

Rating Action: Moody's downgrades EDF's issuer rating to Baa1; negative outlook

21 Feb 2022

Paris, February 21, 2022 -- Moody's Investors Service (Moody's) has today downgraded to Baa1 from A3 the long-term issuer rating and senior unsecured ratings of Electricite de France (EDF). It has also downgraded EDF's senior unsecured MTN program rating to (P)Baa1 from (P)A3, as well as EDF's perpetual junior subordinate debt rating to Ba1 from Baa3 and its Baseline Credit Assessment (BCA) to baa3 from baa2. Concurrently, Moody's has downgraded to Baa3 from Baa2 the long-term issuer ratings for EDF Trading Limited (EDFT), Edison S.p.A. and EDF Energy Holdings Ltd (EDF Energy).

At the same time, Moody's has affirmed EDF's short-term Prime-2 Commercial Paper program ratings.

The outlooks on EDF, EDFT, Edison S.p.A. and EDF Energy are negative.

This rating action follows EDF's action plan [1], announced on 18 February 2022, to mitigate low nuclear output over 2022-23 and the consequences of ARENH cap rise for 2022. The action concludes the review for downgrade initiated on 17 January 2022.

A full list of affected ratings is provided towards the end of this press release.

RATINGS RATIONALE

The rating downgrade reflects Moody's view that EDF's risk profile has become more volatile as a result of unstable and unpredictable nuclear output associated with fleet ageing; the increased exposure of earnings to volatile wholesale electricity prices following the significant disposal programme of recent years; and detrimental political intervention to protect end-customers in a context of elevated power prices. The rating action further takes into account the lack of visibility around (1) the form and timing of nuclear reform in France, at a time when negotiations with the European Commission are suspended; (2) the nature of assets which will be sold by 2024; and (3) the potential consequences for energy policy and EDF of the upcoming French elections.

Moody's has downgraded EDF's Baseline Credit Assessment (BCA), which reflects its standalone credit quality before taking into account potential government support, to baa3 from baa2. The rating agency expects that 2022 credit metrics will fall significantly short of levels consistent with the previous baa2 BCA, with funds from operations (FFO)/net debt potentially declining to around 2% as compared with guidance for the previous BCA in the mid-to-high teens in percentage terms. This is despite planned mitigation measures including a EUR2.5 billion capital increase, the prolonged scrip dividend policy over 2022-23 and a EUR3 billion disposal programme.

EDF expects that the additional 20 TWh of electricity that the group must sell under the ARENH mechanism over April to December 2022, to limit the increase in regulated tariffs for 2022 to 4%, will represent a c. EUR8 billion additional cost at the EBITDA level. Concomitantly, the lower than previously anticipated nuclear output resulting from the recent corrosion issues will cause another c. EUR11 billion additional cost at the EBITDA level. This cumulative c. EUR19bn extra cost exceeds 2021 EBITDA of EUR18 billion.

Moody's expects that EDF will rebuild its financial flexibility from 2023 onwards, supported by elevated power prices and a nuclear output that EDF estimates in a range from 300-330TWh. However, recovery in the group's financial metrics' will be subject to the development of wholesale prices and nuclear output. These parameters are hard to predict and have been particularly volatile; Moody's notes the gradual decline of EDF's nuclear output over the last decade from 408TWh in 2010 to an expected range from 295-315TWh in 2022.

EDF falls under Moody's Government Related Issuers Methodology and its Baa1/P-2 ratings incorporate an expectation that the Government of France, EDF's majority shareholder, would continue to provide support if needed. The issuer and senior unsecured ratings incorporate a two-notch uplift from the baa3 BCA for such potential support, capturing the credit quality of the Government of France, and Moody's assessment of there being "high" probability of government support in the event of financial distress, as well as "high" default

dependence.

The baa3 BCA is underpinned by (1) the scale and breadth of EDF's businesses across the energy value in France, which account for more than 75% of its EBITDA; (2) the rising contribution to earnings from its domestic regulated activities and renewables business, which together account for around 37% of the group's EBITDA in 2021, as a result of new connections and additional capacities driven by the energy transition plan outlined in the multi-year energy programme; and (3) its geographical diversification given its sizeable positions in Italy and in the United Kingdom (UK).

These positives are balanced by (1) EDF's fixed-cost merchant power generation in France and the UK, which exposes it to power price volatility, albeit supportive since H2 20; (2) increasing competition in the French supply market, which result in a weakening of EDF leading position; (3) a significant capital spending programme which results in negative FCF; and (4) the construction risk associated with the Flamanville new nuclear reactor in France and the Hinkley Point C (HPC) new nuclear project in the UK.

The Ba1 perpetual junior subordinated debt ratings, which is one notch below EDF's baa3 BCA, reflects (1) the features of the hybrids that receive basket 'C' treatment, i.e. 50% equity or "hybrid equity credit" and 50% debt for financial leverage purposes; and (2) that the Baa1 senior unsecured rating benefits from two notches of uplift based on Moody's expectations for potential extraordinary government support. The difference in ratings takes into account Moody's view that, in a distressed scenario, support from the French State could entail distinctions between deeply subordinated notes and senior unsecured bonds.

The change of EDFT's ratings to Baa3 from Baa2 follows EDF's BCA. EDFT is fully owned and closely controlled by EDF and the rating downgrade reflects the close linkages between the entities and the rating agency's view that EDF's standalone credit quality acts as a constraint. In the context of the liquidity risks and cash flow volatility that characterise wholesale energy trading, EDFT's credit profile is supported by its strategic importance derived from its exclusive right to transact energy for EDF on the European wholesale energy markets. EDFT is financed by EDF and has access to contingency funding from EDF in case of emergency. Moody's expects that EDF will continue to provide support to EDFT as the latter pursues its mandate to optimize the group's access to wholesale energy markets.

The change of Edison's ratings to Baa3 from Baa2 follows EDF's BCA. Edison is significantly integrated with EDF, with the latter exercising close managerial and financial control and further supporting the company through intercompany debt. Moody's expects EDF's management to continue to tightly oversee Edison's operations. Edison's credit quality further benefits from an improved business risk profile, a positive momentum in earnings growth and stronger cashflow generation on the back of increased electricity generation capacity; the optimised flexibility and appropriate indexation of gas contracts; and the long-term exposure to wholesale power prices in Italy, Government of (Baa3 stable).

The change of EDF Energy's ratings to Baa3 from Baa2 follows EDF's BCA. EDF Energy benefits from its close integration into the EDF group and the majority of financing needs being procured by EDF through cash and equity injection, resulting in a solid financial profile with low leverage. EDF Energy's rating is further based upon (1) its scale and business risk profile as a major UK integrated utility; (2) it not being responsible for the funding of qualifying nuclear liabilities associated with existing plants, except costs related to unburnt fuel, under the agreements signed with the British government; (3) the company's exposure to volatile power prices as a result of a predominantly fixed-cost generation fleet; and (4) the risks associated with construction of the HPC new nuclear plant.

ESG CONSIDERATIONS

Social risk is a key driver of the rating action. The French government's decision to step in to address affordability concerns and protect end-customers as planned is an adverse political intervention and highly detrimental to EDF's economic interests, resulting in an additional cost of c. EUR8billion.

RATIONALE FOR THE NEGATIVE OUTLOOK

The negative outlook on EDF reflects the risk of nuclear output falling short of levels currently anticipated by the group given the detection of corrosion defects. The extent of these defects across the fleet and the final impact on earnings are still uncertain. Operational uncertainties and execution risks in remedial measures that the group may pursue to bolster credit quality increases the risk of key credit metrics over 2023-24 falling below levels commensurate with the baa3 BCA, which includes FFO/net debt at least in the mid-to-high teens in percentage terms.

The negative outlook further takes into account the absence of visibility associated with economic regulation when EDF needs financial relief to support the acceleration in the development of new capacities, including the construction of six (potentially 14) new European Pressurised Reactors (EPRs) in France by 2050, in addition to the targeted 60 gigawatts (GW) of renewable capacities by 2030.

The negative outlooks on EDFT, Edison, EDF Energy reflect that of EDF given the close linkages

FACTORS THAT COULD LEAD TO AN UPGRADE OR DOWNGRADE OF THE RATINGS

Upward rating pressure is unlikely in the medium term, given the group's negative outlook. Nevertheless, the outlook could stabilise if EDF restores a sound track record with regards to its nuclear output and it appears that EDF will be able to maintain metrics in line with guidance for the current rating, based on a FFO/net debt ratio to remain at least in the mid-to-high teens in percentage terms.

The ratings could be downgraded if (1) EDF's credit metrics appear likely to fall persistently below guidance for a Baa1 rating; (2) a change in the group's relationship with the French government were to cause Moody's to remove the uplift for government support; or (3) there were to be a significant downgrade of France's government rating.

The ratio guidance for an Baa1 rating might be revised following announcement of any reforms.

EDFT's outlook could be stabilised if that of EDF is. A downgrade of EDF's BCA would likely result in a corresponding downgrade of EDFT's rating. EDFT's rating could also be downgraded following financial performance issues (for example, trading losses) or an increase in external debt at EDFT.

Edison's outlook could be stabilised if that of EDF is. A downgrade of EDF's baa3 BCA would likely result in a corresponding downgrade of its Italian subsidiary's rating. Edison's rating could also be downgraded if Edison's operating performance or capitalisation were to deteriorate significantly.

EDF Energy's outlook could be stabilised if that of EDF is. Any downgrade of EDF's baa3 BCA would likely result in a corresponding downgrade of its UK subsidiary's rating. EDF Energy's rating could also be downgraded if EDF Energy's operating performance or capitalisation were to deteriorate, or it were no longer considered financially and operationally integrated within the EDF group as a result of a change in EDF's strategy or financial policy.

LIQUIDITY

Liquidity remains good in the next 18 months for EDF. EDF's strong liquidity is supported by EUR22.5 billion of available cash and financial assets and a total of EUR13 billion of undrawn committed credit facilities as of 31 December 2021. These include EUR1.7 billion credit facilities maturing within one year. Despite a weak cash generation expected in 2022, these sources are sufficient to cover the group's EUR2.5 billion debt maturities and capital spending over the next 12 months.

With a reported EBITDA of EUR18 billion as of 31 December 2021 and net installed generation capacity of 123 GW as of year-end 2021, EDF is one of Europe's largest integrated utilities, providing electricity generation, distribution and supply services. The group is organised along the following business lines: (1) France - generation and supply, where it is the dominant power generator and supplier; (2) France - regulated, which primarily includes electricity distribution through its subsidiary Enedis; (3) UK, through EDF Energy, the country's largest generator following the acquisition of British Energy; (4) Italy, where it is the third-largest generator through Edison; (5) other international, which mainly consists of Belgium, where EDF Luminus is the second-largest electricity group in the Belgian market, and in the Netherlands; (6) EDF Renouvelables (EDFR), the group's wholly owned investment vehicle for renewables, excluding hydro; and (7) other activities, which include Framatome, EDFT and energy services through Dalkia.

LIST OF AFFECTED RATINGS

Issuer: Electricite de France

Affirmations:

....Commercial Paper, Affirmed P-2

....Backed Commercial Paper, Affirmed P-2

Downgrades:

...LT Issuer Rating, Downgraded to Baa1 from A3
...Junior Subordinated Regular Bond/Debenture, Downgraded to Ba1 from Baa3
...Senior Unsecured Medium-Term Note Program, Downgraded to (P)Baa1 from (P)A3
...Junior Subordinated Medium-Term Note Program, Downgraded to (P)Ba1 from (P)Baa3
...Backed Senior Unsecured Medium-Term Note Program, Downgraded to (P)Baa1 from (P)A3
...Senior Unsecured Regular Bond/Debenture, Downgraded to Baa1 from A3
...Senior Unsecured Shelf, Downgraded to (P)Baa1 from (P)A3
...Backed Senior Unsecured Shelf, Downgraded to (P)Baa1 from (P)A3
...Baseline Credit Assessment, Downgraded to baa3 from baa2

Outlook Actions:

...Outlook, Changed To Negative From Rating Under Review

Issuer: Edison S.p.A.

Downgrades:

...LT Issuer Rating, Downgraded to Baa3 from Baa2

Outlook Actions:

...Outlook, Changed To Negative From Rating Under Review

Issuer: EDF Energy Holdings Ltd

Downgrades:

...LT Issuer Rating, Downgraded to Baa3 from Baa2

Outlook Actions:

...Outlook, Changed To Negative From Rating Under Review

Issuer: EDF Trading Limited

Downgrades:

...LT Issuer Rating, Downgraded to Baa3 from Baa2

Outlook Actions:

...Outlook, Changed To Negative From Rating Under Review

The principal methodologies used in rating Electricite de France were Unregulated Utilities and Unregulated Power Companies published in May 2017 and available at https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_1066389 , and Government-Related Issuers Methodology published in February 2020 and available at https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_1186207 . The principal methodology used in rating EDF Energy Holdings Ltd and Edison S.p.A. was Unregulated Utilities and Unregulated Power Companies published in May 2017 and available at https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_1066389 . The principal methodology used in rating EDF Trading Limited was Trading Companies published in June 2016 and available at https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_190422 . Alternatively, please see the Rating Methodologies page on www.moodys.com for a copy of these methodologies.

REGULATORY DISCLOSURES

For further specification of Moody's key rating assumptions and sensitivity analysis, see the sections Methodology Assumptions and Sensitivity to Assumptions in the disclosure form. Moody's Rating Symbols and Definitions can be found at: https://www.moody's.com/researchdocumentcontentpage.aspx?docid=PBC_79004.

For ratings issued on a program, series, category/class of debt or security this announcement provides certain regulatory disclosures in relation to each rating of a subsequently issued bond or note of the same series, category/class of debt, security 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.moody's.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.

The ratings have been disclosed to the rated entity or its designated agent(s) and issued with no amendment resulting from that disclosure.

These ratings are solicited. Please refer to Moody's Policy for Designating and Assigning Unsolicited Credit Ratings available on its website www.moody's.com.

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

Moody's general principles for assessing environmental, social and governance (ESG) risks in our credit analysis can be found at http://www.moody's.com/researchdocumentcontentpage.aspx?docid=PBC_1288235.

At least one ESG consideration was material to the credit rating action(s) announced and described above.

The Global Scale Credit Rating on this Credit Rating Announcement was issued by one of Moody's affiliates outside the UK and is endorsed by Moody's Investors Service Limited, One Canada Square, Canary Wharf, London E14 5FA under the law applicable to credit rating agencies in the UK. Further information on the UK endorsement status and on the Moody's office that issued the credit rating is available on www.moody's.com.

REFERENCES/CITATIONS

[1] EDF 2021 Annual Results -- Outlook and Action Plan - <https://www.edf.fr/sites/default/files/contrib/groupe-edf/espaces-dedies/espace-finance-en/financial-information/publications/financial-results/2021-annual-results/pdf/annual-results-2021-pr-en-20220218-v2.pdf>

Please see www.moody's.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.moody's.com for additional regulatory disclosures for each credit rating.

Celine Cherubin
Vice President - Senior Analyst
Infrastructure Finance Group
Moody's France SAS
96 Boulevard Haussmann
Paris 75008

France
JOURNALISTS: 44 20 7772 5456
Client Service: 44 20 7772 5454

Neil Griffiths-Lambeth
Associate Managing Director
Infrastructure Finance Group
JOURNALISTS: 44 20 7772 5456
Client Service: 44 20 7772 5454

Releasing Office:
Moody's France SAS
96 Boulevard Haussmann
Paris 75008
France
JOURNALISTS: 44 20 7772 5456
Client Service: 44 20 7772 5454



© 2022 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 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 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.

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.