MOODY'S INVESTORS SERVICE

CREDIT OPINION
25 September 2023

Update

Send Your Feedback

RATINGS

SFO Fuel Company, LLC

Domicile	California, United States
Long Term Rating	Not Available
Type	Not Available
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

Moses Kopmar +1.415.274.1758
Vice President - Senior Analyst
moses.kopmar@moodys.com

Kurt Krummenacker +1.212.553.7207
Associate Managing Director
kurt.krummenacker@moodys.com

CLIENT SERVICES

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

SFO Fuel Company, LLC

Update to credit analysis

Summary

SFO Fuel LLC's credit profile (A1 stable) reflects the company's right to operate the exclusive system for the receipt, storage, transmission and distribution of fuel at one of the top 10 busiest airports in the US: San Francisco International Airport (23.4 million enplanements in FY 2023, managed by the San Francisco Airport Commission, A1 stable). The credit profile also reflects the essential role that the company provides to its consortium of airlines (Contracting Airlines) since the airlines depend on the fuel facility in order to operate efficiently. The company's contractual structure ensures stable net cash flow without any revenue variability linked to performance, volumes, or availability because the company is entitled to recover from the contracting airlines all of its costs on a timely basis. Further, the contractual structure provides a strong mitigation of airline credit risk, which has increased since the coronavirus pandemic due to material declines in traffic and financial stress; in addition, there is protection from other risks such as cost increases, stranded assets, force majeure, and technology. Credit challenges recognized in the credit profile include the sum sufficient debt service coverage resulting from the cost recovery profile of the project.

Credit strengths

» Right to operate an essential asset on a de facto exclusive basis at San Francisco International Airport, one of the busiest airports in the US

» High degree of predictability of cash flows reflecting the absence of availability, demand and performance risk that could reduce revenues; solid mitigation of the airline default risk

» Experienced project parties

» Technical and operating risks are well mitigated

Credit challenges

» Air traffic recovery at SFO has modestly lagged the broader sector

» Sum sufficient metrics that are offset by SFO Fuel's contractual rights to increase rates and fees to cover debt service payments

Rating outlook

The stable outlook is based on our expectation that the contracting airline profile will remain fairly stable and the airlines will continue to provide full financial support for all costs related to the fuel system, including additional capital costs associated with new improvements financed with the Series 2019 bonds to support increased fuel demand from airlines.

Factors that could lead to an upgrade

» Improved financial position of member airlines

» Greater cash reserves

Factors that could lead to a downgrade

» Dramatic changes in environmental remediation costs or in capital costs needed to keep the system in compliance with tightening environmental legislation

» Events that reduce the strong market position of SFO relative to major nearby airports

» Significant reductions in the number of member airlines

» Weakened debt service reserve or operating reserve accounts

Key indicators

Debt Service Coverage Ratios (DSCR) are typically used as the Key Indicator in the Generic Project Finance Methodology. However, SFO Fuel operates on a not-for-profit basis, whereby its revenues are adjusted under a pure cost recovery structure. Therefore, the DSCR will tend to be at or just above 1.00x, irrespective of the quantity of fuel delivered, expenses incurred or any other event.

Profile

SFO Fuel was organized on May 28, 1997 as a limited liability company under the laws of the state of Delaware for the purpose of leasing, constructing and operating the fuel system at San Francisco International Airport (SFO). The San Francisco Airport Commission issued Special Facilities Lease Revenue Bonds on October 7, 1997 and May 1, 2000. The bonds were issued specifically to finance the costs of acquisition, construction, modification, expansion and installation of certain additions, replacements and improvements to the jet fuel receipt, storage and distribution system serving SFO, certain diesel and gasoline storage, and delivery facilities for ground service equipment and related environmental costs. On February 20, 2019, the San Francisco Airport Commission issued Special Facilities Lease Revenue Bonds Series 2019 A/B which refunded all previously issued and outstanding special facilities lease revenue bonds and financed certain capital improvements. SFO Fuel contracts with Menzies Aviation for the operation and administration of the fuel system.

The San Francisco Airport Commission (Commission) granted a 31 year exclusive lease, expiring in June 2028, to SFO Fuel in 1997 of the sole fuel facilities for the storage and distribution of jet fuel on the airport. The lease term was extended to 2047 through an amendment in 2019, which was executed at the same time the Series 2019 A/B bonds were issued. The lease provides for ground rental of certain parcels of land and easements, as well as the payment of debt service on bonds issued by the Commission to finance facility improvements.

Detailed credit considerations

A Well Tested Model

SFO Fuel has been operating at SFO since 1997 and thus has considerable experience in that role. Its sole purpose is to acquire, construct, finance and lease assets used in connection with the fueling of aircraft and ground support equipment at the airport. SFO Fuel has no material operating risk since the jet fuel storage and distribution facilities are maintained and operated by Aircraft Services International, Inc (ASI, a wholly owned subsidiary of Menzies Aviation, Inc) under a contract as fuel system operator.

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

A critical concept to understand is that the fuel system is common use but the contractual nexus lies with the contracting airlines. Upon the payment of an entry fee and capital contribution, a contracting airline can obtain the use of the fuel system at a preferential member rate, and exercise various rights including the right to approve capital expenditures (while also becoming liable for certain obligations as detailed below). Non-contracting airlines pay a materially higher rate for using the fuel system and have no special rights. Thus, as long as an airline flies a minimum number of flights at the airport, there is a strong incentive to become and remain a contracting airline, as witnessed by the overwhelming proportion (~96%) of jet fuel used by the contracting airlines at the airport.

For the contracting airlines, the use of a common fueling system represents an efficient and economical solution to get fuel stored and delivered to their planes at the airport. Usually, the savings achieved by the airlines from having access to different jet fuel sources and to the fuel inventory storage offered by the common system largely offset the cost of building and operating a proprietary system. The capital investment in developing a hydrant system can be shared among multiple users and the operating costs of a hydrant system are much lower than operating a fleet of tank trucks. As a result, there is usually material support from the contracting airlines to operate the fuel system in a safe and efficient manner and to incur the costs needed to maintain and expand the system as required.

This concept is well tested through North America. In the US alone, there are multiple fuel facilities corporations at major airports all operating on similar though not necessarily identical terms.

Right to Operate an Essential Asset at a Major International Gateway

SFO Fuel operates at the airport, which is an essential aviation infrastructure asset in the national airport system. The airport served 23.4 million enplaned passengers in FY 2023, representing about 82% of the 28.6 million enplaned passengers in FY 2019.

SFO Fuel, as lessee and operator of the fuel system that is used to distribute all the jet fuel delivered at the airport's gates, provides an essential service for the good functioning of the airport operations. In addition, the contracting airlines must use the fuel system and no other, which underscores SFO Fuel's de facto exclusive position at the airport. While airlines may have recourse to tankering, that risk is limited especially for the long distance flights served by the airport.

Absence of Availability, Demand and Performance Risk; Airline Default Risk Well Mitigated

SFO Fuel benefits from a long term lease with the San Francisco Airport Commission, CA (A1 stable), which grants SFO Fuel the right to lease lands, install, operate and maintain an aircraft fueling system at the airport. The lease agreement imposed an absolute and unconditional payment obligation upon SFO Fuel, and the interline agreement among SFO Fuel and the contracting airlines provides SFO Fuel the ability to recover all its costs related to ground rent, debt service and miscellaneous costs such as insurance and property taxes, owed under its lease with the commission.

SFO Fuel is not responsible for any tank farm operations or into-plane operations, which are carried out by ASI (or into-plane agents on behalf of contracting airlines). SFO Fuel does not own the jet fuel delivered by the system. As a result of these arrangements, operating risk is low.

SFO Fuel's contractual framework ensures that SFO Fuel is in effect well protected against demand risk, unexpected events and especially airline credit risk. The contractual framework provides a high degree of certainty for SFO Fuel's cash flows for the term of the debt. In particular, the contractual framework gives SFO Fuel:

» Very clear and unequivocal contractual right to recover its costs and debt service requirements from the contracting airlines until SFO Fuel's obligations, including debt obligations, are extinguished; this payment is not subject to any deductions for performance and availability, nor is it subject to demand risk. Payments are billed in advance and due monthly, thus limiting any material working capital need. While SFO Fuel's cash costs are very predictable due to their nature, SFO Fuel can adjust its billing to the contracting airlines to recognize additional costs (for instance debt service costs once new debt is incurred, after the contracting airlines have approved a new project and related debt issue). Finally, SFO Fuel has the right to bill the contracting airlines to replenish any use of the airline Reserve Account or the Debt Service Reserve Fund.

» The requirement to pre-bill the contracting airlines for 2 months of service to be held in a reserve account by the company.

» Protection through a step-up obligation of remaining member airlines if a contracting airline defaults in its payment.

- The right to convert a defaulting contracting airline to a non-contracting airline, which would mean an immediate increase in the fueling cost for that airline.
- The right to deny service to any defaulting airline, a fairly severe consequence since there would not be any alternative to procure the fuel.
- Withdrawing airlines' undertaking to pay all obligations accrued up to the withdrawal date.
- Mechanism to have all SFO Fuel's obligations extinguished even in the case of all contracting airlines withdrawing from the consortium.

The strength of this contractual structure has been tested in the United States and Canada with fuel facilities corporations able to withstand various airline bankruptcies and reorganizations over many years. We note that SFO Fuel's ability to mitigate airline risk is all the more important given that one airline and its affiliates consume over 35% of the total fuel delivered by the system. However, we are of the view that even the most catastrophic scenario of that airline discontinuing its operations should not lead to any permanent duress for SFO Fuel due to multiple levels of protection outlined above and the strength of the airport's market position.

Experienced Project Parties Provide Further Strength

SFO Fuel has no employees. Maintenance, operation and management services are sub-contracted to and provided by ASI.

- ASI's parent Menzies is a company with vast experience in aviation services, being involved in several aspects of airport operations across the US, including the management of projects undertaken by fuel facilities corporations.
- ASI also carries out the tank farm services and is permitted to provide into-plane services.
- ASI's contract was recently extended, and we expect they will continue as operator, even if agreements may be for varying intervals

Technology and Operational Risk is Well Understood and Managed

Fuel facilities consortia have been operating for several decades now in the US with a good track record. SFO Fuel's system needs to be available on a 24/7 basis and, as a result, periodic testing for leaks with specialized equipment and preventive maintenance is carried out to avoid major disruptions in the system (all are the responsibility of the system operator). In the worst case scenario, should the system be destroyed and not be rebuilt, insurance proceeds and self-assessments, if necessary, from the contracting airlines would be used to extinguish all of SFO Fuel's obligations.

Minimal Exposure to Event Risk

Exposure to event risk is minimal given the proactive monitoring and the regular maintenance of the fuel system conducted by SFO Fuel, the insurance coverage that the company as well as the operator maintain and the fact that, by contractual agreement, SFO Fuel can continue to bill the contracting airlines for an amount covering the debt service obligation under all circumstances, even force majeure. Should insurance proceeds be insufficient to repay SFO Fuel's debt (if the fuel system is not rebuilt after full or partial destruction), SFO Fuel has the right to recover any shortfall from the contracting airlines. Finally, any costs related to changes in laws or any other reasons that would make it more expensive for SFO Fuel to operate the fuel system can be recovered by SFO Fuel from the contracting airlines.

Sum Sufficient Metrics

The fact that SFO Fuel operates on a not-for-profit basis, combined with the sum sufficient rate covenant, will necessarily lead to very weak metrics with debt service coverage ratios at or just above 1.00x on a net basis. Given the nature of the cash flows, their predictability, the various layers of protection against airline risk, as well as the relative ease with which SFO Fuel can increase rates and fees to cover costs, we are of the view that the financial metrics should not represent abnormal risk in the rating category.

Recovery prospects: High

Recovery prospects are high because SFO Fuel is an essential asset at a large and nationally significant airport under a long-term agreement with the commission that extends beyond maturity of debt. Lenders have step-in rights and security in all material contracts and accounts. The dissolution of the fuel consortium, if it were to occur, is predicated upon the prior repayment of all of SFO Fuel's obligations including all debt obligations.

ESG considerations

Environmental

The airport has moderate physical climate and carbon transition risks. Physical climate risks include sea level rise, wildfires and drought, and the airport is constructing a seawall to protect its airfield and other critical infrastructure. Evolving decarbonization policies around the globe and regulations may increase operating costs for airlines and result in higher airfares that reduce the demand for air travel. Further, the desire by some passengers to reduce carbon emissions may lead to reduced travel, in particular, corporations seeking to reduce their carbon footprints. Our consideration of carbon transition risk is balanced by modest risks for water management, natural capital, and waste and pollution.

Social

Social risk is limited as it relates to customer relations, demographic and social trends, health and safety, human capital, and responsible production. We consider levels of social risk related to the linkage between carbon transition and demographic and societal policies to be lower in the US compared to global peers given the geographically dispersed nature of the country and the lack of viable rail alternatives. High income levels and a sizeable population in the airport's primary catchment area support demand for air travel, mitigating risks related to demographic and societal trends.

Governance

Governance risk is limited as it relates to our assessment of management credibility and track record, organizational structure, compliance and reporting, and board structure, policies and procedures. Federal Aviation Administration regulation of US airports tightly restricts the use of funds generated at US airports to aviation purposes and essentially eliminates the possibility that a municipal owner could extract value from the airport at the expense of bondholders. The airport is owned by the City and County of San Francisco. The airport commission is responsible for the operation and management of the airport, and consists of five members appointed by the mayor of the city.

SFO Fuel's contractual framework with member airlines provides a high degree of certainty for SFO Fuel's cash flows for the term of the debt.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moodys.com. In order to view the latest scores, please click here to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

Rating methodology and scorecard factors

SFO Fuel's rating is derived from the application of Generic Project Finance methodology. The assigned rating of A1 is one notch below the final grid score of Aa3. The one notch differential recognizes the essential but comparatively narrow scope of the service being provided and the narrow financial metrics that result from the cost recovery profile of the project.

Exhibit 1

SFO Fuel LLC

Generic Project Finance Grid

Factor	Subfactor	Score	Metric
1. Business Profile	a) Market Position	Aa	
	b) Predictability of Net Cash Flows	Aa	
2. Operating Risk	a) Technology	Aaa	
	b) Capital Reinvestment	Aaa	
	c) Operating Track Record	Aaa	
	d) Operator and Sponsor Experience, Quality and Support	Aaa	
Project Risk		**Medium**	
3. Leverage and Coverage	a) Debt Service Coverage Ratio	Baa	
Preliminary Scorecard Indicated Outcome before Notching:		**Aa3**	
Notching Considerations		**Notch**	
	1 - Liquidity	0.5	
	2 - Structural Features	0.0	
	3 - Refinancing Risk	0.0	
	4 - Construction and Ramp-up Risk	0.0	
	5 - Priority of Claim, Structural Subordination and Double Leverage	0.0	
Preliminary Scorecard Indicated Outcome before Offtaker Constraint:		**Aa3**	
	Offtaker Constraint Applied?	No	
	Level of Offtaker(s) Constraint		
Scorecard Indicated Outcome:		**Aa3**	

Source: Moody's Investors Service

© 2023 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 CREDIT RATINGS AFFILIATES ARE THEIR 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 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 APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S 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 credit 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 $5,000,000. 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, Inc. 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 — Charter Documents - 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.
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 credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY100,000 to approximately JPY550,000,000.
MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

REPORT NUMBER 1381126

CLIENT SERVICES

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

Moody's
INVESTORS SERVICE