

Avista Corp.

1411 East Mission P.O. Box 3727 Spokane, Washington 99220-0500 Telephone 509-489-0500 Toll Free 800-727-9170

VIA - Electronic Email

August 8, 2017

Washington Utilities and Transportation Commission 1300 S. Evergreen Park Drive S. W. P.O. Box 47250 Olympia, Washington 98504-7250

Attention: Mr. Steven King, Executive Director & Secretary

RE: Docket UE-170484
Tariff WN U-28 (Schedule 93 – Power Cost Rate Adjustment (PCRA))

Dear Mr. King,

This letter is in response to Commission Staff's Open Meeting Memo for Agenda Item A1 scheduled for August 10, 2017. Staff recommends that the Power Cost Rate Adjustment (PCRA) filing be either rejected or consolidated with Avista's pending general rate case proceeding. Consolidation with Avista's pending general rate case would have the same effect as rejection of the filing. If the PCRA filing is rejected or consolidated, in either event power supply costs would not be updated until the conclusion of Avista's pending general rate case, which is scheduled to conclude on or around April 26, 2018.

There are a number of clarifications related to the information Staff has presented as the basis for its recommendation, that are important for the Commission's consideration in its decision in this Docket as follows:

Staff Memo: On page 2 of its Memo, Staff states, "Lending further support to staff's recommendation is Avista's August 2, 2017, report to its investors of its financial results for the second quarter of 2017. According to the company's report, its 2017 earnings continue to be <u>above expectations</u>." (emphasis added here by Avista)

<u>Clarification</u>: What Staff did not include in its Memo to the Commission from that same August 2, 2017 report to investors is the following:

In addition, our 2017 guidance range includes regulatory timing lag directly associated with the Washington jurisdiction and resulting from the denial of our 2016 rate increase requests, which is estimated to reduce the return on equity by 100 to 120 basis points. This results in an expected return on equity range for Avista Utilities of 7.4 percent to 7.8 percent in 2017.

Avista's <u>expected earnings</u> for 2017 includes <u>significant</u> under-earnings for its electric operations in Washington, which has had the effect of reducing Avista's <u>total utility</u> earnings opportunity by 100 to 120 basis points. Avista's Washington electric operations represent approximately 50% of its earnings, and, therefore, the under-earnings for Avista's Washington electric operations on a stand-alone basis for 2017 is a reduction to return on equity (ROE) of approximately 200 to 240 basis points (which would be the equivalent of a 7.1% to 7.5% ROE versus the current Washington authorized 9.5% ROE). In Avista's earnings release dated February 22, 2017, the Company stated that this under-earnings is "in the range of \$0.20 to \$0.30 per diluted share" for 2017, related to Washington electric operations. This is equal to an earnings shortfall of approximately \$20 million to \$30 million on a pre-tax basis, based on approximately 65 million shares outstanding.

It is important the Commission understand that Staff's reference to 2017 earnings being "<u>above expectations</u>," means that the actual earnings are above <u>meager</u> expectations, and are still significantly below the authorized return.

Staff Memo: In its Memo at page 1, Staff makes reference to power supply costs being \$6.5 million lower than the authorized amount (a benefit) during the first six months of 2017.

Clarification: Actual power supply costs for January – June 2017 were favorable due in part to good snow pack and good Spring rains, which significantly increased hydroelectric generation. This resulted in a reduced need for purchased power and fuel purchases for thermal generation. The above-normal snowpack is gone and the above-normal spring rains are over. Following Avista's filing on May 26, 2017, Staff submitted no requests for information and did not inquire about expected power supply costs for the balance of 2017. In July 2017 alone, actual power supply costs for Avista's Washington electric operations were \$1.4 million unfavorable, which begins to eliminate the \$6.5 million benefit. Current estimates show the benefit will not only be eliminated, but power costs by the end of 2017 will be well above the authorized amount. And based on normal snowpack and rainfall for January through April 2018, power supply costs will also be well above the current authorized amount. Unless power supply costs are reset through this PCRA filing, under

¹ Avista Corp. Reports Financial Results for Second Quarter 2017 and Confirms 2017 Earnings Guidance (http://avistacorp.mwnewsroom.com/press-releases/avista-corp-reports-financial-results-for-second--nyse-avagnw 1793077 001), August 2, 2017.

² At December 31 2016, Washington electric rate base was \$1.50 billion as compared to total utility rate base of \$2.94 billion on an end of period basis.

³ Avista Corp. Reports Financial Results for Fourth Quarter and Fiscal Year 2016, and Initiates 2017 Earnings Guidance (http://avistacorp.mwnewsroom.com/press-releases/avista-corp-reports-financial-results-for-fourth--nyse-ava--11g130934-001), February 22, 2017.

normal operating conditions Avista will experience power supply costs well above those included in base retail rates between now and when they are reset in the pending general rate case on or around April 26, 2018.

<u>Staff Memo</u>: On page 2 of its Memo Staff makes the following statement: "Simply stated, even if the alleged increase in net power supply costs materialize, the ERM carries a sufficient balance to easily absorb that alleged increase."

<u>Clarification</u>: This statement is misleading. The \$23.5 million ERM balance Staff refers to represents dollars that are due to customers. They are <u>not available to Avista</u> to offset increased power supply costs, absent an order from the Commission to do so. Under the ERM mechanism, the ERM balance accumulates over time until the balance reaches \$30 million in either the surcharge or rebate direction. After the \$30 million trigger is reached, a retail rate change is made to either rebate or surcharge the balance to customers. All but \$1.9 million of the \$23.5 million ERM balance was accumulated prior to 2017, and as indicated earlier, the \$1.9 million benefit for 2017 will be eliminated by the end of the year due to higher power supply costs for the balance of the year.⁴

<u>Conclusion</u>: This filing represents a starting point for getting back on track to address the significant under-recovery of costs (and under-earnings) Avista is currently experiencing for 2017 in its Washington electric operations. Through its pending general rate case filing Avista requested an electric base revenue increase of \$61.4 million or 12.5%, which includes an increase in power supply costs of approximately \$16 million. Approval of this PCRA filing would provide Avista a \$15.0 million revenue increase (2.9%) effective September 1, 2017, which would reduce the \$61.4 million revenue increase needed at the conclusion of the general rate case by \$15.0 million. The effect of the September 1, 2017 increase would be to <u>phase in</u> the revenue increase needed in the next 12 months.

In its Credit Opinion dated March 22, 2017, which is Attachment A to this response, Moody's Investors Service refers to "significant miscommunication with Washington regulators" and "a recent rate filing snafu in Washington," which has resulted in Avista significantly under-earning in its Washington electric operations in 2017. The Commission should not be misled by the use of selected information presented by Staff. In this instance, the reference to earnings "above expectations" for Avista for the first six months of 2017 should not be interpreted as a report of reasonable earnings for Avista, when the original earnings expectation for Washington electric earnings were approximately 7.1% to 7.5% ROE (vs the 9.5% authorized level). Avista is still earning significantly below its authorized level. Furthermore, power supply costs in the first half

⁴ It is also noteworthy that since the first full year of the ERM in 2003, actual power supply costs, as compared to authorized costs over the 14 year period, have been \$37 million higher on a cumulative basis (a net cost to Avista, and a benefit to customers). Therefore, the deferral balance has gone in both directions over the 14 years, and there have been more dollars in the direction of costs to Avista, than a benefit to Avista. Power supply costs were higher in 2003 (\$34 million), 2004 (\$21 million), 2005 (\$14 million), 2007 (\$25 million), 2008, (\$14 million) and 2013 (\$5 million). Power supply costs were lower in 2006 (\$3 million), 2009 (\$3 million), 2011 (\$19 million), 2012 (\$15 million), 2014 (\$10 million), 2015 (\$18 million) and 2016 (\$8 million). In 2010, as a part of a rate case settlement, there was no ERM adjustment.

⁵ "Avista Corp. A Vertically Integrated Electric and Gas Utility." Moody's Investors Service, March 22, 2017.

of 2017 were <u>temporarily</u> offset by favorable hydroelectric conditions, which we know are now gone. Those early benefits will <u>completely disappear before the end of the year (July 2017 alone was a negative \$1.4 million)</u>, and power supply costs between now and April 26, 2018 will be well above the current authorized level, on a normalized basis.

It is reasonable and appropriate for customers to begin to pay on September 1, 2017 a portion of the increased costs Avista is already experiencing. The proposed increase in power supply costs in this PCRA filing is based on known changes in power supply costs (such as the expired Portland General Electric contract which expired effective January 1, 2017), and using the AURORA Model with the most recent information. This is consistent with the past practice of this Commission in the determination of pro forma power supply costs under normal operating conditions.⁶

As stated earlier, consolidation of this PCRA filing with Avista's pending general rate case would have the same effect as rejection of the filing. Avista respectfully requests the Commission approve the proposed increase effective September 1, 2017, as a starting point to get back on track to address the significant under-recovery of costs Avista is currently experiencing.

Please direct any questions related to this letter to me at (509) 495-4267, or by e-mail at kelly.norwood@avistacorp.com.

Sincerely,

Kelly Norwood

Vice President, State & Federal Regulation

cc: Chairman Danner

Commissioner Rendahl

Commissioner Balasbas

Commission Staff (Mark Vasconi, Tom Schooley, David Gomez, and Christopher Casey)

ICNU (Jesse Cowell, Brad Mullins and Patrick Oshie)

Public Counsel (Lisa Gafken and Armikka Bryant)

.

⁶ Although Staff's reference to "a few discrete changes in power costs" could be interpreted to mean minor changes, these are major known changes in power costs.

Attachment A

"Avista Corp. A Vertically Integrated Electric and Gas Utility." Moody's Investors Service, March 22, 2017.



CREDIT OPINION

22 March 2017

Update

Rate this Research



RATINGS

Avista Corp.

| Domicile | Spokane, Washington, United States |
|------------------|---------------------------------------|
| Long Term Rating | Baa1 |
| Туре | LT Issuer Rating |
| Outlook | Stable |

Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

Contacts

Ryan Wobbrock 212-553-7104
Vice President
ryan.wobbrock@moodys.com

Jillian Cardona +1 212 553 4351 Associate Analyst jillian.cardona@moodys.com

Jim Hempstead 212-553-4318
MD-Utilities

james.hempstead@moodys.com

AVISTA CORP.

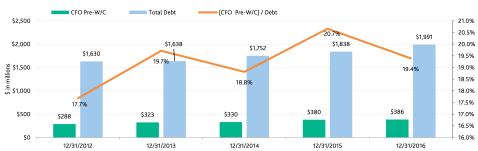
A Vertically Integrated Electric and Gas Utility

Summary Rating Rationale

Avista Coporation's (Avista, Baa1 Stable) Baa1 issuer rating reflects its primary business as a low-risk vertically integrated electric and gas utility with supportive cost recovery mechanisms, such as electric and gas revenue decoupling. Recent events in Washington, Avista's primary regulatory jurisdiction, create some uncertainty for the company going forward, but Avista's financial profile can provide cushion to offset any negative effects over the next 12-18 months.

Avista has some unregulated exposure in addition to its ownership of regulated utility Alaska Electric Light and Power (AEL&P, Baa3 Stable), which provide marginal operational and cash flow diversity, but remain neutral in terms of affecting the ratings of Avista.

Exhibit 1
Historical CFO Pre-WC, Total Debt and CFO Pre-WC to Debt



Source: Moody's Investors Service

Credit Strengths

- » Low-risk utility with supportive cost recovery mechanisms
- » Stable cash flow production

Credit Challenges

- » Significant miscommunication, recently, between AVA and its key regulator
- » Clean Air Rule in Washington could be costly

Rating Outlook

The stable outlook incorporates our view that despite a recent rate filing snafu in Washington, Avista's financial profile will maintain cash flow from operations pre-working

capital (CFO pre-WC) CFO pre-WC to debt in the high-teens range and that it will continue to receive adequate cost recovery within its regulatory jurisdictions. The stable outlook also incorporates a view that unregulated operations will remain below 15% of consolidated earnings and cash flow.

Factors that Could Lead to an Upgrade

The ratings for Avista could be upgraded if the company were able to produce CFO pre-WC to debt above 21% on a sustained basis, without the benefits from one-time adjustments or temporary tax benefits.

Factors that Could Lead to a Downgrade

Avista's ratings could considered for downgrade with less supportive regulatory relationships over a sustained period of time and if CFO pre-WC to debt were to fall to 17% on a consistent basis. Also, if the contribution of Avista's unregulated business were to increase disproportionately to those of its regulated operations, it could be downgraded.

Key Indicators

Exhibit 2

| KEY INDICATORS [1] | | | | | |
|----------------------------------|------------|------------|------------|------------|------------|
| Avista Corp. | | | | | |
| | | | | | |
| | 12/31/2012 | 12/31/2013 | 12/31/2014 | 12/31/2015 | 12/31/2016 |
| CFO pre-WC + Interest / Interest | 4.4x | 5.0x | 5.2x | 5.7x | 5.4x |
| CFO pre-WC / Debt | 17.7% | 19.7% | 18.8% | 20.7% | 19.4% |
| CFO pre-WC – Dividends / Debt | 13.5% | 15.2% | 14.3% | 16.2% | 15.0% |
| Debt / Capitalization | 47.4% | 46.7% | 44.6% | 44.8% | 44.5% |

^[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Source: Moody's Financial Metrics™

Detailed Rating Considerations

SIGNIFICANT MISCOMMUNICATION WITH WASHINGTON REGULATORS

In Washington, there appears to be some form of miscommunication between Avista and the Washington Utilities and Transportation Commission (WUTC). This is evident given Avista's most recent rate filing being rejected by the WUTC in December 2016, which was followed by a WUTC denial for reconsideration of the December decision, in February 2017. This was a surprising outcome considering our view that the core competency of utility management is managing regulatory relationships and an outright denial by the regulator is unexpected.

Since the WUTC is Avista's most important regulator, overseeing roughly 60% of the company's revenue generation, we anticipate that the company will have a declining financial profile over the next 12-18 months while Avista engages the commission in preparation for another filing (expected during 2Q17). While this is a credit negative development, Avista currently has a strong enough financial profile to absorb this rate case delay without any ratings impact (see financial section, below). Moreover, we view this snafu as temporary, and expect that the company will continue to receive adequate and timely cost recovery of prudently incurred costs.

In the meantime, Avista's last general rate case order remain intact, including the electric and gas decoupling mechanisms, which we view as a significant credit positive. Decoupling enhances the timely recovery of fixed costs for the utility and provides for stable and predictable gross margin and cash flow in the face of declining use, in addition to attrition adjustments for ongoing rates. This has been beneficial to Avista since residential and commercial customer electric and gas use has declined over the past two years.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

FINANCIAL PROFILE PROVIDES SOME CUSHION FOR RATE CASE DELAY

Avista's key financial metrics, such as cash flow from operations before the changes in working capital (CFO pre-WC) to debt, continue to be very stable at around 19%. This level is in-line with other Baa1 vertically integrated peers and should provide a degree of financial flexibility for the company to withstand the financial decline expected over the next 12-18 months.

For example, Avista estimates that the delay in obtaining a rate order will reduce its earnings per diluted share between \$0.20 to \$0.30 for 2017. We estimate that this would equate to between \$13 million and \$20 million of net income. This reduction of net income could reduce cash flow to debt metrics by up to 100 basis points, or around 18%, assuming no increase in debt. We would expect this trend to correct itself once an acceptable general rate case is filed with the WUTC and becomes approved. However, should cash flow to debt remains in the mid-teen's percent range (e.g., 16% or 17%) there could be negative ratings pressure for Avista.

We see a more significant risk with Avista's level of deferred taxes generated in 2016. The company benefitted from around \$125 million of deferred tax increases that represented roughly 35% of CFO in 2016. We expect this level to decline significantly going forward, which could place additional pressure on financial metrics. For example, if deferred taxes reduced to around \$75 million (the average level from 2012-2016) 2016 CFO pre-WC to debt would be 17%.

WASHINGTON'S CLEAN AIR RULE PROVIDES AN ASPECT OF UNCERTAINTY

In September 2016, the Washington State Department of Ecology adopted the Clean Air Rule (CAR) which establishes emission standards for green house gas (GHG) emissions from certain sources in the state, including power plants and natural gas distributors. The plan calls for a reduction of GHG emissions over time, at a pace of 1.7% annually until 2035; however, the base level has not been set by the Department of Ecology.

Exactly how, and at what cost, the rule might affect Avista's power plant generation and natural gas distribution is currently unclear. Under the rule, Avista can comply by simply reducing emissions or providing Emission Reduction Units (ERUs) - a cap and trade type mechanism within Washington state borders, which has yet to be administered.

We view the ability to reduce emissions from owned generation as more feasible than from natural gas deliveries - which are primarily based on customer needs and generally outside the control of the company - since the company only acts as a conduit for natural gas deliveries. Therefore, if Avista is held financially accountable for the emissions of roughly 117 Bcf of gas deliveries per year, rates and customer bills could rise with no added benefit of service - a credit negative.

The first compliance period ranges from 2017 to 2020, giving Avista time to incorporate a compliance strategy. We note that several parties, including Avista, filed a joint action in the US District Court for the Eastern District of Washington challenging the CAR; thus, a prolonged litigation period will likely ensue.

Liquidity Analysis

We expect Avista to maintain adequate liquidity in the next 12-18 months.

Avista's external liquidity source consists of a \$400 million senior secured revolving credit facility, which expires in April 2021. As of 31 December 2016, there were \$154 million of cash borrowings, leaving \$246 million available under the line of credit. Since Avista currently has unsecured investment grade ratings from two nationally recognized rating agencies, the company has the option to request the banks to relinquish the existing First Mortgage Bond collateral position, but it has chosen not to do so for economic reasons. Despite the collateral staying in place at Avista's discretion, the secured nature of the credit facilities somewhat constrains Avista's liquidity flexibility, in our opinion, since the typical investment grade issuer (having an unsecured facility) can use collateral as an option to improve bank credit access during periods of unforeseen liquidity stress.

Avista was in compliance with the facility's sole covenant of less than 65% capitalization, with a ratio of 52.9% as of 31 December 2016.

AEL&P has a \$25 million line of credit which expires in November 2019 and requires a consolidated debt to capitalization covenant of 67.5%. As of 31 December 2016, there were no borrowings or letters of credit outstanding under the facility and AEL&P was in compliance with its covenant, with a ratio of 55.6%.

Avista's next material debt maturities occur in May and June 2018, when \$7 million and an aggregate \$255.5 million of senior debt are due, respectively.

Profile

Avista Corporation (Avista, Baa1 Stable) is primarily a regulated electric and gas utility servicing around 375,000 electric and 335,000 gas customers in Washington, Idaho and Oregon. Avista also owns Alaska Energy and Resources Company (AERC; not rated), parent of Alaska Electric Light and Power Company (AEL&P; Baa3) which serves around 17,000 electric customers in Juneau, Alaska.

Avista's utility operations are primarily regulated by the Washington Utilities and Transportation Commission (WUTC), Idaho Public Utilities Commission (IPUC) and the Oregon Public Utility Commission (OPUC). AEL&P is under the purview of the Regulatory Commission of Alaska (RCA).

Rating Methodology and Scorecard Factors

Exhibit 3

| Rating Factors | | | | |
|---|--------------------------|---------|--|---------|
| Avista Corp. | | | • | |
| Regulated Electric and Gas Utilities Industry Grid [1][2] | Current FY 12/31/2016 | | Moody's 12-18 Month Forward View As of Date Published [3] | |
| Factor 1: Regulatory Framework (25%) | Measure | Score | Measure | Score |
| a) Legislative and Judicial Underpinnings of the Regulatory Framework | Α | Α | Α | Α |
| b) Consistency and Predictability of Regulation | Α | Α | Α | Α |
| Factor 2 : Ability to Recover Costs and Earn Returns (25%) | | | | |
| a) Timeliness of Recovery of Operating and Capital Costs | Baa | Ваа | Ваа | Baa |
| b) Sufficiency of Rates and Returns | Baa | Baa | Ваа | Baa |
| Factor 3 : Diversification (10%) | | | | |
| a) Market Position | Baa | Baa | Ваа | Baa |
| b) Generation and Fuel Diversity | Α | Α | Α | Α |
| Factor 4 : Financial Strength (40%) | | | | |
| a) CFO pre-WC + Interest / Interest (3 Year Avg) | 5.5x | Α | 4.6x - 4.9x | Α |
| b) CFO pre-WC / Debt (3 Year Avg) | 19.6% | Ваа | 17% - 19% | Baa |
| c) CFO pre-WC – Dividends / Debt (3 Year Avg) | 15.2% | Baa | 14% - 16% | Baa |
| d) Debt / Capitalization (3 Year Avg) | 44.6% | Α | 41% - 43% | Α |
| Rating: | | | | |
| Grid-Indicated Rating Before Notching Adjustment | | Baa1 | | Baa1 |
| HoldCo Structural Subordination Notching | 0 | 0 | 0 | 0 |
| a) Indicated Rating from Grid | | Baa1 | | Baa1 |
| b) Actual Rating Assigned | | (P)Baa1 | | (P)Baa1 |
| | | | | |

^[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.

^[2] As of 12/31/2016.

^[3] This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures. Source: Moody's Financial Metrics™

Ratings

Exhibit 4

| Category | Moody's Rating | |
|---|----------------|--|
| AVISTA CORP. | | |
| Outlook | Stable | |
| Issuer Rating | Baa1 | |
| First Mortgage Bonds | A2 | |
| Senior Secured | A2 | |
| Senior Unsecured MTN | (P)Baa1 | |
| ALASKA ELECTRIC LIGHT AND POWER COMPANY(AELP) | | |
| Outlook | Stable | |
| Issuer Rating | Baa3 | |
| AVISTA CORP. CAPITAL II | | |
| Outlook | Stable | |
| BACKED Pref. Stock | Baa2 | |
| Source: Moody's Investors Service | | |

© 2017 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT-LIKE SECURITIES, AND MOODY'S PUBLICATIONS MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS ON OT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS NOR MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER. ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. 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 or in preparing the Moody's publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any rating, agreed to pay to Moody's Investors Service, Inc. for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of 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 reckless and inappropriate for retail investors to use MOODY'S credit ratings or publications when making an investment decision. If in doubt you should contact your financial or other professional adviser.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a 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. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJKK or MSFJ (as applicable) for appraisal and rating services rendered by it fees ranging from JPY200,000 to approximately JPY350,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

REPORT NUMBER

1062628

