

## Electricite de France (EDF)

Rating Type	Rating	Outlook	Last Rating Action
Long-Term IDR	A-	Stable	Affirmed 28 June 2018
Short-Term IDR	F2		Affirmed 28 June 2018

[Click here for full list of ratings](#)

## Financial Summary

(EURm)	Dec 2016	Dec 2017	Dec 2018F	Dec 2019F
Gross Revenue	71,203	69,632	69,632	71,025
Operating EBITDAR Margin (%)	21.6	18.1	18.9	20.6
FFO Margin (%)	16.5	11.2	13.8	15.2
FFO Fixed Charge Coverage (x)	5.2	3.6	3.8	4.0
FFO Adjusted Net Leverage (x)	3.5	4.1	3.8	3.8

Source: Fitch

In June 2018 Fitch Ratings affirmed EDF's Long-term IDR at 'A-'. The agency also affirmed EDF Energy Nuclear Generation Group Ltd's Long-Term IDR at 'A-', reflecting its strong links with the parent. The Outlooks on the Long-Term IDRs are Stable.

EDF's 'A-' rating reflects a strong business profile based on a dominant market position in France. We expect EBITDA to recover on continued progress on safety issues surrounding French nuclear and stronger commodity prices while the introduction of capacity markets in France, the UK and Italy will raise the visibility of generation earnings. We estimate regulated and contracted EBITDA at 50% of total, some way below peers Engie S.A., E.ON SE, Enel SpA and Iberdrola, S.A.

We expect funds from operations (FFO) adjusted net leverage at EDF to average 4.0x through 2021, comparable to its peers', although all have stronger free cash flow (FCF) generation than EDF and are rated 'BBB+' except for Engie, rated 'A'. Partly offsetting this, we would expect further asset disposals from EDF, supporting credit metrics.

## Key Rating Drivers

**Ageing Domestic Nuclear Fleet:** We expect EDF's nuclear output through 2021 to be in a range of 385-395TWh compared with 395-408TWh previously as a result of first-of-kind 10-year inspections as part of Grand Carenage. French nuclear safety regulator ASN is satisfied with progress to date on safety issues related to Le Creusot files, but there is still residual risk in 2018. ASN is due to report on safety upgrades to support life extensions of first 900MW reactors in 2020. A first plant closure at Fessenheim and the start-up of Flamanville 3 are due to occur in 2019.

**Commodity Price Recovery Benefit:** Power prices show signs of recovery and as fixed cost hydro and nuclear account for 75% of capacity, this supports stronger cash flow. However, with French baseloads above EUR42/ MWh, competitors have every reason to buy energy from EDF instead of the market under ARENH, partly offsetting the benefit of higher prices. It is possible that the ARENH mechanism is reformed in future, but this is not reflected in Fitch's rating case. Capacity markets in France from 2017, UK from 2018 and Italy potentially from 2019 should improve overall visibility of generation cash flows.

**New Nuclear Challenges Persist:** Technical issues continue to affect the EPR technology, and may potentially delay Flamanville's commercial operation, raising the risk of additional cost overruns and delaying cash flow generation. To reflect these risks, we are raising estimates of capex on EPR at Hinkley Point C. Above all, the increased competitiveness of renewables is putting pressure on governments to provide direct financial support for new nuclear, particularly pre-funding.

The UK government has recently agreed to provide equity for new nuclear in the UK. Similar discussions with the French government will need to take place to prepare for French nuclear fleet renewal, although it is more of a long-term prospect in France.

**FCF Generation:** In addition to safety-related constraints to existing nuclear output and technical challenges facing new nuclear, an increase in capex on renewables in line with a shift in the French government policy limits EDF's ability to generate FCF.

Given that maintenance, regulated and renewables capex represent more than 75% of total capex, EDF has limited flexibility over capex although there is some scope to defer capex on Grand Carenage and to smooth the growth in renewables. There is some short-term relief from an abnormally low cash tax charge. However, with the majority shareholder's choice of a scrip dividend expiring in June 2018, we expect a substantial increase in cash dividends from 2019.

**Asset Disposals:** Although EDF is not giving formal guidance, the Fitch rating case is based on our estimate of further asset disposals through 2021. This would help fund additional capex in renewables. On this basis, we estimate average FFO adjusted net leverage over 2018-21 at 4.0x. We are tightening the negative rating guideline to 4.2x net leverage from 4.5x to reflect better consistency with peers, notably on weaker FCF generation.

## Rating Derivation Relative to Peers

Rating Derivation vs. Peers	
Peer Comparison	We estimate regulated and contracted EBITDA at 50% of the total, some way below peers Engie (A/Stable), Enel and Iberdrola (both rated BBB+/Stable) and E.ON (BBB+/Rating Watch Negative). FFO adjusted net leverage is forecast at an average 4.0x through 2021, comparable to these names, although all have stronger FCF generation than EDF. Partly offsetting this, we would expect further asset disposals from EDF, supporting credit metrics.
Parent/Subsidiary Linkage	Government-Related Entities Rating Criteria is applicable, but EDF is rated on a standalone basis. The Parent and Subsidiary Rating Linkage criteria were applied to rating EDF Energy Nuclear Generation Group Ltd. We followed the stronger parent approach and assessed the overall linkage as strong. EDF Energy Nuclear Generation's IDR is at the same level as EDF's.
Country Ceiling	No Country Ceiling constraint was in effect for these ratings.
Operating Environment	No operating environment influence was in effect for these ratings.
Other Factors	-
Source: Fitch	

## Navigator Peer Comparison

Issuer	Business profile							Financial profile		
	IDR/Outlook	Operating Environment	Management and Corporate Governance	Integration	Asset Base and Operations	Market Risk and Position	Cashflow Profile and Regulation	Profitability and Cash Flow	Financial Structure	Financial Flexibility
Engie S.A.	A/Sta	a+	a-	a	a	a-	a-	bbb+	a	a
Electricite de France (EDF)	A-/Sta	a+	a	a	a	a+	a	bbb+	a	a
Enel S.p.A.	BBB+/Sta	a	a	a-	bbb+	bbb	a-	bbb+	bbb	bbb+
Iberdrola, S.A.	BBB+/Sta	a+	a	a	a-	bbb+	a-	bbb+	bbb+	bbb+
E.ON SE	BBB+/Sta	a+	a-	bbb+	bbb+	bbb+	a-	bbb+	bbb	bbb-

Source: Fitch

Importance: Higher (Red), Moderate (Blue), Lower (Light Blue)

## Rating Sensitivities

### Future Developments That May, Individually or Collectively, Lead to Positive Rating Action

- FFO adjusted net leverage below 3.5x on a sustained basis
- FFO fixed charge cover above 4.0x on a sustained basis
- Sustained reduction in negative FCF

**Future Developments That May, Individually or Collectively, Lead to Negative Rating Action**

- FFO adjusted net leverage above 4.2x on a sustained basis
- FFO fixed charge cover below 3.5x on a sustained basis
- A substantial decline in electricity prices in France, UK and Italy or weaker business profile

**Liquidity and Debt Structure**

**Strong Liquidity:** At 31 December 2017, EDF had liquidity comprising cash and cash equivalents of EUR3.4 billion, short-term liquid investments of EUR18.1 billion and committed undrawn facilities of EUR9.6 billion, with maturities spread until 2021. This means that EDF can cover scheduled debt maturities, mainly short-term debt of EUR5.8 billion, capex and operating requirements well into 2020 without resorting to additional debt issuance.

**Debt Maturities and Liquidity at FY17**

Liquidity Summary	Original
	31 December 2017
(EURm)	
Total Cash & Cash Equivalents	3,692
Short-Term Investments	18,963
Less: Not Readily Available Cash and Cash Equivalents	-1,183
<b>Fitch-defined Readily Available Cash and Cash Equivalents</b>	<b>21,472</b>
Availability under Committed Lines of Credit	9,794
<b>Total Liquidity</b>	<b>31,266</b>
Plus: Fitch Forecasted 2018 FCF (post dividend)	-4,512
<b>Total Projected Liquidity</b>	<b>26,754</b>
<b>LTM EBITDA</b>	<b>12,006</b>
<b>LTM Free Cash Flow</b>	<b>-4,512</b>
Source: Fitch Ratings, Inc., Company filings	

Scheduled Debt Maturities	Original
(EURm)	
31 December 2018	3,179 <sup>a</sup>
31 December 2019	2,700
31 December 2020	3,600
31 December 2021	3,400
31 December 2022	2,000
Thereafter	36,613
<b>Total Debt Maturities</b>	<b>51,492<sup>b</sup></b>
<sup>a</sup> Including accrued interest of EUR1,073m in 2018 only	
<sup>b</sup> Excluding other financial liabilities and hybrids (50% equity credit)	
Source: Fitch Ratings, Inc., Company filings	

## Key Assumptions

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Fitch's key assumptions within our rating case for the issuer include:

### France Generation and Supply

- French nuclear output 395TWh in 2018, an increase of 4.2% on 2017, and 385TWh in 2019
- French hydro output 30% higher in 2018 at 38TWh, but settling back to 34-35TWh for 2019-21
- Net market purchases to continue through 2019, with current forwards consistently above EUR42/ MWh, assuming no reform of ARENH.

### France Regulated

- Enedis EBITDA to follow regulated tariff increases of 2.7% in August 2017, 1.7% in January 2018 and 2.3% in August 2019
- Other regulated EBITDA growth of up to 4% per year

### UK Generation and Supply

- UK nuclear output at 61TWh in 2018, a fall of 4.5% yoy, reflecting an outage at Huntstown B, and 62TWh in 2019
- First time capacity market revenue from 2018
- Supply EBITDA margins of 1% through 2021 vs. 2% in 2017

### Italy Electricity and Gas

- Forward baseloads through 2021 of EUR48-EUR52/MWh

### Renewables

- Fully consolidated capacity build of 1GW a year through 2021

### Group

- Cash tax, allocations to dedicated assets, capex as per guidance
- Cash dividends assumed at 50% of prior year net income excluding non-recurring items & hybrid coupon
- Further asset disposals through 2021

## Financial Data

(EURm)	Historical			Forecast	
	Dec 2015	Dec 2016	Dec 2017	Dec 2018F	Dec 2019F
<b>SUMMARY INCOME STATEMENT</b>					
Gross Revenue	75,006	71,203	69,632	69,632	71,025
Revenue Growth (%)	2.2	-5.1	-2.2	0.0	2.0
Operating EBITDA (Before Income From Associates)	16,536	14,711	11,946	12,435	13,834
Operating EBITDA Margin (%)	22.1	20.7	17.2	17.9	19.5
Operating EBITDAR	17,146	15,349	12,592	13,183	14,616
Operating EBITDAR Margin (%)	22.9	21.6	18.1	18.9	20.6
Operating EBIT	4,280	7,514	5,637	5,435	6,584
Operating EBIT Margin (%)	5.7	10.6	8.1	7.8	9.3
Gross Interest Expense	-3,086	-2,926	-2,949	-2,634	-2,737
Pretax Income (Including Associate Income/Loss)	1,884	4,836	3,951	3,443	4,555
<b>SUMMARY BALANCE SHEET</b>					
Readily Available Cash and Equivalents	21,463	22,882	20,853	19,864	17,425
Total Debt With Equity Credit	66,458	68,124	59,954	62,934	65,325
Total Adjusted Debt with Equity Credit	71,338	73,228	65,122	68,918	71,581
Net Debt	44,995	45,241	39,101	43,069	47,900
<b>SUMMARY CASH FLOW STATEMENT</b>					
Operating EBITDA	16,536	14,711	11,946	12,435	13,834
Cash Interest Paid	-2,383	-2,156	-2,289	-2,634	-2,737
Cash Tax	-1,508	-838	-771	-280	-337
Dividends Received Less Dividends Paid to Minorities (Inflow/(Out)flow)	-4	41	60	108	85
Other Items Before FFO	-468	-6	-1,193	0	-66
Funds Flow From Operations	12,186	11,772	7,774	9,632	10,782
Change in Working Capital	132	-1,935	1,476	836	-726
Cash Flow From Operations (Fitch Defined)	12,318	9,837	9,250	10,468	10,055
Total Non-Operating/Non-Recurring Cash Flow	0	0	0		
Capital Expenditure	-14,789	-14,397	-14,747		
Capital Intensity (Capex/Revenue)	19.7	20.2	21.2		
Common Dividends	-1,420	-165	-109		
Free Cash Flow	-3,891	-4,725	-5,606		
Net Acquisitions and Divestitures	1,550	753	1,149		
Other Investing and Financing Cash Flow Items	-5,250	-806	4,605	-77	-126
Net Debt Proceeds	7,086	3,248	-3,403	2,374	2,391
Net Equity Proceeds	-14	-2	3,999	0	0
Total Change in Cash	-519	-1,532	744	-989	-2,439

<b>ADDITIONAL CASH FLOW MEASURES</b>					
FFO Margin (%)	16.3	16.5	11.2	13.8	15.2
<b>Calculations for Forecast Publication</b>					
Capex, Dividends, Acquisitions and Other Items Before FCF	-14,659	-13,809	-13,707	-13,754	-14,760
Free Cash Flow After Acquisitions and Divestitures	-2,341	-3,972	-4,457	-3,286	-4,704
Free Cash Flow Margin (After Net Acquisitions) (%)	-3.1	-5.6	-6.4	-4.7	-6.6
<b>COVERAGE RATIOS</b>					
FFO Interest Coverage (x)	6.1	6.5	4.4	4.7	4.8
FFO Fixed Charge Coverage (x)	5.1	5.2	3.6	3.8	4.0
Operating EBITDAR/Interest Paid + Rents (x)	5.7	5.5	4.3	3.9	4.2
Operating EBITDA/Interest Paid (x)	6.9	6.8	5.2	4.8	5.1
<b>LEVERAGES RATIOS</b>					
Total Adjusted Debt/Operating EBITDAR (x)	4.2	4.8	5.1	5.2	4.9
Total Adjusted Net Debt/Operating EBITDAR (x)	2.9	3.3	3.5	3.7	3.7
Total Debt with Equity Credit/Operating EBITDA (x)	4.0	4.6	5.0	5.0	4.7
FFO Adjusted Leverage (x)	4.7	5.0	6.1	5.3	5.0
FFO Adjusted Net Leverage (x)	3.3	3.5	4.1	3.8	3.8
Source: Company, Fitch Ratings					

#### How to Interpret the Forecast Presented

The forecast presented is based on the agency's internally produced, conservative rating case forecast. It does not represent the forecast of the rated issuer. The forecast set out above is only one component used by Fitch to assign a rating or determine a rating outlook, and the information in the forecast reflects material but not exhaustive elements of Fitch's rating assumptions for the issuer's financial performance. As such, it cannot be used to establish a rating, and it should not be relied on for that purpose. Fitch's forecasts are constructed using a proprietary internal forecasting tool, which employs Fitch's own assumptions on operating and financial performance that may not reflect the assumptions that you would make. Fitch's own definitions of financial terms such as EBITDA, debt or free cash flow may differ from your own such definitions. Fitch may be granted access, from time to time, to confidential information on certain elements of the issuer's forward planning. Certain elements of such information may be omitted from this forecast, even where they are included in Fitch's own internal deliberations, where Fitch, at its sole discretion, considers the data may be potentially sensitive in a commercial, legal or regulatory context. The forecast (as with the entirety of this report) is produced strictly subject to the disclaimers set out at the end of this report. Fitch may update the forecast in future reports but assumes no responsibility to do so.

Rating Navigator

# Electricite de France (EDF)

## Corporates Ratings Navigator EMEA Utilities

Factor Levels	Sector Risk Profile	Operating Environment	Business Profile					Financial Profile			Issuer Default Rating
			Management and Corporate Governance	Position and Cash Flow Profile	Regulation	Market Trends and Risks	Asset Base and Operations	Profitability and Cash Flow	Financial Structure	Financial Flexibility	
aaa											AAA
aa+											AA+
aa											AA
aa-											AA-
a+											A+
a											A
a-											A- Stable
bbb+											BBB+
bbb											BBB
bbb-											BBB-
bb+											BB+
bb											BB
bb-											BB-
b+											B+
b											B
b-											B-
ccc											CCC
cc											CC
c											C
d or rd											D or RD

**Operating Environment**

aa+	Economic Environment	aa	Very strong combination of countries where economic value is created and where assets are located.
aa	Financial Access	aa	Very strong combination of issuer-specific funding characteristics and the strength of the relevant local financial market.
	Systemic Governance	aa	Systemic governance (eg rule of law, corruption, government effectiveness) of the issuer's country of incorporation consistent with 'aa'.
b-			
ccc			

**Position and Cash Flow Profile**

a-	Market Presence and Integration	a	Top-tier position in more than one market. Vertically integrated (typically including generation, transmission, distribution and supply).
bbb+	Earnings from Regulated Network Assets	bbb	Less than 40% of EBITDA comes from high-quality regulated network assets.
bbb	Quasi-Regulated Earnings	bb	Less than 10% of EBITDA comes from quasi-regulated assets or from long-term contracted sales with creditworthy counterparties.
bbb-			
bb+			

**Market Trends and Risks**

a+	Fundamental Market Trends	bbb	Markets with emerging structural challenges.
a	Generation and Supply Positioning	a	Strong position in the merit order; effective hedging; flexible fuel procurement. Generation balanced with strong position in supply and services.
a-	Customer Base and Counterparty Risk	a	Economy of area served provides structurally stable background; low counterparty risk; high collection rates for supply operations.
bbb+			
bbb			

**Profitability and Cash Flow**

a-	Free Cashflow	bb	Structurally negative FCF across the investment cycle.
bbb+	Volatility of Profitability	bbb	Stability and predictability of profits in line with utility peers.
bbb			
bbb-			
bb+			

**Financial Flexibility**

a	Financial Discipline	a	Clear commitment to maintain a conservative policy with only modest deviations allowed.
a-	Liquidity	a	Very comfortable liquidity. Well-spread debt maturity schedule. Diversified sources of funding.
bbb+	FFO Fixed Charge Cover	bbb	4.5x
bbb	FX Exposure	a	Profitability potentially exposed to FX but efficient hedging. Debt and cash flows well matched.
bbb-			

**Management and Corporate Governance**

a+	Management Strategy	a	Coherent strategy and good track record in implementation.
a	Governance Structure	a	Experienced board exercising effective checks and balances. Ownership can be concentrated among several shareholders.
a-	Group Structure	a	Group structure has some complexity but mitigated by transparent reporting.
bbb+	Financial Transparency	bbb	Good-quality reporting without significant failings. Consistent with the average of listed companies in major exchanges.
bbb			

**Regulation**

a-	Regulatory Framework and Policy Risk	bbb	Less transparent frameworks, with emerging track record and multi-year tariffs; exposed to political risk. Medium-term predictability.
bbb+	Cost Recovery and Risk Exposure	bbb	Tariff setting that may limit efficiently incurred cost and investment recovery, with moderate regulatory lag, price and volume risk.
bbb			
bbb-			
bb+			

**Asset Base and Operations**

aa-	Asset Quality	a	High asset quality likely to benefit opex and capex requirements compared with peers.
a+	Asset Diversity	a	High diversification by geography, generation source, supplied product, multi-jurisdictional utility or regional multi-utility.
a	Carbon Exposure	a	Energy production mostly from clean sources and low carbon exposure (< 300gCO2/kWh).
a-			
bbb+			

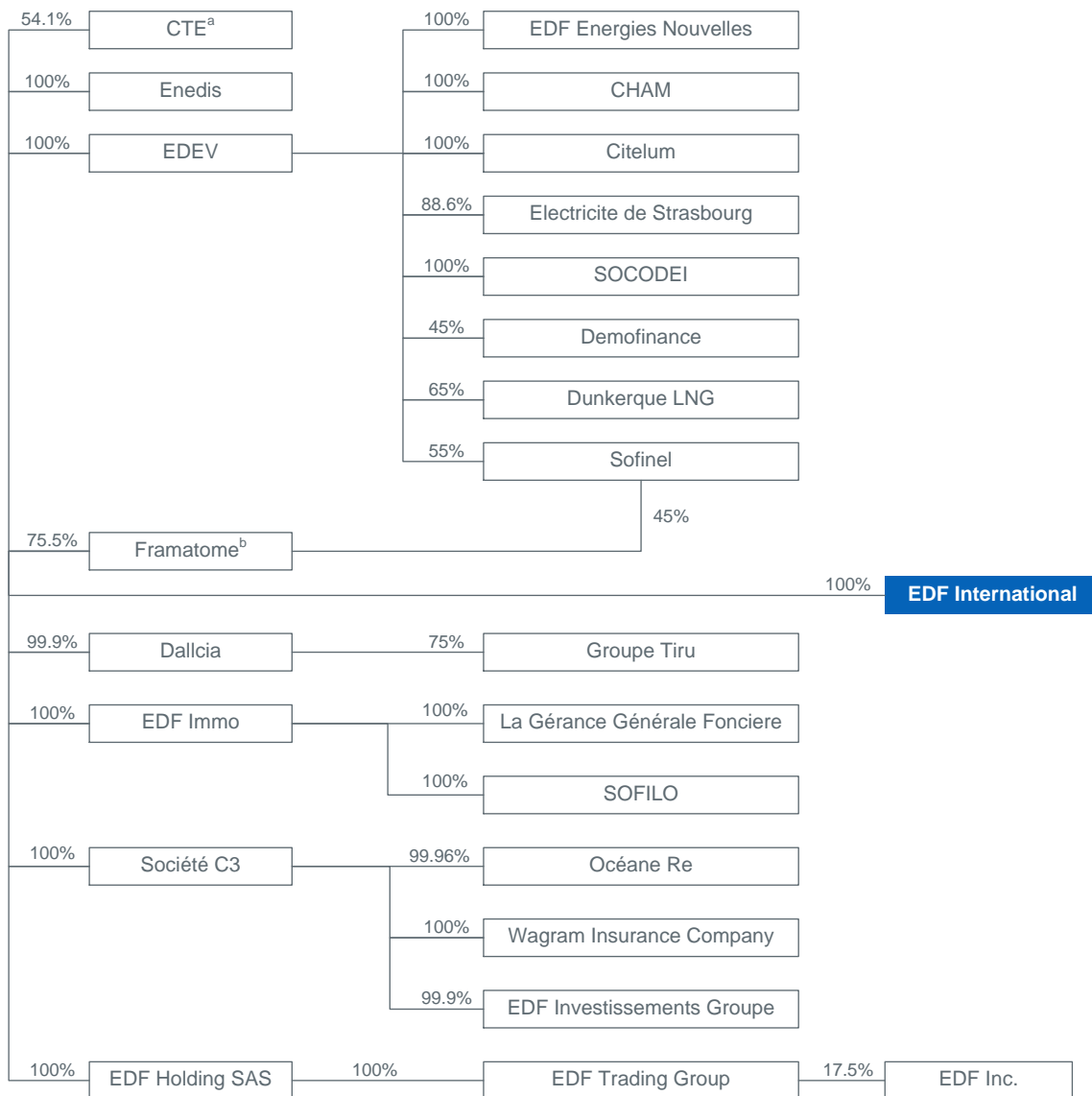
**Financial Structure**

a+	Lease Adjusted FFO Gross Leverage	a	3.5x
a	Lease Adjusted FFO Net Leverage	a	3.0x
a-			
bbb+			
bbb			

**How to Read This Page:** The left column shows the three-notch band assessment for the overall Factor, illustrated by a bar. The right column breaks down the Factor into Sub-Factors, with a description appropriate for each Sub-Factor and its corresponding category.



Simplified Group Structure Diagram

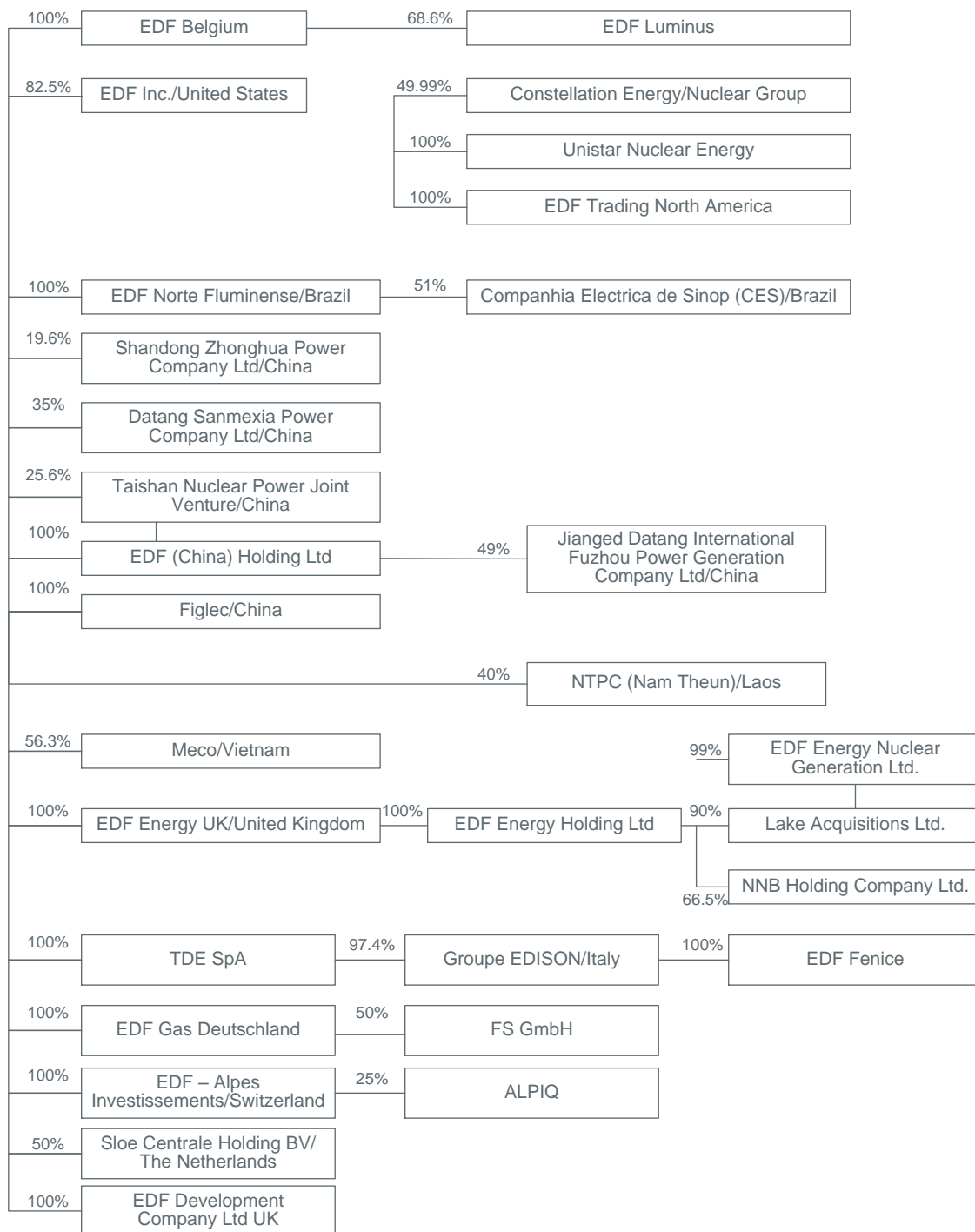


<sup>a</sup> Coentreprise de Transport d'Electricité <CTE> (ex C25), company holding RTE Shares

<sup>b</sup> Acquisition at 31 December 2017

Source: Company

**EDF International**



Source: Company

## Peer Financial Summary

Company	Date	Rating	Gross Revenue	Operating EBITDAR Margin (%)	FFO Margin (%)	FFO Fixed Charge Coverage (x)	FFO Adjusted Leverage (x)
Electricite de France (EDF)	2017	A-	69,632	18.1	11.2	3.6	6.1
	2016	A-	71,203	21.6	16.5	5.2	5.0
	2015	A	75,006	22.9	16.3	5.1	4.7
Engie S.A.	2017	A	65,029	15.3	10.0	5.3	5.0
	2016		64,840	15.4	10.8	5.3	5.0
	2015		69,883	16.2	11.5	5.5	4.7
Enel S.p.A.	2017	BBB+	74,639	20.6	14.1	2.5	4.1
	2016	BBB+	68,604	22.4	12.1	3.6	4.6
	2015	BBB+	73,076	20.8	13.2	3.9	4.4
Iberdrola, S.A.	2017	BBB+	31,263	23.9	16.4	5.3	6.3
	2016	BBB+	29,215	27.2	19.5	5.2	4.8
	2015	BBB+	31,419	23.9	16.7	4.7	4.8
E.ON SE	2017	BBB+	37,965	16.1	6.9	2.7	4.7
	2016	BBB+	38,173	13.3	14.5	5.5	2.5
	2015	BBB+	42,656	16.9	15.5	5.9	2.5

Source: Fitch

## Reconciliation of Key Financial Metrics

(EUR Millions, As reported)	31 Dec 2017
<b>Income Statement Summary</b>	
Operating EBITDA	11,946
+ Recurring Dividends Paid to Non-controlling Interest	-183
+ Recurring Dividends Received from Associates	243
+ Additional Analyst Adjustment for Recurring I/S Minorities and Associates	0
<b>= Operating EBITDA After Associates and Minorities (k)</b>	<b>12,006</b>
<b>+ Operating Lease Expense Treated as Capitalised (h)</b>	<b>646</b>
<b>= Operating EBITDAR after Associates and Minorities (j)</b>	<b>12,652</b>
<b>Debt &amp; Cash Summary</b>	
<b>Total Debt with Equity Credit (l)</b>	<b>59,954</b>
+ Lease-Equivalent Debt	5,168
+ Other Off-Balance-Sheet Debt	0
<b>= Total Adjusted Debt with Equity Credit (a)</b>	<b>65,122</b>
Readily Available Cash [Fitch-Defined]	2,509
+ Readily Available Marketable Securities [Fitch-Defined]	18,344
<b>= Readily Available Cash &amp; Equivalents (o)</b>	<b>20,853</b>
<b>Total Adjusted Net Debt (b)</b>	<b>44,269</b>
<b>Cash-Flow Summary</b>	
<b>Preferred Dividends (Paid) (f)</b>	<b>0</b>
Interest Received	21
<b>+ Interest (Paid) (d)</b>	<b>-2,289</b>
<b>= Net Finance Charge (e)</b>	<b>-2,268</b>
<b>Funds From Operations [FFO] (c)</b>	<b>7,774</b>
+ Change in Working Capital [Fitch-Defined]	1,476
<b>= Cash Flow from Operations [CFO] (n)</b>	<b>9,250</b>
<b>Capital Expenditures (m)</b>	<b>-14,747</b>
<b>Multiple applied to Capitalised Leases</b>	<b>8.0</b>
<b>Gross Leverage</b>	
<b>Total Adjusted Debt / Op. EBITDAR* [x] (a/j)</b>	<b>5.1</b>
<b>FFO Adjusted Gross Leverage [x] (a/(c-e+h-f))</b>	<b>6.1</b>
<i>Total Adjusted Debt/(FFO - Net Finance Charge + Capitalised Leases - Pref. Div. Paid)</i>	
<b>Total Debt With Equity Credit / Op. EBITDA* [x] (l/k)</b>	<b>5.0</b>
<b>Net Leverage</b>	
<b>Total Adjusted Net Debt / Op. EBITDAR* [x] (b/j)</b>	<b>3.5</b>
<b>FFO Adjusted Net Leverage [x] (b/(c-e+h-f))</b>	<b>4.1</b>
<i>Total Adjusted Net Debt/(FFO - Net Finance Charge + Capitalised Leases - Pref. Div. Paid)</i>	
<b>Total Net Debt / (CFO - Capex) [x] ((l-o)/(n+m))</b>	<b>-7.1</b>
<b>Coverage</b>	
<b>Op. EBITDAR / (Interest Paid + Lease Expense)* [x] (j/-d+h)</b>	<b>4.3</b>
<b>Op. EBITDA / Interest Paid* [x] (k/(-d))</b>	<b>5.2</b>
<b>FFO Fixed Charge Cover [x] ((c-e+h-f)/(-d+h-f))</b>	<b>3.6</b>
<i>(FFO - Net Finance Charge + Capit. Leases - Pref. Div. Paid) / (Gross Int. Paid + Capit. Leases - Pref. Div. Paid)</i>	
<b>FFO Gross Interest Coverage [x] ((c-e-f)/(-d-f))</b>	<b>4.4</b>
<i>(FFO - Net Finance Charge - Pref. Div. Paid) / (Gross Int. Paid - Pref. Div. Paid)</i>	
* EBITDA/R after Dividends to Associates and Minorities	
Source: Fitch, based on information from company reports.	

## Fitch Adjustment Reconciliation

	Reported Values 31 Dec 17	Sum of Fitch Adjustments	Preferred Dividends, Associates and Minorities Cash Adjustments	- CORP - other	Other Adjustment	Adjusted Values
<b>Income Statement Summary</b>						
Revenue	69,632	0				69,632
Operating EBITDAR	15,418	-2,826		-2,826		12,592
Operating EBITDAR after Associates and Minorities	15,418	-2,766	60	-2,826		12,652
Operating Lease Expense	646	0				646
Operating EBITDA	14,772	-2,826		-2,826		11,946
Operating EBITDA after Associates and Minorities	14,772	-2,766	60	-2,826		12,006
Operating EBIT	5,637	0				5,637
<b>Debt &amp; Cash Summary</b>						
Total Debt With Equity Credit	56,846	3,108		3,108		59,954
Total Adjusted Debt With Equity Credit	62,014	3,108		3,108		65,122
Lease-Equivalent Debt	5,168	0				5,168
Other Off-Balance Sheet Debt	0	0				0
Readily Available Cash & Equivalents	20,587	265		265		20,853
Not Readily Available Cash & Equivalents	2,417	-265		-265	0	2,151
<b>Cash-Flow Summary</b>						
Preferred Dividends (Paid)	0	0				0
Interest Received	21	0				21
Interest (Paid)	-1,774	-515		-515		-2,289
Funds From Operations [FFO]	9,400	-1,626	60	-1,686		7,774
Change in Working Capital [Fitch-Defined]	1,476	0				1,476
Cash Flow from Operations [CFO]	10,876	-1,626	60	-1,686		9,250
Non-Operating/Non-Recurring Cash Flow	0	0				0
Capital (Expenditures)	-14,747	0				-14,747
Common Dividends (Paid)	-109	0				-109
Free Cash Flow [FCF]	-3,980	-1,626	60	-1,686		-5,606
<b>Gross Leverage</b>						
Total Adjusted Debt / Op. EBITDAR* [x]	4.0					5.1
FFO Adjusted Leverage [x]	5.3					6.1
Total Debt With Equity Credit / Op. EBITDA* [x]	3.8					5.0
<b>Net Leverage</b>						
Total Adjusted Net Debt / Op. EBITDAR* [x]	2.7					3.5
FFO Adjusted Net Leverage [x]	3.5					4.1
Total Net Debt / (CFO - Capex) [x]	-9.4					-7.1
<b>Coverage</b>						
Op. EBITDAR / (Interest Paid + Lease Expense)* [x]	6.4					4.3
Op. EBITDA / Interest Paid* [x]	8.3					5.2
FFO Fixed Charge Coverage [x]	4.9					3.6
FFO Interest Coverage [x]	6.3					4.4

\*EBITDA/R after Dividends to Associates and Minorities

Source: Fitch Ratings

## Full List of Ratings

	Rating	Outlook	Last Rating Action
<b>Electricite de France (EDF)</b>			
Long-Term IDR	A-	Stable	Affirmed 28 June 2018
Short-Term IDR	F2		Affirmed 28 June 2018
Senior unsecured rating	A-		Affirmed 28 June 2018
Subordinated notes rating	BBB		Affirmed 28 June 2018
<b>EDF Energy Nuclear Generation Group Ltd</b>			
Long-Term IDR	A-	Stable	Affirmed 28 June 2018

## Related Research & Criteria

<a href="#">Corporate Rating Criteria (March 2018)</a>
<a href="#">Parent and Subsidiary Rating Linkage (July 2018)</a>
<a href="#">Corporates Hybrids Treatment and Notching Criteria (March 2018)</a>
<a href="#">Corporates Notching and Recovery Ratings Criteria (March 2018)</a>
<a href="#">Government-Related Entities Rating Criteria (February 2018)</a>

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