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INVESTORS SERVICE

CREDIT OPINION
17 May 2016

Update

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RATINGS

Electricite de France

Domicile	Paris, France
Long Term Rating	A2
Type	LT Issuer Rating
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.

Analyst Contacts

Paul Marty
VP-Senior Credit Officer

Monica Merli
MD-Infrastructure Finance

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EMEA	44-20-7772-5454

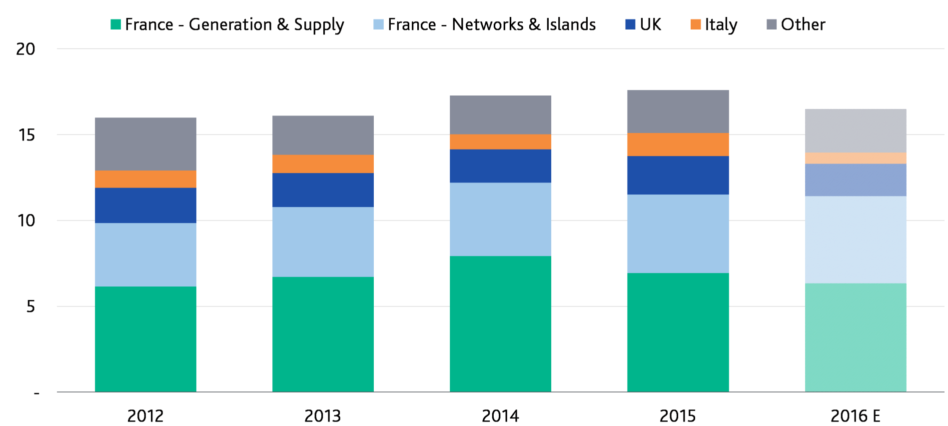
Electricite de France

Update Following Recent Downgrade to A2 Negative

Summary Rating Rationale

Electricite de France's (EDF) A2 senior unsecured ratings with negative outlook reflect (1) its exposure to declining market power prices in France and the UK which will exert downward pressure on credit metrics as hedges roll off; (2) increasing competition in its domestic supply market; and (3) the group's substantial investment programme required to upgrade the French nuclear fleet and the resulting negative free cash flows. These challenges are balanced by (1) the scale and breadth of EDF's businesses in France, which account for nearly two thirds of EBITDA; (2) the diversification implied by sizeable positions in generation and supply in other European markets; and (3) the stabilising contribution to earnings from its French regulated networks and island activities. From the financial risk perspective, our guidance for the current rating includes funds from operations (FFO)/net debt in the mid to high teens in percentage terms. Finally, the A2 rating incorporates two notches of uplift given the French government's 84.9% ownership.

Exhibit 1
Lower power prices will exert pressure on EDF's EBITDA (in € billion)



The 2016 estimate represents Moody's forward view; not the view of the issuer.
Source: EDF, Moody's Investors Service estimates

Credit Strengths

- Leading and still dominant position as electric utility in France
- Regulated activities and geographic diversification support cash flow stability
- Expectation of high support from the French government given 84.9% state ownership

Credit Challenges

- Low power prices will exert pressure on cash flows as hedges roll off
- Increasing competition in the French supply market
- Significant capex programme results in negative free cash flows
- Execution risk associated with EDF's action plan

Rating Outlook

The negative outlook reflects (1) the execution risk associated with certain elements of EDF's action plan, notably the disposal of commodity-exposed activities; (2) that the action plan does not address the fundamental challenge faced by EDF, that is power prices at a level which currently does not allow the group to cover the required investments and earn a return on those; and (3) the incremental risks associated with the Hinkley Point C (HPC) nuclear power station project in the UK, should it go ahead.

Factors that Could Lead to an Upgrade

Given the current negative outlook, upward rating pressure is unlikely in the medium term. The outlook could be returned to stable provided that (1) EDF decides not to proceed with the HPC nuclear project; (2) it demonstrates progress on its action plan so as to maintain financial ratios well in line with the guidance above on a permanent basis; and (3) clarity develops on regulatory measures such as carbon price floor or capacity payments that would support EDF's business model.

Factors that Could Lead to a Downgrade

The ratings could be downgraded if (1) the HPC project were to go ahead; (2) credit metrics fall below our guidance for the A2 rating, which includes FFO/net debt in the mid to high teens in percentage terms; (3) progress on EDF's action plan and the regulatory measures described above fail to materialize; or (4) EDF were to be significantly exposed to AREVA NP's liabilities. In addition, downward rating pressure could arise if a change in the group's relationship with the government were to cause Moody's to remove the uplift for government support, or if there were to be a significant downgrade of France's government rating.

Key Indicators

Exhibit 2

EDF's key adjusted indicators

Electricité de France

	12/31/2015	12/31/2014	12/31/2013	12/31/2012	12/31/2011
(CFO Pre-W/C + Interest) / Interest	5.0x	4.7x	4.8x	4.4x	3.9x
FFO / Net Debt	18.1%	18.4%	20.5%	18.4%	19.2%
RCF / Net Debt	15.2%	14.3%	16.6%	14.7%	14.8%

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Source: Moody's Financial Metrics™

Note: For definitions of Moody's most common ratio terms please see the accompanying User's Guide.
Source: Moody's Investors Service

Detailed Rating Considerations

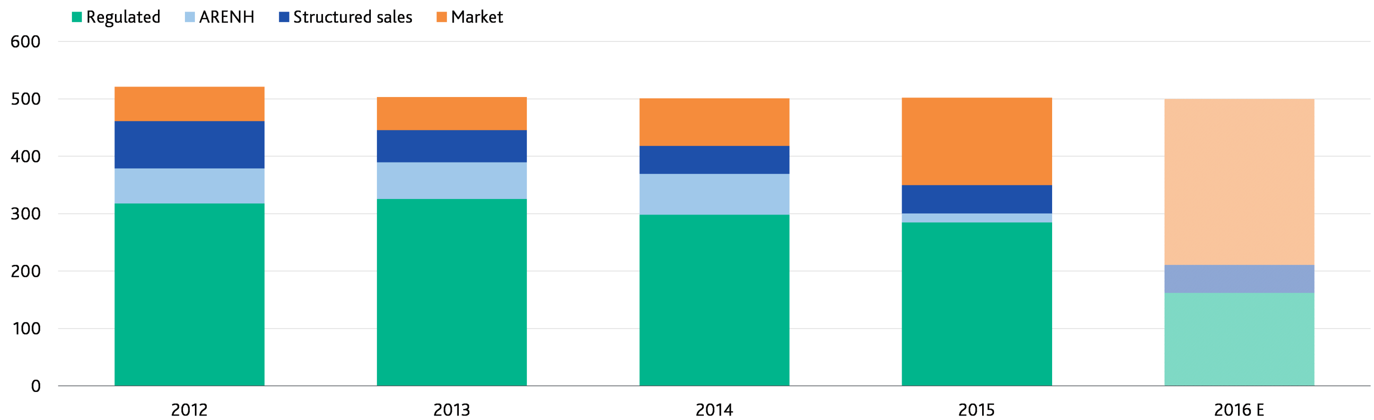
Low power prices will exert pressure on cash flows as hedges roll off

We estimate that market-exposed generation activities account for approximately 50% of EDF's EBITDA. In addition, as its generation fleet is predominantly fixed cost in nature, with 85% of total output represented by nuclear and hydro, EDF is particularly exposed to movements in wholesale power prices.

As hedges roll off, lower power prices (current one-year forward baseload price in France is around €30/MWh) will exert pressure EDF's on cash flows. This pressure is arising at a time when EDF's domestic electricity volumes sold are increasingly exposed to market prices following the termination of regulated tariffs for mid-size and large business customers on 1 January 2016 (see exhibit below).

Exhibit 3

EDF's volumes sold in France are increasingly market-exposed (in TWh)



The 2016 estimate represents Moody's forward view; not the view of the issuer.
Source: EDF, Moody's Investors Service estimates

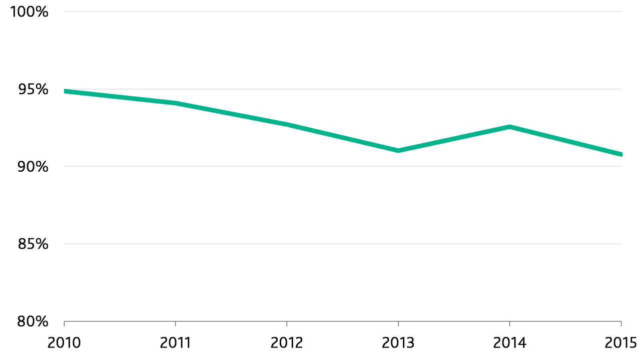
We note the recent announcement by the French government that it will seek to introduce a carbon price floor for electricity in France. Although this would likely raise French wholesale power prices and hence have a positive impact on EDF's earnings given its low-carbon generation mix, there remains significant uncertainty as regards the timing and impact of this measure.

Leading position as electric utility in France, although growing competition in the supply market

EDF is the leading generator in France with 98 GW of installed generation capacity. Annual domestic generation of 456 TWh (excluding French islands activities) or 84% of national power output mostly generated by nuclear and hydro plants, is matched by its downstream position, which consists of more than 27 million customer accounts, giving it some 80% of the end-user electricity market.

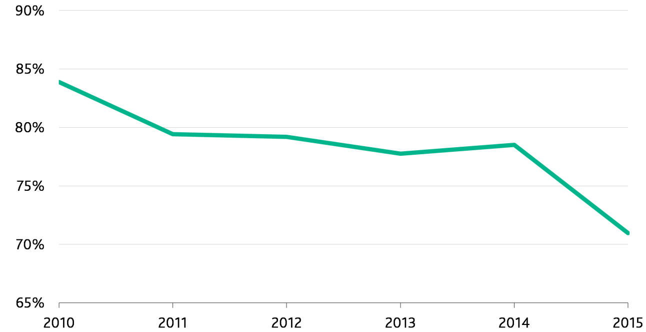
This market position, combined with the predominantly regulated nature of electricity tariffs until 2015, has historically underpinned the predictability of EDF's cash flows. However, growing competition in the supply market, as evidenced by a recent greater churn (see exhibits below), will exacerbate the pressure on generation earnings.

Exhibit 4
Incumbent share of the residential electricity supply market in France (%)



Source: CRE

Exhibit 5
Incumbent share of the non-residential electricity supply market in France (%)

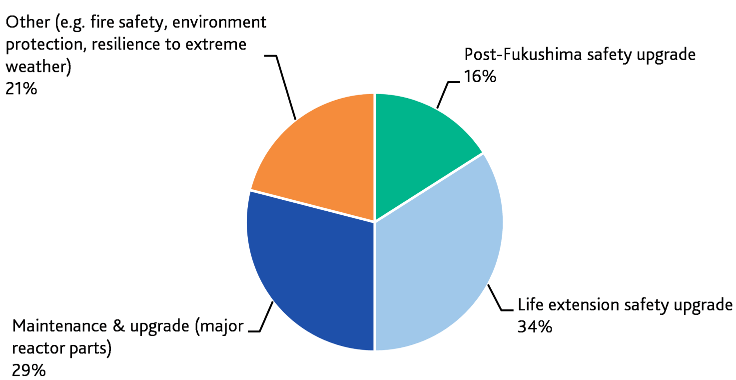


Source: CRE

Significant capex programme creates execution risk and results in negative free cash flows

The A2 rating reflects that EDF faces a substantial capex programme over the next years, with limited flexibility to reduce significantly spending mostly because of the large investment required to maintain and upgrade the distribution network and nuclear fleet in France. The latter is estimated at €50 billion through 2025 and reflects (1) the ageing status of the existing fleet, which is 30 years old on average, as well as EDF's strategy to extend its lifespan beyond the current 40 years it records in its accounts; (2) the group's ongoing program to reduce unplanned outages and boost availability; and (3) more stringent nuclear safety requirements post-Fukushima (see exhibit below).

Exhibit 6
Split of EDF's nuclear capex programme shows limited flexibility



Source: Cour des Comptes

Other main projects include (1) the 1.6 GW Flamanville 3 nuclear plant, whose start has been delayed to late 2018; (2) the Linky smart meter project; and (3) expansion of renewable capacity through EDF EN. Overall, the group expects net investments to range between €12.5bn and €13.5bn per year over the next three years which, absent asset sales, will continue to result in negative free cash flows.

In addition, if the decision is eventually taken by EDF and its partner CGN (A3 negative) to start the construction of a new nuclear power plant at Hinkley Point C (HPC) in the UK, the significant scale and complexity of this project are likely to affect the group's business and financial risk profiles. The total construction cost of the project, which will be fully consolidated on EDF's balance sheet, is estimated at GBP18 billion with the first unit expected to be commissioned 115 months after final investment decision.

Regulated activities and geographic diversification provide cash flow stability

EDF's rating is supported by its regulated electricity distribution activities in France, whose revenues benefit from a high degree of visibility under the regulatory framework now in its fourth period (TURPE 4). French network activities accounted for 22% of group EBITDA in 2015. These exclude EDF's 100% ownership of transmission network owner and operator RTE, which has been equity-accounted since year-end 2010 for governance reasons. Regulated generation, network and supply activities in French islands, which accounted for 4% of group EBITDA in 2015, also provide a stabilizing contribution to earnings.

The group's activities outside of France account for roughly 35% of its EBITDA. Nearly half of that is generated by its nuclear assets in the UK and the fast growing renewables business of EDF EN, which should provide some ballast to the group's earnings outside France. At the same time, other activities, notably in Italy, remain exposed to a challenging operating environment.

Action plan is positive for financial risk profile, but execution risk remains

EDF announced in April 2016 an action plan aimed at strengthening its balance sheet, which includes (1) a reduction in operating and capital expenditure; (2) an asset disposal programme of €10 billion; (3) proposing to shareholders the option to receive the dividend related to fiscal years 2016 and 2017 in shares; and (4) a €4 billion capital increase. EDF's main shareholder, the French government, subsequently indicated that it intends to exercise the option to take the dividend in shares and to subscribe to the proposed capital increase for €3 billion.

Whilst we view this plan as a positive step from a financial risk profile perspective, we note the execution risk associated with certain elements thereof, notably the disposal of commodity-exposed activities. Taking into account the planned disposals, we expect that EDF will demonstrate FFO/net debt in the mid to high teens in percent terms from 2017 onwards, a level which we view as consistent with the A2 rating.

Planned acquisition of AREVA NP creates risks

The A2 rating factors in EDF's proposed acquisition of a majority stake in nuclear service provider AREVA NP for an indicative price of €2.5 billion (100% equity value). Whilst this will likely raise EDF's business risk profile given the latter's mix of activities, which includes an engineering and construction business exposed to large projects, we believe that the acquisition can be accommodated within the current rating as AREVA NP is expected to account for only a minor proportion of EDF's EBITDA.

Nevertheless, the A2 rating is also based on our expectation that EDF will have no material exposure to AREVA NP's liabilities associated with past and existing contracts in its engineering and construction business. Whilst both companies expect to be completely immunised against any risks related to AREVA NP's loss-making Olkiluoto 3 nuclear project in Finland, the details of how this would be structured are yet to be disclosed.

Expectation of high support from the French state

Given the 84.9% stake held by the French government (Aa2 stable), EDF is considered a Government-Related Issuer (GRI) under Moody's methodology. Accordingly, and based on our estimate of high support in case of financial distress, the A2 rating factors in two notches of uplift from the group's standalone credit quality or Baseline Credit Assessment ("BCA") of baa1.

Our estimate of high support reflects (1) the strategic importance of EDF to the French government as the owner and operator of France's nuclear power plants, (2) the company's highly unionised and politically influential workforce and (3) the French government's track-record of supporting strategically important entities.

Liquidity Analysis

EDF's liquidity is underpinned by material cash flows, large holdings of cash and cash equivalents, and its committed bank facilities. At 31 December 2015, the group had €4.2 billion of cash and cash equivalents as well as €18.1 billion of liquid financial assets. In addition, unused committed credit facilities amounted to €11.4 billion, of which €0.8 billion matures within one year. We believe that these sources of liquidity are sufficient for the group to meet short-term debt maturities of €10.4 billion as well as capex and dividend payments over the next 18 months.

EDF's debt maturities are well spread, avoiding any significant concentration of refinancing risk. The next significant maturity is a €1.1 billion bond in October 2016.

Corporate Profile

With EBITDA of €17.6 billion in 2015, Electricité de France S.A. is one of Europe's largest integrated utilities, providing electricity generation, transmission, distribution, and supply services. It has net installed generation capacity of 134 GW, of which 54% is nuclear, 24% thermal and 22% hydro and renewables. The group is organized along five business lines: (1) France (65% of 2015 EBITDA) where it is the dominant electricity generator, distributor through its subsidiary ERDF, and supplier; (2) UK (13%) through EDF Energy, the country's largest generator following the acquisition of British Energy; (3) Italy (8%) where it is the third largest generator through Edison S.p.A. (Baa3 negative); (4) other International (3%) which combines activities in central and western Europe as well as outside of Europe; and (5) other activities (11%) which include EDF Trading (Baa2 negative), EDF Energies Nouvelles, the group's wholly-owned vehicle for investment in renewables excluding hydro, as well as energy services through Dalkia.

EDF is listed on Euronext Paris with a market capitalization of approximately €21 billion. It is 84.9% owned by the French government (Aa2 stable).

Rating Methodology and Scorecard Factors

EDF is rated in accordance with the rating methodology for Unregulated Utilities and Unregulated Power Companies, published in October 2014, and Government-Related Issuers, published in October 2014.

Exhibit 7

EDF's rating factors

Electricité de France				
Unregulated Utilities and Unregulated Power Companies Industry Grid [1][2]	**Current 12/31/2015**		**Moody's 12-18 Month Forward View As of May 2016 [3]**	
Factor 1 : Scale (10%)	**Measure**	**Score**	**Measure**	**Score**
a) Scale (USD Billion)	303	Aaa	Aaa	Aaa
Factor 2 : Business Profile (40%)				
a) Market Diversification		A	A	A
b) Hedging and Integration Impact on Cash Flow Predictability		A	A	A
c) Market Framework & Positioning		Baa	Baa	Baa
d) Capital Requirements and Operational Performance		Baa	Baa	Baa
e) Business Mix Impact on Cash Flow Predictability		Aa	Aa	Aa
Factor 3 : Financial Policy (10%)				
a) Financial Policy		Baa	Baa	Baa
Factor 4 : Leverage and Coverage (40%)				
a) (CFO Pre-W/C + Interest) / Interest (3 Year Avg)	4.8x	Baa	4.5x - 5.5x	Baa
b) (CFO Pre-W/C) / Net Debt (3 Year Avg)	19.0%	Ba	16% - 19%	Ba
c) RCF / Net Debt (3 Year Avg)	15.3%	Baa	15% - 17%	Baa
Rating:				
a) Indicated Rating from Grid		Baa1		Baa1
b) Actual Baseline Credit Assessment Assigned				baa1
Government-Related Issuer	**Factor**			
a) Baseline Credit Assessment	baa1			
b) Government Local Currency Rating	Aa2			
c) Default Dependence	High			
d) Support	High			
e) Final Rating Outcome	A2			

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.

[2] As of 12/31/2015; Source: Moody's Financial Metrics™

[3] This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures

Source: Moody's Investors Service

Ratings

Exhibit 8

Category	Moody's Rating
ELECTRICITE DE FRANCE	
Outlook	Negative
Issuer Rating	A2
Senior Unsecured	A2
Jr Subordinate	Baa2
Commercial Paper	P-1
EDF TRADING LIMITED	
Outlook	Negative
Issuer Rating	Baa2
EDISON S.P.A.	
Outlook	Negative
Issuer Rating	Baa3
Senior Unsecured -Dom Curr	Baa3

Source: Moody's Investors Service

Moody's Related Research

RATING ACTION

- Moody's downgrades EDF's ratings to A2; outlook negative, 12 May 2016

ISSUER COMMENT

- Rising Cost of Nuclear Waste Storage Is Credit Negative for Electricité de France, 25 January 2016 (187253)
- Electricité de France Sells No Electricity under Regulatory Price Mechanism, a Credit Negative, 10 December 2015 (136165)
- Agreement with CGN brings EDF a step closer to Hinkley Point C, 22 October 2015 (1009441)
- China General, EDF Move Closer to Committing to Nuclear Reactor Project, a Credit Negative, 28 September 2015 (184593)
- Moody's says EDF's ratings unaffected following France downgrade, 21 September 2015 (1008375)
- EDF Expects More Cost Overruns and Construction Delays at Flamanville Nuclear Reactor, 7 September 2015 (184145)
- Moody's says EDF's ratings and outlook unchanged following strategic partnership agreement with Areva, 31 July 2015 (1007126)
- Regulator's Prolonged Investigation of Electricite de France's Nuclear Plant Is Credit Negative, 22 June 2015 (182520)
- EDF's anticipated acquisition of AREVA NP majority stake could be credit negative, 4 June 2015 (1005689)

SECTOR IN-DEPTH

- Unregulated Utilities Would Benefit from Higher CO2 Price, but No Game Changer in Sight Yet, 30 June 2015 (1005857)
- In France, Exposure to Weak Wholesale Power Prices Will Continue to Grow, 30 June 2015 (1005748)

SPECIAL COMMENT

- After COP21: Decarbonisation Policies in the EU Will Continue to Shape the European Electricity Sector, 14 December 2015 (1011021)
- Regulated and contracted earnings prove their worth, 19 November 2015 (185925)

INDUSTRY OUTLOOK

- 2016 Outlook-Stable Outlook Reflects Improvement in Southern Europe, Weak Conditions in Germany, Nordics, 19 November 2015 (1009722)

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Contacts

Paul Marty 44-20-7772-1036
VP-Senior Credit Officer
paul.marty@moodys.com

Monica Merli 44-20-7772-5433
MD-Infrastructure Finance
monica.merli@moodys.com

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