

CREDIT OPINION

18 November 2020

Update

✓ Rate this Research

RATINGS

Indian Renewable Energy Develop. Agency Ltd.

Domicile	India
Long Term CRR	Not Assigned
Long Term Issuer Rating	Baa3
Type	LT Issuer Rating - Fgn Curr
Outlook	Negative

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

Jeffrey Lee +65.6311.2649
 AVP-Analyst
jeffrey.lee@moodys.com

Alka Anbarasu +65.6398.3712
 VP-Sr Credit Officer
alka.anbarasu@moodys.com

Chong Jun (CJ) Wong +65.6311.2616
 Associate Analyst
chongjuncj.wong@moodys.com

Graeme Knowd +65.6311.2629
 MD-Banking
graeme.knowd@moodys.com

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454

Indian Renewable Energy Develop. Agency Ltd.

Update following fiscal 2020 results

Summary

[Indian Renewable Energy Develop. Agency Ltd.](#)'s (IREDA) Baa3 local- and foreign-currency issuer ratings reflect its Baseline Credit Assessment (BCA) of ba3 and our assessment of close links between IREDA and the [Government of India](#) (Baa3 negative), which results in three notches of support uplift from its BCA. The rating outlook is negative.

The negative outlook reflects our expectation that the company's ba3 BCA could come under pressure if its financial performance remains weak over the next 12-18 months; or a downgrade in sovereign rating will result in a downgrade of the company's ratings.

IREDA's BCA reflects the company's weak asset quality as a result of high credit concentration, declining earnings because of increasing credit costs and modest capitalization following rapid credit growth.

As a renewables project financing company, IREDA's credit concentration is high. As of the end of March 2020, the company's top 20 borrowers accounted for about 36.3% of gross loans. The company also experienced rapid credit growth in the past five years. While the strong growth occurred from a low base, the company's loan book is untested yet.

As a result of high concentration and unseasoned loans, the company's problems loans have steadily increased in the past few years. In the fiscal year that ended March 2020 (fiscal 2020), its problem loan ratio increased to 10.0% from 6.1% in the previous year, which is much higher than the 3.5% in fiscal 2014.

IREDA's profitability has declined in recent years because of thinner margins and rising credit costs. In fiscal 2020, the company's net income/average managed assets fell to 0.8% from 1.4% a year earlier. The company's weaker internal capital generation, combined with rapid credit growth, resulted in a decline in its capitalization. Its tangible common equity/total managed assets declined to 7.4% as of the end of March 2020 from 10.5% as of the end of March 2019.

The company relies heavily on market funding because it cannot access deposits as a finance company. Nevertheless, this weakness is mitigated by its diverse funding channels and long-tenured borrowings from multilateral agencies that have been mostly guaranteed by the government.

We classify IREDA as a government-related issuer and apply the associated methodology to arrive at the ratings. Its standalone BCA is derived on the basis of our Finance Companies rating methodology.

Credit strengths

- » Stable liquidity and funding, with long-duration borrowings from bilateral and multilateral agencies that are mostly supported by guarantees from the Indian government
- » Government ownership, as well as its role as the key agency to implement the government's renewable energy initiatives, which ensure strong direct and indirect funding support from the government

Credit challenges

- » Declining capital because of higher credit costs and lower profitability
- » Weak asset quality from legacy loans to the cogeneration, biomass and hydro sectors, which form most of the company's gross nonperforming assets
- » High concentration risks because of its exposure to the renewable energy sector only
- » Relatively small capital base, which limits IREDA's strategic importance and its role in financing renewable energy

Outlook

The outlook on IREDA's ratings is negative.

Factors that could lead to an upgrade

Given the negative rating outlook, we are unlikely to upgrade the company's ratings during the next 12-18 months. Nevertheless, the rating outlook could return to stable if the company returns to its historical levels of profitability on a sustained basis, and its asset-quality metrics remain stable and are supported by a strengthening in IREDA's loss-absorbing buffers.

Factors that could lead to a downgrade

Downward pressure on the ratings could materialize through a continued deterioration in the company's asset quality, or a significant weakening in its capitalization or profitability, or both. In addition, any changes in the company's policy role could hurt the ratings.

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.moody's.com for the most updated credit rating action information and rating history.

Key indicators

Exhibit 1

Indian Renewable Energy Develop. Agency Ltd. (Consolidated Financials) [1]

	03-20 ²	03-19 ²	03-18 ²	03-17 ²	03-16 ²	CAGR/Avg. ³
Total managed assets (INR Million)	276,523.6	243,609.6	202,652.7	186,097.5	131,458.2	20.4 ⁴
Total managed assets (USD Million)	3,655.2	3,516.6	3,107.1	2,865.9	1,985.1	16.5 ⁴
Net Income / Average Managed Assets (%)	0.8	1.4	1.9	2.3	2.6	1.8 ⁵
Tangible Common Equity (Finance) / Tangible Managed Assets (%)	7.3	10.5	12.4	13.5	17.5	12.2 ⁵
Problem Loans / Gross Loans (Finance) (%)	10.0	6.1	6.3	5.7	5.7	6.8 ⁵
Net Charge-offs / Average Gross Loans and Leases (%)	0.7	0.6	0.2	--	--	0.5 ⁵
Debt Maturities Coverage (%)	0.0	20.6	290.7	126.5	105.1	108.6 ⁵
Secured Debt / Gross Tangible Assets (%)	39.8	35.5	29.6	27.2	34.0	33.2 ⁵

[1] All figures and ratios are adjusted using Moody's standard adjustments. [2] LOCAL GAAP [3] May include rounding differences because of the scale of reported amounts. [4] Compound annual growth rate (%) based on the periods for the latest accounting regime. [5] Simple average of periods for the latest accounting regime.

Sources: Moody's Investors Service and company filings

Profile

Indian Renewable Energy Develop. Agency Ltd.'s (IREDA) principal activities involve engaging in promoting, developing and extending financial assistance for setting up projects related to new and renewable sources of energy, energy efficiency or conservation.

IREDA is a public financial institution under section 2(72) of the Companies Act, 2013, and registered as a non-banking financial company with the Reserve Bank of India (RBI). It was established in March 1987 and is wholly owned by the Indian government under the Ministry of New and Renewable Energy (MNRE).

The company is headquartered in New Delhi, with branch offices in Chennai, Hyderabad and Ahmedabad.

Detailed credit considerations

Weak operating environment and credit concentration pose downside risks to asset quality

IREDA's asset risk is high because of its credit concentration in a few borrowers and an unseasoned loan book.

As of the end of March 2020, the top 20 borrowers accounted for 36.3% of total loans, an increase from 32.7% a year earlier. High credit concentration in a few borrowers exposes the company to downside risks because problems in a few accounts can cause a considerable increase in nonperforming loans (NPLs). For example, the top four NPL accounts represented 33.5% of IREDA's total NPLs as of 30 March 2020.

We expect IREDA's credit concentration to remain high because the company continues to have a policy role of providing financing to a small number of renewable energy projects in India. We expect wind and solar projects to represent a significant proportion of IREDA's new disbursements because the company plans to reduce loans to hydropower and biomass projects to avoid asset-quality deterioration. The wind and solar projects currently account for about 75% of its total loans.

IREDA's loan book is also geographically concentrated in certain Indian states. High geographic concentration renders the company vulnerable to any policy changes, particularly around the pricing and purchase of renewable energy from the producers based in that state.

At the same time, the company has grown its loan book significantly in the past five years. Its compounded annual growth rate of gross loans between fiscal 2016 and fiscal 2020 was high at 22.8%. While this growth occurred from a small base, a large proportion of its loan book is untested.

IREDA's problem loans/gross loans jumped in fiscal 2020 to 10.0% from 6.1% a year earlier, as the company changed its recognition of NPLs to more than 90 days overdue from 120 days in fiscal 2019. The company's problem loans are mainly from projects related to small hydro, cogeneration and biomass segments, and we expect the company's asset quality to deteriorate further in these segments. However, the asset-quality performance of wind and solar projects, which is the company's key focus area, remains stable.

While we do not expect a significant jump in problem loans like in fiscal 2020, the risk of further asset-quality deterioration in the coming years is high because of the difficult operating environment following the disruptions caused by the pandemic. Following the

RBI's guidelines announced on 27 March 2020, the company provided moratoriums on the payments of installments and/or interests to eligible borrowers. Currently, these loans under moratorium are not included in the past dues; however, we expect some slippages once the measures are fully lifted.

However, the low interest rate environment and other government measures will support borrowers' debt-servicing capacity. For example, the liquidity injection to state-owned power distribution companies (DISCOMs) from Power Finance Corporation and REC Limited, following the government announcement on 13 May 2020, will help alleviate near-term credit risks for power sector lenders, including IREDA, as the plan helps reduce the spillover of liquidity shortfalls to power generation companies.

Declining net interest margin (NIM) and high credit costs weigh on profitability

IREDA's return on average managed assets declined to 0.8% in fiscal 2020 from 1.4% a year earlier. The decrease in the company's profitability can be attributed to the decrease in NIM and higher loan-loss provisions recorded.

NIM shrunk to 3.3% in fiscal 2020 from 3.7% a year earlier because of the significant increase in funding costs as the default of Infrastructure Leasing & Financial Services in 2018 caused a liquidity crunch in the non-bank financial companies sector.

The increase in loan-loss provisions also contributed to the decline in IREDA's profitability. For fiscal 2020, loan-loss provisions as a percentage of gross loans increased to 2.2% from 1.4% a year earlier, in line with the deterioration in asset quality.

The company's loan-loss provisions will decline from the historical high in fiscal 2020 because the firm completed the migration of its NPLs to the 90 days past due category as of the end of fiscal 2020.

However, we expect credit costs to remain relatively high in the next coming few years because of high asset risk given the difficult operating environment. Further asset-quality deterioration would not only require the company to provision against new problem loans but also lead to additional provisions for the existing problem loans. The company's loan-loss provisions/problem loans remained low at 31.0% as of the end of fiscal 2020.

However, the low interest rate environment will help the company reduce its funding costs because it heavily relies on borrowings and capital markets.

Modest capitalization because of rapid credit growth

IREDA's capitalization is modest because rapid credit growth has outpaced internal capital generation. The company's tangible common equity/tangible managed assets (TCE/TMA) fell to 7.4% as of the end of March 2020 from 10.5% as of the end of March 2019 and 12.4% as of the end of March 2018. The company's capital/risk-weighted assets also declined to 14.3% as of the end of March 2020 from 16.3% a year earlier; however, it remained higher than the regulatory requirement of 12% as prescribed under the RBI norms.

In fiscal 2020, the company's TCE ratio declined, despite a moderation in loan growth to 10.4% compared with the 2016-20 CAGR of 22.8%, because of a decrease in the company's net profit, losses from foreign-currency translation and a substantial increase in dividends paid. The net losses from foreign-currency translation and increase in dividends accounted for around 40% of the decrease in TCE for fiscal 2020.

We expect capitalization to remain stable over the next 12-18 months, underpinned by a moderation in loan growth and planned dividend suspension over the next five years.

IREDA had plans to go public via an IPO. However, the IPO has been postponed for the past three years, and the plan to go public will likely continue to be deferred because of poor market conditions following the pandemic. Without additional capital, we expect the company to moderate its loan growth, otherwise, rapid loan growth will weigh on its capitalization.

Following the change in status to a Miniratna in 2015, the government ceased its budgetary capital allocations to IREDA. Nevertheless, we expect the government to continue to support the company in times of need, given the strategic importance of the renewable energy sector.

Funding diversification and long-tenured funding mitigate high reliance on market funding

As a non-deposit taking finance company, IREDA has heavy reliance on wholesale funding, such as borrowing from financial institutions and capital markets financing. However, the company benefits from diverse funding channels, with access to borrowings from bilateral and multilateral agencies, domestic debt markets and international debt markets, as well as term loans from banks.

Out of the company's total borrowings as of 30 March 2020, about 48% are from bilateral and multilateral agencies. Masala bonds, taxable bonds and tax-free bonds in the domestic capital market represented 42% of its total borrowings during the same period, while the remaining borrowings comprised funding from banks and other financial institutions.

In addition, as of the end of March 2020, about 70% of the foreign-currency borrowings had explicit guarantees from the Indian government. IREDA also benefits from long-tenured borrowings that help mitigate the risk of short-term volatility in the debt markets. Of the company's total borrowings, 73% will mature in or after March 2023.

Despite the long-term funding, IREDA's 12-month coverage ratio — calculated as cash and other liquid resources/debt maturing in 12 months — has declined since 2019 because the company keeps thin liquidity on balance sheet. Its 12-month coverage ratio was 60.8% as of the end of fiscal 2020, which indicates that the company could face imminent funding needs because it does not have sufficient liquidity to meet obligations maturing within the year.

IREDA manages the liquidity risk by matching cash inflows from collections of interests and installments with cash outflows. The company also has uncommitted credit lines from financial institutions including multilateral agencies and public-sector commercial banks.

The company's funds from operations as a percentage of total debt, which serves as an indicator of the company's ability to pay interest and meet debt maturities, deteriorated to 2.7% in fiscal 2020 from 2.2% in fiscal 2019 and 3.5% in fiscal 2018, mainly because of the increase in leverage.

Its reliance on secured debt has also increased steadily since fiscal 2018 because of an increase in funding from the issuance of domestic bonds, which are secured by its assets. This is credit negative for its liquidity because it reduces the company's financial flexibility to access additional sources of liquidity in times of need. The company's secured debt/gross tangible assets was 39.8% as of the end of March 2020.

Government support, given IREDA's status as a key renewable energy agency

Renewable energy is an important component of India's energy planning process. The MNRE aims to add 175 gigawatts to the country's renewable energy capacity by 2022, with a road map supported by policy and regulatory help for the sector. Furthermore, the RBI has included renewable energy financing in the priority-sector lending category.

IREDA is the nodal agency to route the government's various subsidies and grants to the renewable energy sector. The company is also the program administrator for MNRE schemes, such as the generation-based incentive scheme for wind and solar power projects, a rooftop solar power program and a capital subsidy scheme for solar water heating systems.

Because of this role, IREDA will likely continue to benefit from government support. This support was in the form of regular equity infusions until fiscal 2015, as well as guarantees for around 40% of the company's borrowings from multilateral agencies as of 30 March 2020 and access to tax-free bonds (a low-cost funding source).

Furthermore, the government allocated INR3 billion to IREDA from the National Clean Energy Fund for on-lending to banks and financial institutions in the renewable energy sector. IREDA was also mandated by the government in 2016 to raise INR40 billion in bonds, fully serviced by the Indian government to support various MNRE schemes, of which a total of INR16.4 billion was raised as of 31 March 2019.

Operating environment

We assign a Ba2 score to IREDA's Operating Environment, based wholly on the industry risk of Indian power-sector lenders. (India's Macro Profile reflected in the Baa2 Macro-Level Indicator score does not have any weighting in the scorecard because this score is higher than the Industry Risk score.)

The Operating Environment score has no impact on IREDA's financial profile and results in a Ba3 adjusted financial profile, in line with the Ba3 score before the consideration of the operating environment.

Macro-level indicator

IREDA's revenue is generated in India. The Baa2 Macro-Level Indicator score reflects a score of a2 for Economic Strength, ba1 for Institutional Strength, and ba for Susceptibility to Event Risk.

Industry risk

We assign a Ba Industry Risk score for Indian power-sector lenders. Lending to this sector is largely concentrated with banks and a few non-bank financial institutions. The technical nature of lending, big ticket size and underdeveloped bond market for lending to projects that are in the construction phase have led to the concentration of exposures with a few companies.

Given the significant stress in the Indian power sector, lenders are selective in their lending decisions and command some pricing power because a large number of companies have pulled back from the sector.

Lending to the power sector follows domestic economic cycles. Furthermore, there are significant differences in the quality of the industry participants in terms of project planning and implementation. This, combined with limited backup liquidity for many industry companies, tends to extend downturns because confidence-sensitive funding can be slow to return to the sector. The weak credit quality of power DISCOMs is another key challenge.

In line with the commitments under the Paris Agreement, India plans to increase the share of green energy in the total energy mix. Furthermore, technological improvements have made the pricing of renewable energy comparable with conventional energy. In line with these developments, renewable energy accounts for a greater share of new projects under implementation compared with conventional energy sources. Based on the government's stated capacity addition targets by 2022, renewable energy will account for only about 20% of the country's power generation and the remaining will be produced from conventional sources.

Lending to the power sector is fairly niche; however, companies in this segment have a long track record, given the fact that they have existed for a long time. Indian power-sector lenders have a stable product offering, given that the electrification of the country is a key policy agenda of the Indian government.

Business profile and financial policy

We make no business profile and financial policy adjustments to IREDA's scorecard.

Support and structural considerations

IREDA's Baa3 issuer rating is three notches above its BCA of ba3 and reflects our assessment of a high level of links between IREDA and the Indian government. The support assumption is based on our Government-Related Issuers methodology.

Methodology and scorecard

About Moody's Scorecard

Our scorecard is designed to capture, express and explain in summary form our Rating Committee's judgment. When read in conjunction with our research, a fulsome presentation of our judgment is expressed. As a result, the output of our scorecard may materially differ from that suggested by raw data alone (though it has been calibrated to avoid the frequent need for strong divergence). The scorecard output and the individual scores are discussed in Rating Committees and may be adjusted up or down to reflect conditions specific to each rated entity.

Rating methodology

The methodologies used in this rating were the [Finance Companies Methodology](#), published in November 2019, and the [Government-Related Issuers Methodology](#), published in February 2020.

Ratings

Exhibit 2

Category	Moody's Rating
INDIAN RENEWABLE ENERGY DEVELOP. AGENCY LTD.	
Outlook	Negative
Issuer Rating	Baa3
Senior Unsecured -Dom Curr	Baa3
Other Short Term	(P)P-3

Source: Moody's Investors Service

DRAFT-CONFIDENTIAL

© 2020 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/OR ITS CREDIT RATINGS AFFILIATES ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S INVESTORS SERVICE 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 OR IMPAIRMENT. SEE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S INVESTORS SERVICE CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER 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. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES ITS 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, ASSESSMENTS, OTHER OPINIONS, AND 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, ASSESSMENTS, OTHER OPINIONS OR 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.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND 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 its 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 CREDIT RATING, ASSESSMENT, 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 credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$2,700,000. MCO and Moody's investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moody.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 61 003 399 657 AFSL 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.

Additional terms for Japan only: Moody's Japan K.K. ("MJJK") 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 MJJK. 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. MJJK 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.

MJJK 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 MJJK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJJK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY250,000,000.

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

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454

DRAFT-CONFIDENTIAL