality continues to be challenged by material exposure to both wholesale price and hydrology risk given significant reliance on large wholesale power sales to meet cash flow needs, large but manageable capital spending requirements and PPA offtakers that are rated lower than Chelan PUD. The rating downgrade of the Consolidated System subordinated revenue notes reflects District's weaker positioning within the Aa2 rating and the 3rd lien net revenue pledge of the Consolidated System subordinated revenue notes.

The negative outlook considers heightened business risk profile given the expected large increase in wholesale exposure starting in 2012, the uncertainty in the District's ability to achieve their forecasted improvement in credit metrics and execution risk tied to sourcing new longer term hedges that ensure medium to long term revenue stability at metrics commensurate with the District's forecast.

DETAILED CREDIT DISCUSSION

Chelan PUD operates a utility system that primarily generates and delivers electricity to approximately 48,100 retail customers in Chelan county (not rated), which is located in the central part of Washington state. The District also provides wholesale fiber-optic services, water services, waste water services and generates electricity for sale to under either long term contracts or on a wholesale basis. The District's 2,994 square mile service area is primarily rural and has a population of approximately 73,300. The major economic activities in the Chelan/Douglas county area are agriculture, agriculture related industries, healthcare, education and manufacturing. Average 2010 unemployment was around 8.6% in Chelan county compared to 9.6% for Washington state.

Chelan PUD benefits from ownership of three hydroelectric plants totaling 1,988 MW of capacity. 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. Currently, the District sells approximately seventy two percent of the power output from the District's Rocky Reach, Rock Island and Lake Chelan plants under take-or-pay contracts with investment grade counterparties. The remainder of Rocky Reach and Rock Island's power is either used by the District to service its customers or sold into the wholesale market. Once the existing long-term contracts expire, Chelan PUD will sell approximately 51% of the combined output of the Rocky Reach and Rock Island plants to Puget Sound Energy (Baa2/sta) and Alcoa (Baa3/sta) under long-term contracts that have take or pay type features. Douglas PUD (Aa3/sta) is also expected to take 5.54% of Rocky Reach's output under long-term contract.

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 2012 for two commissioner positions.

USE OF PROCEEDS:

The proceeds from the bond offering will be used to refund Chelan Hydro Consolidated System revenues bonds, fund the interest reserve, pay transaction expenses and potentially fund an interest rate swap termination.

LEGAL SECURITY:

The Consolidated System Subordinate notes and Consolidated System revenue bonds are secured by a third lien and second lien, respectively, on the net revenues of the Consolidated System. The Consolidated System includes net revenues from the Electric Distribution System, Lake Chelan Hydro project, Fiber Optic system, Water System and Waste Water System. The Consolidated System bonds also benefits from a pledge of payments of interest and principal on affiliate debt loaned by the Consolidated System to Rock Island and Rocky Reach but not a direct pledge of the net revenues from Rock Island and Rocky Reach system. The Consolidated System revenue bonds are subordinate to the senior lien of the Chelan Hydro Consolidated System revenue bonds except for the revenues of the Fiber Optic System. The District has covenanted not to issue additional Chelan Hydro Consolidated System bonds. The Consolidated System revenue bonds have a debt service reserve equal to maximum annual interest. The rate covenant and additional bonds test for the Consolidated System bonds is 1.25 times using other available funds and 1.00 times based only on current revenue excluding other available funds. The debt service reserve requirement is equal to maximum annual interest. Each bond series has its own segregated reserve and all the Consolidated System reserves are cash funded.

The Chelan Hydro Consolidated System bonds are secured by a senior lien on the net revenues of the Chelan Hydro Consolidated system that includes the net revenues of the Electric Distribution System, Lake Chelan Hydro project, Water System and Waste Water System. The Chelan Hydro Consolidated bonds also benefits from a pledge of payments of interest and principal on affiliate debt loaned by Chelan Hydro Consolidated system to Rock Island and Rocky Reach but not a direct pledge of the net revenues from Rock Island and Rocky Reach system. The rate covenant requires 1.0 times coverage based on net revenues of the Chelan Hydro Consolidated system against debt service of the Chelan Hydro Consolidated system excluding debt service for debt funds loaned to the three hydro projects (Lake Chelan, Rock Island, Rocky Reach). An additional rate covenant requires 1.15 times coverage using other available funds and based upon the net revenues of the Chelan Hydro Consolidated System. Each bond series has its own segregated reserve and some of the reserves are backed by $8.8 million in sureties from FGIC and MBIA. The exposed bonds are series 2004 A/B/C/E and 2005 A/B, which are backed by $6.63 million of FGIC sureties while Series 2001C and 2003A are exposed to $2.14 million of MBIA sureties. While the surety exposure is considered a credit weakness, the exposure is relatively manageable since 85% of total interest reserves across all of Chelan PUD systems are backed by cash. Additionally, the District's strong consolidated liquidity is considered a strength.

The Rock Island revenue bonds are secured by a pledge of net Rock Island system revenues and are subordinate to the lien on prior Rock Island bonds, which are closed to new debt issuances and approximately $262 million were outstanding at year end 2010. Pledged revenues include all revenues, rates and charges from the District's operation of the Rock Island system. 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 bond charge coverage of 1.0 times; there is no additional bonds test; and there is a weak debt service reserve requirement, which is equal to maximum annual interest. Each bond series has its own segregated reserve and all the Rock Island reserves are cash funded.

The Rocky Reach System revenue bonds are secured by a pledge of revenues and were subordinate to the lien on prior Rocky Reach bonds, which have been refunded. The District has covenanted not to issue additional senior lien Rocky Reach bonds and none remain outstanding. 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 bond coverage test and there is a weak debt service reserve requirement of maximum annual interest. Each bond series has a segregated reserve and all of the Rocky Reach reserves are cash funded.

Moody's notes that the 2008 Rock Island and Rocky Reach master resolutions for the 2008 and 2009 bond series require the Distribution System to pay for its share of the costs only if Rock Island or Rocky Reach provides power. While Moody's views this as a weakness that could ultimately affect the ratings for Rock Island or Rocky Reach, the weak provision does not have an impact at this time given the large amount of subordinated affiliate debt owed by Rocky Reach and Rock Island to the District. Additionally, the weak provision affects only $16.6 million of Rock Island debt and $21.1 million of Rocky Reach's debt.

INTEREST RATE DERIVATIVES:

The District has four interest rate swaps with a total notional value of $167.9 million with highly rated counterparties. In May 2011, the District plans to terminate a large forward interest rate swap, which should substantially reduce the current negative mark to market position to below $10 million. The negative termination value of the swaps are manageable given Chelan PUD current strong liquidity position.

RATING FACTORS

MARKET/COMPETITIVE POSITION: LOW COST HYDRO SYSTEM

A key fundamental credit support factor for the District is Chelan PUD's 1,988 MW low cost hydro system and the District's easy access to transmission of the energy to retail and wholesale customers. The low cost is significantly due to the major capital investments that were made to the hydro facilities 30 to 50 years ago. In 2010, approximately 7.7 million MWh of power was delivered by the District's facilities at a weighted average cost of $21.4/MWh. Additionally, Rock Island's five year (2006-2010) average cost of production was around $27/MWh; at Rocky Reach it was around $13/MWh; and Lake Chelan, $18/MWh. Over the next five years, Chelan PUD expects the combined weighted average cost for all three hydros at around $17/MWh in 2011 and rising to approximately $21/MWh in 2015 based on average water conditions. The forecasted average cost is lower since 2009 and 2010 were low water years that reduced total output by roughly 19% compared to an average water year. The District's cost of power has historically been well-below regional and national averages though the competitive positive has weakened since 2009 due to a nearly 50% drop in 'around the clock' market prices to the low $30/MWh range for 2009 and 2010.

In addition to price competitiveness, the District's hydro facilities enjoy environmental benefits since they do not emit greenhouse gases or other major emissions. If the US Environmental Protection Agency fully implements many of the proposed environmental rules and regulations under currently consideration, Chelan PUD would benefit since the District sells a substantial amount of excess power and the new regulations would likely result in higher market power prices.

That said, the District remains exposed to environmental regulations affecting threatened and endangered fish similar to other hydro generator owners in the region. Chelan PUD has a comprehensive Habitat Conservation Plan (HCP) to manage its environmental exposures at both Rocky Reach and Rock Island. The District has already spent substantial capital on a fish bypass system and continues to expend ongoing funds on fish related environmental costs including the fish hatcheries and fish monitoring.

LONG TERM TAKE OR PAY TYPE CONTRACTS COVER ROUGHLY HALF OF HYDRO SYSTEM'S OUTPUT IN 2012 AND ONWARD

Currently, the District sells approximately seventy percent of the power output from the District's Rocky Reach and Rock Island plants under take-or-pay contracts to Puget Sound Energy (PSE, 41% of allocated capacity), Alcoa (15%), Portland General Electric (8%), PacifiCorp (3%), Douglas County Public Utility District (2%), and Avista (2%), with the balance sold by the District's distribution system (30%). The District subsequently sells the power to its electric system's customers and the excess into the wholesale market. Moody's believes the very competitive prices charged for the capacity and energy ensures wholesale customer retention. These contracts are maturing on October 31, 2011 and June 7, 2012 and the District has new replacement contracts to cover approximately 52.2% of the total output.

In February 2006, the District executed a new long-term power sales contract with PSE scheduled to terminate in 2031. Deliveries under the new contract will commence upon the expiration of the existing power sales contracts for the Rocky Reach and Rock Island Projects. Under the new contract, PSE will purchase an amount equal to 25% of the combined energy and capacity from both the Rocky Reach and Rock Island Projects in exchange for payment by PSE of its proportionate share of operation and maintenance, assumed debt service and other costs. The contract was approved by FERC in March 2006. Alcoa signed a new take-or-pay type contract with the District representing 26% of the equivalent output of both Rocky Reach and Rock Island that expires in 2028. Douglas PUD also exercised their option to take 2.77% of Rocky Reach's output at cost and another 2.77% on similar terms with PSE and Alcoa through at least October 2021. Douglas PUD has another four 10-year extension options resulting in a potential final maturity of October 2061. Moody's notes that the new take or pay type contracts with PSE, Alcoa and 50% of Douglas PUD's share allow Chelan PUD to assess debt reduction and capital recovery charges, which can be used to reduce debt or pay for capital expenditures. The District has decided to charge the maximum debt reduction and capital recovery charge allowed under the contract. Chelan PUD can also assess credit and administrative charges. That said, the Alcoa and PSE's payments related to their share of debt service at Rocky Reach and Rock Island follow an assumed debt amortization schedule, which can be different than the actual debt amortization at the two hydro plants.

The remaining 47.8% of the output is retained by the District and Chelan PUD sells a substantial amount of power into the wholesale energy market.

THE DISTRICT HAS SIGNIFICANT RELIANCE ON PROFITS FROM VOLATILE WHOLESALE MARKET REVENUES

The District's share of three hydroelectric projects are sufficient for the District to meet its electric system load requirements under almost all conditions, such as during the 2000-2001 energy crises. That said, Chelan PUD has substantial excess power sales and the District significantly relies on wholesale energy sales to subsidize the District's other systems including electric distribution and fiber optic business. Since Chelan PUD's share of the hydro plant's output is increasing from 30% to 47.8% by mid 2012, the District's exposure is expected to grow. Under average hydrology, Chelan PUD expects to sell approximately 330 aMW of surplus power from its current 130 aMW of sales once the current power purchase agreements expire in 2011 and 2012. Wholesale power sales as a portion of total operating revenues is expected increase from roughly 25% in 2010 to approximately 40% of total operating revenues by 2013 and is considered a credit weakness given the greater riskiness of the wholesale energy business compared to the traditional electric distribution business.

The two primary drivers of wholesale market sales for Chelan PUD are hydro levels and wholesale market prices. Under an 'ordinary' economic environment, lower hydro levels tend to push up wholesale market prices and serve as a partial natural hedge. For example, in 2001, Chelan's wholesale revenues increased compared to 2000 even though Grand Coulee flow levels were 59% of normal compared to 97% in 2000. However, the District faced both low hydrology and low market prices in 2009 and 2010. The key drivers of low market prices were due to recession drive demand destruction and low natural gas prices. Looking forward, power prices are expected to increase slowly with current forward Mid Columbia power prices indicating that 2008 market prices will be reached around 2016. On a positive note, regional hydrology improved in 2011 and regional water flows is currently expected to be 118% of average at Grand Coulee.

To manage wholesale and hydrology exposure, the District utilizes a combination of hedging and strong liquidity position.

LARGE LIQUIDITY AND NEW HEDGING PROGRAM REDUCES THE IMPACT OF WHOLESALE REVENUE VOLATILITY

An important credit strength is the District's strong liquidity position. Cash and investments totaled over $419 million at year-end 2010 and total unrestricted internal reserves were $184 million which was greater than the District's policy minimum $150 million of unrestricted cash and investments. Approximately $112 million of the cash was due to advance payments received from PSE and Alcoa when their new PPAs were executed in 2006 and 2008, respectively. Days cash on hand was high at around 500 at year-end 2010 though moderately below the 2006-2008 average of 583. Looking forward, Chelan PUD expects to maintain roughly 500 days cash on hand over the 5-year forecast period. That said, the expected expiration of a standby bond purchase agreement (SBPA) in March 2013 creates the possibility of a major drain on unrestricted internal liquidity if the District decides to use internal liquidity to backstop its $91 million of variable rate debt. Moody's expects the District to take action that will maintain its internal liquidity position such as extending the SBPA or refinancing the variable rate debt.

To further improve liquidity, the District executed a $50 million 3-year bank credit facility starting on April 1, 2011. However, Moody's views the bank credit facility as a substantially weaker form of liquidity since it contains restrictive features including a 'no material adverse effect' clause and minimum A3/A-/A- rating as conditions precedent to funding. Additionally, the bank credit agreement terminates and all advances are immediately due and payable if the District's rating falls to Baa2/BBB/BBB or lower. Ultimately, a high internal reserve level is considered a key credit support factor for the District and Chelan PUD's rating could decline if internal liquidity levels were to materially decline below forecast.

To reduce ongoing exposure to merchant power price and hydrology risk, the District has also implemented a major hedging program over the last two years. The hedging program incorporates a combination of firm energy sales and auctions of 'slices' of the District's hydro system output. While firm energy sales only transfers price risk, 'slice' sales transfers both hydrology and price risk to the offtaker. Currently, the District has most of its expected surplus sales hedged for 2011 and 2012, with the hedges rolling off starting in 2013 with little hedged in 2015. Moody's expects that the District will continue to hedge through block and slice products on a rolling basis to ensure greater revenue stability over the medium term.

Moody's believes that the District's strong financial liquidity and new hedging policy significantly reduces the short to medium term revenue risks associated with wholesale energy and hydrology risk. The hedging program incorporating slice auctions is a significant improvement and reflects the District's improved risk management approach. However, the combination of liquidity and hedging does not serve to fully mitigate low wholesale price or hydrology for an extended period of time and the negative outlook considers the execution risk tied to sourcing new longer term hedges that ensure medium to long term revenue stability at metrics commensurate with the District's forecast.

IMPROVED RATE MANAGEMENT IS CREDIT POSITIVE THOUGH HISTORICAL WILLINGESS TO RAISE RATES IS VIEWED AS WEAKER THAN PEERS

While the District's rate process is not regulated by the state regulatory board, the District has showed a limited willingness to use its authority to raise retail rates to maintain its financial condition in the past. In April 2009, Chelan PUD 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. The rate increase was necessitated by lower than expected wholesale revenue and lower than expected interest income. Prior to 2009, Chelan PUD raised electric rates by 5% in 2008 and 2.5% in 2000. While the District's retail rates are significantly below average compared to other electric utilities in Washington State and remain one of the lowest rates in the US, the risk of a 'rate shock' remains an important factor since retail customer are likely to consider increases relative to their current rates in addition to the absolute rate.

Since April 2009, the District has taken extensive efforts to improve communications with its customers and the District's commissioners leading to smoother subsequent rate actions. For example, the 9% surcharge has been extended through 2011 and water/sewer rates were raised by 5% and wholesale telecom rates were raised by up to 22%. The improvement is viewed as positive development compared to 2009 and Moody's expects the District to continue to maintain its enhanced communications with its customers and commissioners.

EXPECTED IMPROVEMENT IN FINANCIAL METRICS IN 2012 AND ONWARD

For 2010, Chelan PUD's consolidated debt service coverage ratio was approximately 1.0 times according to Moody's calculation based on unaudited year-end 2010 financials. The drop in consolidated debt service coverage from approximately 2.04 times in 2008 was due to an approximately 50% drop in wholesale energy prices and low hydrology in 2009 and 2010. Due to the drop in cash flow, the District effectively bypassed a rate covenant in the Chelan Hydro Consolidated System by escrowing 2009 and 2010 debt service associated with the Distribution Division's bonds. Escrowed amounts totaled approximately $10.6 million. While the escrow provision is allowed per the bond resolution according to Chelan PUD, Moody's viewed such actions negatively since the purpose of a rate covenant is to ensure sufficient net revenues to meet debt service.

For 2011, consolidated debt service coverage is expected to remain low at around 1.2-1.3 times. Starting in 2012, the District expects substantial improvement in debt service coverage ratio to at least 2.0 times and rising to 2.4 times by 2016 based on assumed average hydrology, moderately rising energy prices and the District benefiting from a greater share of the output of Rocky Reach and Rock Island plants. Under a 5% downside probability event over multiple years, Moody's expects the District's coverage ratio could drop to around 1.9 times through 2013 and to 1.3 times in 2016. Moody's also expects unrestricted cash could drop severely below the District's $150 million policy target under a continuous low water and low price environment. That said, the biggest impact to liquidity and debt service coverage starts in 2014 when the District's hedges start to substantially reduce and Moody's expects the District to hedge on an ongoing basis to minimize the potential downside risks.

Moody's notes the District's debt ratio of 74% at year end 2010 is above the median of 62% for U.S. public power utilities that own generation and Chelan PUD's debt ratio is considered high for the rating. The District expects to reduce debt over time by a least 16% to $868 million by 2015 from approximately $1.04 billion at year-end 2010. The largest debt reduction occurs in 2014. A combination of debt reduction and increasing assets is expected to result in the debt ratio decreasing to approximately 60% by 2015 according to the District's stated policy goals. Chelan PUD is also considering additional debt reduction measures depending on its liquidity needs. Given the District's increased business risk profile, Chelan PUD achieving its minimum forecasted debt reduction target is an important factor supporting the rating.

While Chelan PUD expects an improvement in financial metrics, the uncertainty regarding the District's ability to achieve the forecasted improvement is one of the main drivers of the negative outlook.

CAPITAL PROGRAM: MAJOR CAPITAL NEEDS ARE LARGE BUT MANAGEABLE

The District's capital program remains substantial though manageable. The District's capital plan is projected to cost $294 million from 2011 to 2015. Spending at the Electric Distribution system is the single largest segment at around 28% followed by Rock Island at 25% and Rocky Reach at 21%. Chelan PUD expects to fund its capital expenditure program through a combination of internal cash and operating cash flow generation. As of year-end 2010, the District had approximately $94 million of cash and investments reserved for construction.

Outlook

The negative outlook considers heightened business risk profile given the expected large increase in wholesale exposure starting in 2012, the uncertainty in the District's ability to achieve their forecasted improvement in credit metrics and execution risk tied to sourcing new longer term hedges that ensure medium to long term revenue stability at financial metrics commensurate with the District's forecast.

What Could Change the Rating - DOWN

Chelan PUD's rating could be downgraded if the District again demonstrated limited willingness to implement rate increases necessary to maintain a sound financial position, if financial metrics do not improve as anticipated or if the District does not hedge for longer tenors that ensures forecasted metrics.

What Could Change the Rating - UP

The District's rating could stabilize if Chelan PUD achieves its forecasted financial metrics, implements longer term hedging and continues to strengthen its improved risk management.

KEY STATISTICS:

Total Restricted and Unrestricted Cash and Investments, 2010: $419 million

Total net MWh produced, 2010: 7.74 million

Aggregate Hydro Capacity (Nameplate): 1,988 MW

Chelan Senior Consolidated System 2010 Debt Service Coverage (per resolution without available funds): 0.57 times without escrow

Subordinate Consolidated System 2010 Debt Service Coverage (per resolution without available funds): 1.5 times

Rock Island System 2010 Debt Service Coverage (per resolution): 1.0 times

Rocky Reach System 2010 Debt Service Coverage (per resolution): 1.3 times

Consolidated Debt Service Coverage Ratio, 2010 (Moody's): 1.0 times

Debt Ratio, 2010 (unaudited): 74%

Days Cash on Hand, 2010 (unaudited): 499

Average Retail Rate, 2010: 3.4 cents/kwh

DEBT STATEMENT AS OF December 31, 2010

Rock Island System Revenue Bonds $278.7 million

Rocky Reach System Revenue Bonds: $21.1 million

Chelan Hydro Consolidated System Revenue Bonds: $445.4 million

Consolidated System Revenue Bonds: $201.7 million

Consolidated System Subordinated Revenue Notes: $82.7 million

The last rating action occurred on May 15, 2009, when Moody's affirmed Chelan PUD's Aa2 ratings and changed the outlook to negative.

The principal methodology used in this rating was U.S. Public Power Electric Utilities published in April 2008.

REGULATORY DISCLOSURES

Information sources used to prepare the credit rating are the following: parties involved in the ratings and public information.

Moody's Investors Service considers the quality of information available on the credit satisfactory for the purposes of assigning a credit rating.

Moody's adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources Moody's considers to be reliable including, when appropriate, independent third-party sources. However, Moody's is not an auditor and cannot in every instance independently verify or validate information received in the rating process.

Please see ratings tab on the issuer/entity page on Moodys.com for the last rating action and the rating history.

The date on which some Credit Ratings were first released goes back to a time before Moody's Investors Service's Credit Ratings were fully digitized and accurate data may not be available. Consequently, Moody's Investors Service provides a date that it believes is the most reliable and accurate based on the information that is available to it. Please see the ratings disclosure page on our website www.moodys.com for further information.

Please see the Credit Policy page on Moodys.com for the methodologies used in determining ratings, further information on the meaning of each rating category and the definition of default and recovery.

Analysts

Clifford J Kim
Analyst
Public Finance Group
Moody's Investors Service

Dan Aschenbach
Backup Analyst
Public Finance Group
Moody's Investors Service

Contacts

Journalists: (212) 553-0376
Research Clients: (212) 553-1653

Moody's Investors Service
250 Greenwich Street
New York, NY 10007
USA

wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO.

This credit rating is an opinion as to the creditworthiness or a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors. It would be dangerous for retail investors to make any investment decision based on this credit rating. If in doubt you should contact your financial or other professional adviser.