

Rating Action: Moody's changes outlook on EDF to negative, affirms ratings

24 Apr 2020

Paris, April 24, 2020 -- Moody's Investors Service, (Moody's) has today changed the outlook for Electricite de France (EDF) to negative from stable and affirmed the A3 long-term issuer and senior unsecured ratings, the Baa3 perpetual junior subordinate debt ratings and Prime-2 short-term ratings.

The rating action follows EDF's announcement[1], on 16 April 2020, significantly reducing its guidance for nuclear output to 300 Terrawatt hours (TWh) in 2020 and 330-360 TWh in 2021-2022 from 375-390 TWh, as a result of confinement and staff protection measures which will disrupt the planned maintenance of the nuclear fleet and 10-year inspection outages.

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

RATINGS RATIONALE

RATIONALE FOR THE NEGATIVE OUTLOOK

The rapid and widening spread of the coronavirus outbreak, a deteriorating global economic outlook, falling oil prices, and asset price declines are creating a severe and extensive credit shock across many sectors, regions and markets. The combined credit effects of these developments are unprecedented. Although the sector as a whole has reduced its exposure to commodity-driven activities, electricity utilities are facing depressed demand, lower wholesale power prices and operational challenges with elevated political risk as governments seek to shield consumers from the economic fallout. Moody's regards the coronavirus outbreak as a social risk under its ESG framework, given the substantial implications for public health and safety.

Today's change in outlook reflects that the material drop in nuclear output, as a result of coronavirus, and lower wholesale power prices will weigh on EDF's financial flexibility and increases the risk of key credit metrics falling below levels commensurate with current ratings. The action also takes into account that the pandemic may delay changes to the economic regulation of nuclear generation assets in France. If implemented, proposals published by the French government could support earnings visibility for nuclear generation, a key driver of EDF's EBITDA, and provide a solution for the company's persistently negative free cash flow generation.

Generation volumes 20% lower than previously anticipated, supplemented with a c. 12% fall of European forward power prices since beginning of 2020, will significantly reduce EDF profitability given the essentially fixed cost structure of the group.

This happens in a context of a reconsideration of the functioning of the French electricity market. The French government has initiated a review of the economic regulation of nuclear generation with a view to providing financial relief to EDF and boosting its cash flow generation to support its large capital expenditure programme. It is anticipated that new regulation will be combined with a restructuring of the EDF group into two distinct entities: (1) EDF Blue, potentially 100% held by the government, holding the French and international nuclear, hydroelectric activities, Framatome and RTE; and (2) EDF Green holding renewables (excluding hydroelectric activities), customers and services activities, Enedis and international activities. The latter would be a 65%-70% subsidiary of the former, with the remaining capital being free float.

The initial timetable assumed implementation by beginning of 2022. The deterioration in the outlook for the French economy and the need for government to deal with other consequences of the coronavirus outbreak could result in delays to the planned reforms. In the meantime, and absent other measures, Moody's anticipates that EDF will continue to have negative free cash flow (FCF) and increasing debt.

RATIONALE FOR AFFIRMATION OF RATINGS

EDF's A3/P-2 ratings continue to reflect a standalone credit quality or baseline credit assessment (BCA) of baa2 and Moody's expectation that the Government of France (Aa2 stable), EDF's majority shareholder, would continue to provide support if needed.

The baa2 BCA is constrained by (1) EDF's fixed-cost merchant power generation in France and the UK, which exposes it to power price volatility; (2) increasing competition in the French supply market; (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.

These challenges are balanced by (1) the scale and breadth of EDF's businesses in France, which account for more than two-thirds of its EBITDA; (2) the stabilising contribution to earnings from its domestic regulated activities and renewables business, which together account for around 40% of the group's EBITDA; and (3) its geographical diversification because of its sizeable positions in other European countries.

LIQUIDITY

EDF's liquidity is underpinned by its material cash flow, large holdings of cash and cash equivalents, and committed bank facilities. As of 31 Dec. 2019, the group had €22.8bn of cash and cash equivalents and liquid financial assets. In addition, unused committed credit facilities amounted to €10.5bn, of which €1.4bn mature within one year. In July, the group added two €300m sustainable revolving credit facilities to its liquidity availability. We believe that these sources of liquidity are sufficient for the group to meet short-term debt maturities of €11 bn, as well as capital spending and any dividend payment for 2020 over the next 18 months. In addition, EDF's debt maturities are well spread, avoiding any significant concentration of refinancing risk.

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 oulook could stabilise if as planned, reforms or other measures will support EDF's business model and financial profile 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 an A3 rating, (2) a change in the group's relationship with the French government were to cause us to remove the uplift for government support, or (3) there were to be a significant downgrade of France's government rating.

With a reported EBITDA of EUR16.7 billion as of 31 Dec. 2019 and net installed generation capacity of 131 gigawatts (GW) as of year-end 2019, Electricite de France (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 S.p.A. (Baa3 positive); (5) other international, which mainly consists of operations in Northern Europe, in particular in Belgium where EDF Luminus is the second largest electricity supplier in the Belgium market; (6) EDF Renouvelables (EDFR), the group's wholly owned investment vehicle for renewables, excluding hydro; and (7) other activities, which include Framatome, EDF Trading Limited (Baa2 stable) and energy services through Dalkia.

LIST OF AFFECTED RATINGS

..Issuer: Electricite de France

Affirmations:

- LT Issuer Rating, Affirmed A3
-Senior Unsecured Regular Bond/Debenture, Affirmed A3
-Senior Unsecured Shelf, Affirmed (P)A3
-BACKED Senior Unsecured Shelf, Affirmed (P)A3
-Senior Unsecured Medium-Term Note Program, Affirmed (P)A3
-BACKED Senior Unsecured Medium-Term Note Program, Affirmed (P)A3
-Junior Subordinated Regular Bond/Debenture, Affirmed Baa3

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

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

Outlook Actions:

.. Issuer: Electricite de France

....Outlook, Changed To Negative From Stable

PRINCIPAL METHODOLOGIES

The methodologies used in these ratings 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. 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.moodys.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.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.

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.moodys.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 https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_1133569.

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

REFERENCES/CITATIONS

[1] PR EDF_Update on the consequences of the Covid-19 sanitary crisis 16-Apr-2020

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.

Celine Cherubin VP-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



© 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.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 JPY125,000 to approximately JPY250,000,000.

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