

MOODY'S

INVESTORS SERVICE

Rating Action: Moody's changes outlooks on 25 US regulated utilities primarily impacted by tax reform

19 Jan 2018

New York, January 19, 2018 -- Moody's Investors Service, ("Moody's") has changed the rating outlooks to negative from stable for 24 regulated utilities and utility holding companies; and to stable from positive for one utility holding company in the United States. The short-term and long-term ratings for all 25 companies were affirmed.

RATINGS RATIONALE

"Today's action primarily applies to companies that already had limited cushion in their rating for deterioration in financial performance, will be incrementally impacted by changes in the tax law and where we now expect key credit metrics to be lower for longer," said Jim Hempstead, a Managing Director at Moody's. "Utilities will work closely with state regulators to try to mitigate the negative impact of tax reform and in some cases they may seek to refine their corporate financial policies. Where successful, their rating outlooks could revert to stable."

Tax reform is credit negative for US regulated utilities because the lower 21% statutory tax rate reduces cash collected from customers, while the loss of bonus depreciation reduces tax deferrals, all else being equal. Moody's calculates that the recent changes in tax laws will dilute a utility's ratio of cash flow before changes in working capital to debt by approximately 150 - 250 basis points on average, depending to some degree on the size of the company's capital expenditure programs. From a leverage perspective, Moody's estimates that debt to total capitalization ratios will increase, based on the lower value of deferred tax liabilities.

The change in outlook to negative from stable for the 24 companies affected in this rating action primarily reflects the incremental cash flow shortfall caused by tax reform on projected financial metrics that were already weak, or were expected to become weak, given the existing rating for those companies. The negative outlook also considers the uncertainty over the timing of any regulatory actions or other changes to corporate finance policies made to offset the financial impact.

The change in outlook to stable from positive for American Electric Power Company, Inc. (AEP, Baa1 stable) reflects Moody's calculations that the projected ratio of cash flow before changes in working capital to debt, incorporating the effects of tax reform, will remain in the mid-teens range. At this level, Moody's believes AEP's Baa1 rating is appropriate.

The vast majority of US regulated utilities, however, continue to maintain stable rating outlooks. We do not expect the cash flow reduction associated with tax reform to materially impact their credit profiles because sufficient cushion exists within projected financial metrics for their current ratings. Nonetheless, further actions could occur on a company specific basis.

Over the next 12 to 18 months, Moody's will continue to monitor the financial impact of tax reform on each company, including its regulatory approach to rate treatment and any changes to corporate finance strategies. This will include balance sheet changes due to the reclassification of excess deferred tax liabilities as a regulatory liability and the magnitude of any amounts to be refunded to customers. If the financial impact of tax reform is more severe than Moody's initial estimates or the companies fail to materially mitigate any weaknesses in their financial profiles, the ratings could be downgraded.

That said, Moody's expects that most utilities will attempt to manage any negative financial implications of tax reform through regulatory channels. Corporate financial policies could also change. The actions taken by utilities will be incorporated into the credit analysis on a prospective basis. As a result, it is conceivable that some companies will sufficiently defend their credit profiles. For these companies, it is possible for the outlook to return to stable.

Potential regulatory offsets to tax-related cash leakage could include: accelerated cost recovery of certain regulatory assets or future investment; changes to the equity layer or allowed ROEs in rates, and other actions. Changes to corporate financial policies could include changes to capitalization, the financing of future

investments, dividend growth, or others. Some of these corporate measures could have a more immediate boost to projected metrics than certain regulatory provisions, which may take time to approve and implement.

Outlook Actions:

..Issuer: American Electric Power Company, Inc.

....Outlook, Changed To Stable From Positive

..Issuer: Avista Corp.

....Outlook, Changed To Negative From Stable

..Issuer: Avista Corp. Capital II

....Outlook, Changed To Negative From Stable

..Issuer: Duke Energy Corporation

....Outlook, Changed To Negative From Stable

..Issuer: Entergy Corporation

....Outlook, Changed To Negative From Stable

..Issuer: New Jersey Natural Gas Company

....Outlook, Changed To Negative From Stable

..Issuer: Northwest Natural Gas Company

....Outlook, Changed To Negative From Stable

..Issuer: ONE Gas, Inc

....Outlook, Changed To Negative From Stable

..Issuer: Piedmont Natural Gas Company, Inc.

....Outlook, Changed To Negative From Stable

..Issuer: Public Service Company of Oklahoma

....Outlook, Changed To Negative From Stable

..Issuer: Questar Gas Company

....Outlook, Changed To Negative From Stable

..Issuer: South Jersey Gas Company

....Outlook, Changed To Negative From Stable

..Issuer: Alabama Power Capital Trust V

....Outlook, Changed To Negative From Stable

..Issuer: Alabama Power Company

....Outlook, Changed To Negative From Stable

..Issuer: Southern Company (The)

....Outlook, Changed To Negative From Stable

..Issuer: Southern Elect Generating Co

...Outlook, Changed To Negative From Stable

..Issuer: Southwestern Public Service Company

...Outlook, Changed To Negative From Stable

..Issuer: Wisconsin Gas LLC

...Outlook, Changed To Negative From Stable

..Issuer: American Water Capital Corp.

...Outlook, Changed To Negative From Stable

Issuer: American Water Works Company, Inc.

...Outlook, Changed To Negative From Stable

Outlook Actions:

..Issuer: Consolidated Edison Company of New York, Inc.

...Outlook, Changed To Negative From Stable

..Issuer: Consolidated Edison, Inc.

...Outlook, Changed To Negative From Stable

..Issuer: Orange and Rockland Utilities, Inc.

...Outlook, Changed To Negative From Stable

..Issuer: Brooklyn Union Gas Company, The

...Outlook, Changed To Negative From Stable

..Issuer: KeySpan Gas East Corporation

...Outlook, Changed To Negative From Stable

Affirmations:

..Issuer: American Electric Power Company, Inc.

... Commercial Paper, Affirmed P-2

...Senior Unsecured Shelf, Affirmed (P)Baa1

...Junior Subordinated Shelf, Affirmed (P)Baa2

...Senior Unsecured Regular Bond/Debenture, Affirmed Baa1

..Issuer: Avista Corp.

... Issuer Rating, Affirmed Baa1

...Senior Secured First Mortgage Bonds, Affirmed A2

...Underlying Senior Secured First Mortgage Bonds, Affirmed A2

...Senior Secured Medium-Term Note Program, Affirmed (P)A2

...Senior Secured Regular Bond/Debenture, Affirmed A2

...Senior Unsecured Medium-Term Note Program, Affirmed (P)Baa1

..Issuer: Avista Corp. Capital II

....Pref. Stock Preferred Stock, Affirmed Baa2
..Issuer: Duke Energy Corporation
.... Issuer Rating, Affirmed Baa1
....Junior Subordinated Regular Bond/Debenture, Affirmed Baa2
....Senior Unsecured Shelf, Affirmed (P)Baa1
....Senior Unsecured Bank Credit Facility, Affirmed Baa1
....Senior Unsecured Commercial Paper, Affirmed P-2
....Senior Unsecured Regular Bond/Debenture, Affirmed Baa1
..Issuer: Entergy Corporation
.... Issuer Rating, Affirmed Baa2
....Senior Unsecured Commercial Paper, Affirmed P-2
....Senior Unsecured Regular Bond/Debenture, Affirmed Baa2
....Senior Unsecured Shelf, Affirmed (P)Baa2
..Issuer: New Jersey Natural Gas Company
.... Commercial Paper, Affirmed P-1
..Issuer: Northwest Natural Gas Company
.... Commercial Paper, Affirmed P-2
....Senior Secured Medium-Term Note Program, Affirmed (P)A1
....Senior Unsecured Medium-Term Note Program, Affirmed (P)A3
....Senior Secured Shelf, Affirmed (P)A1
....Senior Unsecured Shelf, Affirmed (P)A3
....Preferred Shelf, Affirmed (P)Baa2
....Senior Secured First Mortgage Bonds, Affirmed A1
....Senior Secured Regular Bond/Debenture, Affirmed A1
..Issuer: ONE Gas, Inc
....Senior Unsecured Commercial Paper, Affirmed P-1
....Senior Unsecured Regular Bond/Debenture, Affirmed A2
..Issuer: Piedmont Natural Gas Company, Inc.
....Senior Unsecured Commercial Paper, Affirmed P-1
....Senior Unsecured Regular Bond/Debenture, Affirmed A2
..Issuer: Public Service Company of Oklahoma
.... Issuer Rating, Affirmed A3
....Senior Unsecured Regular Bond/Debenture, Affirmed A3

..Issuer: Questar Gas Company
....Senior Unsecured Commercial Paper, Affirmed P-1
....Senior Unsecured Medium-Term Note Program, Affirmed (P)A2
....Senior Unsecured Regular Bond/Debenture, Affirmed A2
..Issuer: Alabama Power Capital Trust V
....Pref. Stock Preferred Stock, Affirmed A2
..Issuer: Alabama Power Company
.... Commercial Paper, Affirmed P-1
.... Issuer Rating, Affirmed A1
....Senior Unsecured Shelf, Affirmed (P)A1
....Preferred Shelf, Affirmed (P)A3
....Preference Shelf, Affirmed (P)A3
....Pref. Stock Preferred Stock, Affirmed A3
....Senior Unsecured Bank Credit Facility, Affirmed A1
....Senior Unsecured Commercial Paper, Affirmed P-1
....Senior Unsecured Regular Bond/Debenture, Affirmed A1
..Issuer: Columbia (Town of) AL, Industrial Dev. Board
....Senior Unsecured Revenue Bonds, Affirmed A1
....Senior Unsecured Revenue Bonds, Affirmed VMIG 1
..Issuer: Eutaw (City of) AL, Industrial Dev. Board
....Senior Unsecured Revenue Bonds, Affirmed A1
....Senior Unsecured Revenue Bonds, Affirmed VMIG 1
..Issuer: Mobile (City of) AL, I.D.B.
....Senior Unsecured Revenue Bonds, Affirmed A1
....Senior Unsecured Revenue Bonds, Affirmed VMIG 1
..Issuer: Walker County Econ & Ind Dev Authority
....Senior Unsecured Revenue Bonds, Affirmed A1
....Senior Unsecured Revenue Bonds, Affirmed VMIG 1
..Issuer: West Jefferson (Town of) AL, Ind. Devel. Bd.
....Senior Unsecured Revenue Bonds, Affirmed A1
....Senior Unsecured Revenue Bonds, Affirmed VMIG 1
..Issuer: Wilsonville (Town of) AL, I.D.B.
....Senior Unsecured Revenue Bonds, Affirmed A1
....Senior Unsecured Revenue Bonds, Affirmed VMIG 1

....Underlying Senior Unsecured Revenue Bonds, Affirmed A1
..Issuer: South Jersey Gas Company
.... Issuer Rating, Affirmed A2
....Senior Secured First Mortgage Bonds, Affirmed Aa3
....Senior Secured Medium-Term Note Program, Affirmed (P)Aa3
....Senior Secured Regular Bond/Debenture, Affirmed Aa3
....Senior Unsecured Commercial Paper, Affirmed P-1
..Issuer: New Jersey Economic Development Authority
....Senior Secured Revenue Bonds, Affirmed Aa3
....Underlying Senior Secured Revenue Bonds, Affirmed Aa3
....Senior Secured Revenue Bonds, Affirmed Aa2
....Underlying Senior Secured Revenue Bonds, Affirmed Aa2
..Issuer: Southern Company (The)
.... Commercial Paper, Affirmed P-2
....Junior Subordinated Regular Bond/Debenture, Affirmed Baa3
....Senior Unsecured Shelf, Affirmed (P)Baa2
....Junior Subordinated Shelf, Affirmed (P)Baa3
....Senior Unsecured Bank Credit Facility, Affirmed Baa2
....Senior Unsecured Regular Bond/Debenture, Affirmed Baa2
..Issuer: Southern Elect Generating Co
.... Issuer Rating, Affirmed A2
....Senior Unsecured Regular Bond/Debenture, Affirmed A1
..Issuer: Southwestern Public Service Company
.... Issuer Rating, Affirmed Baa1
....Senior Secured Shelf, Affirmed (P)A2
....Senior Unsecured Shelf, Affirmed (P)Baa1
....Senior Secured First Mortgage Bonds, Affirmed A2
....Senior Unsecured Bank Credit Facility, Affirmed Baa1
....Senior Unsecured Commercial Paper, Affirmed P-2
....Senior Unsecured Regular Bond/Debenture, Affirmed Baa1
..Issuer: Wisconsin Gas LLC
.... Commercial Paper, Affirmed P-1
....Senior Unsecured Regular Bond/Debenture, Affirmed A2

..Issuer: American Water Capital Corp.
... Issuer Rating, Affirmed A3
...Senior Unsecured Shelf, Affirmed (P)A3
...Senior Unsecured Commercial Paper, Affirmed P-2
...Senior Unsecured Regular Bond/Debenture, Affirmed A3
..Issuer: American Water Works Company, Inc.
... Issuer Rating, Affirmed A3
..Issuer: Berks County Industrial Development Auth., PA
...Senior Unsecured Revenue Bonds, Affirmed A3
..Issuer: California Pollution Control Financing Auth.
...Senior Unsecured Revenue Bonds, Affirmed A3
..Issuer: Illinois Development Finance Authority
...Senior Unsecured Revenue Bonds, Affirmed A3
..Issuer: Illinois Finance Authority
...Senior Unsecured Revenue Bonds, Affirmed A3
..Issuer: Indiana Finance Authority
...Senior Unsecured Revenue Bonds, Affirmed A3
..Issuer: MARICOPA COUNTY INDUSTRIAL DEVELOPMENT AUTHORITY,AZ
...Senior Unsecured Revenue Bonds, Affirmed A3
..Issuer: Northampton County I.D.A., PA
...Senior Unsecured Revenue Bonds, Affirmed A3
..Issuer: Owen (County of) KY
...Senior Unsecured Revenue Bonds, Affirmed A3
..Issuer: Consolidated Edison Company of New York, Inc.
... Issuer Rating, Affirmed A2
...Senior Unsecured Shelf, Affirmed (P)A2
...Subordinate Shelf, Affirmed (P)A3
...Preferred Shelf, Affirmed (P)Baa1
...Senior Unsecured Commercial Paper, Affirmed P-1
...Senior Unsecured Regular Bond/Debenture, Affirmed A2
...Underlying Senior Unsecured Regular Bond/Debenture, Affirmed A2
..Issuer: New York State Energy Research & Dev. Auth.
...Senior Unsecured Revenue Bonds, Affirmed A2
...Underlying Senior Unsecured Revenue Bonds, Affirmed A2

..Issuer: New York State Research & Development Auth.
...Senior Unsecured Revenue Bonds, Affirmed A2
...Underlying Senior Unsecured Revenue Bonds, Affirmed A2
..Issuer: Consolidated Edison, Inc.
.... Issuer Rating, Affirmed A3
...Senior Unsecured Shelf, Affirmed (P)A3
...Senior Unsecured Commercial Paper, Affirmed P-2
...Senior Unsecured Regular Bond/Debenture, Affirmed A3
..Issuer: Orange and Rockland Utilities, Inc.
.... Issuer Rating, Affirmed A3
...Senior Unsecured Commercial Paper, Affirmed P-2
...Senior Unsecured Regular Bond/Debenture, Affirmed A3
..Issuer: Brooklyn Union Gas Company, The
....LT Issuer Rating, Affirmed A2
...Senior Unsecured Regular Bond/Debenture, Affirmed A2
..Issuer: New York State Energy Research & Dev. Auth.
...Backed LT IRB/PC Insured, Affirmed A2
...Underlying LT IRB/PC, Affirmed A2
Issuer: KeySpan Gas East Corporation
...LT Issuer Rating, Affirmed A2
...Senior Unsecured Regular Bond/Debenture, Affirmed A2

The principal methodology used in rating Public Service Company of Oklahoma, Southwestern Public Service Company, Southern Company (The), Alabama Power Company, Alabama Power Capital Trust V, Southern Elect Generating Co, South Jersey Gas Company, Wisconsin Gas LLC, American Electric Power Company, Inc., Duke Energy Corporation, Piedmont Natural Gas Company, Inc., Avista Corp., Avista Corp. Capital II, ONE Gas, Inc, New Jersey Natural Gas Company, Northwest Natural Gas Company, Questar Gas Company, Entergy Corporation, Consolidated Edison, Inc., Consolidated Edison Company of New York, Inc., Brooklyn Union Gas Company, The, KeySpan Gas East Corporation, and Orange and Rockland Utilities, Inc. was Regulated Electric and Gas Utilities published in June 2017. The principal methodology used in rating American Water Works Company, Inc. and American Water Capital Corp. was Regulated Water Utilities published in December 2015. Please see the Rating Methodologies page on www.moodys.com for a copy of these methodologies.

REGULATORY DISCLOSURES

For ratings issued on a program, series or category/class of debt, this announcement provides certain regulatory disclosures in relation to each rating of a subsequently issued bond or note of the same series or category/class of debt or pursuant to a program for which the ratings are derived exclusively from existing ratings in accordance with Moody's rating practices. For ratings issued on a support provider, this announcement provides certain regulatory disclosures in relation to the credit rating action on the support provider and in relation to each particular credit rating action for securities that derive their credit ratings from the support provider's credit rating. For provisional ratings, this announcement provides certain regulatory disclosures in relation to the provisional rating assigned, and in relation to a definitive rating that may be

assigned subsequent to the final issuance of the debt, in each case where the transaction structure and terms have not changed prior to the assignment of the definitive rating in a manner that would have affected the rating. For further information please see the ratings tab on the issuer/entity page for the respective issuer on www.moodys.com.

For any affected securities or rated entities receiving direct credit support from the primary entity(ies) of this credit rating action, and whose ratings may change as a result of this credit rating action, the associated regulatory disclosures will be those of the guarantor entity. Exceptions to this approach exist for the following disclosures, if applicable to jurisdiction: Ancillary Services, Disclosure to rated entity, Disclosure from rated entity.

Regulatory disclosures contained in this press release apply to the credit rating and, if applicable, the related rating outlook or rating review.

The relevant office for each credit rating is identified in "Debt/deal box" on the Ratings tab in the Debt/Deal List section of each issuer/entity page of the website.

Please see www.moodys.com for any updates on changes to the lead rating analyst and to the Moody's legal entity that has issued the rating.

Please see the ratings tab on the issuer/entity page on www.moodys.com for additional regulatory disclosures for each credit rating.

Ryan Wobbrock
Vice President - Senior Analyst
Infrastructure Finance Group
Moody's Investors Service, Inc.
250 Greenwich Street
New York, NY 10007
U.S.A.
JOURNALISTS: 1 212 553 0376
Client Service: 1 212 553 1653

Jim Hempstead
MD - Utilities
Infrastructure Finance Group
JOURNALISTS: 1 212 553 0376
Client Service: 1 212 553 1653

Releasing Office:
Moody's Investors Service, Inc.
250 Greenwich Street
New York, NY 10007
U.S.A.
JOURNALISTS: 1 212 553 0376
Client Service: 1 212 553 1653

Moody's
INVESTORS SERVICE

© 2018 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 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 DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND 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.

CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

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.