

CREDIT OPINION

25 September 2017

Update

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RATINGS

Electricity Supply Board (ESB)

Domicile	Dublin, Ireland
Long Term Rating	A3
Type	LT Issuer Rating
Outlook	Stable

Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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Electricity Supply Board (ESB)

Update following upgrade of rating to A3, stable outlook

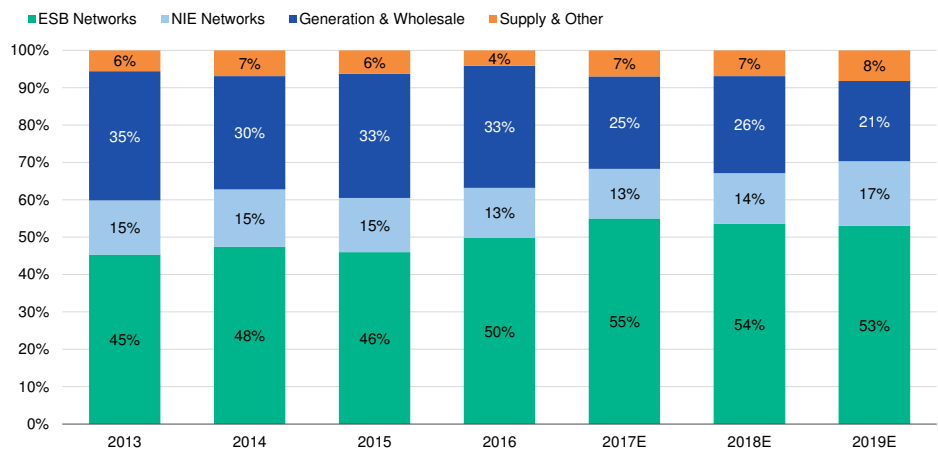
Summary

Electricity Supply Board (ESB)'s robust credit quality reflects (1) the significant proportion of earnings generated through its regulated transmission and distribution operations in the Republic of Ireland (RoI, A2 stable) and Northern Ireland; (2) the low business risk profile of these businesses; (3) an improved leverage profile, as reflected in FFO/debt of 19.6% in 2016, up from 17.9% in 2015, and good liquidity; and (4) potential support given government ownership, should it become necessary.

The ratings also reflect (1) the relatively higher business risk profile of ESB's generation and wholesale activities (33% of 2016 EBITDA); (2) uncertainty for the generation business resulting from the ongoing re-design of the Irish electricity market; and (3) the challenges associated with a large capital investment programme (albeit mostly in the lower risk regulated business).

Exhibit 1

Regulated networks earnings will continue to generate the majority of ESB's EBITDA



Source: Company data, Moody's estimates

## Credit Strengths

- » Two-thirds of earnings from monopoly networks businesses operating under a consistent and transparent regulatory framework
- » Solid financial performance against an improving macroeconomic environment
- » Prudent financial policy
- » Diversified funding sources and sound liquidity position

## Credit Challenges

- » Relatively higher business risk profile of generation and wholesale activities, exposed to low power prices
- » Uncertainty in the generation business resulting from re-design of the Irish Single Electricity Market (SEM)
- » Challenging final determination for RP6 in Northern Ireland
- » Large capital investment programme

## Rating Outlook

The stable outlook on ESB's ratings reflects (1) the stable outlook on Ireland's long-term government bond ratings; and (2) Moody's expectation that ESB will maintain a credit profile consistent with guidance for the Baa1 rating level, which includes FFO interest cover of above 3.5x and FFO to net debt of at least the mid-teens in percentage terms.

## Factors that Could Lead to an Upgrade

Upwards pressure could develop on ESB's ratings if ESB's underlying credit profile was to strengthen such that FFO interest cover and FFO/net debt were expected to be sustainably above 4.5x and 20%, respectively and no material negative consequences arise from the review of the Irish Single Electricity Market design.

## Factors that Could Lead to a Downgrade

Although not currently expected, downward rating pressure could arise from (1) a material debt-funded acquisition or capital investment that eroded ESB's financial flexibility; (2) material unfavourable changes in the regulatory framework in Ireland; (3) an increase in the proportion of non-regulated activities within ESB's business mix; (4) a substantial and persistent deterioration in the group's credit metrics; or (5) downward movement in the Government of Ireland's rating.

## Key Indicators

Exhibit 2

### Key Indicators

#### Electricity Supply Board (ESB)

	12/31/2016	12/31/2015	12/31/2014	12/31/2013	12/31/2012
FFO Interest Coverage	5.2x	4.6x	4.4x	4.6x	4.4x
Net Debt / Fixed Assets	51.0%	53.9%	52.4%	51.6%	52.7%
FFO / Net Debt	19.6%	17.9%	16.9%	20.0%	16.3%
FCF / Net Debt	18.0%	13.3%	11.8%	17.2%	15.0%

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

Source: Moody's Financial Metrics™

## Corporate Profile

ESB is the former incumbent vertically integrated electric utility in the RoI, which holds leading market positions in power generation and electricity supply, as well as being the monopoly owner of electricity distribution and transmission networks across RoI and Northern Ireland.

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The group's regulated businesses contribute the majority of earnings. Across RoI and Northern Ireland, ESB's network assets (which include over 180,000 km of power lines in RoI and over 49,000 km in Northern Ireland) had a combined regulatory asset base (RAB) of approximately €9.1 billion as at the end of December 2016. In addition, the group had a market share of 47% across the Irish Single Electricity Market (SEM) during 2016 and served 1.4 million electricity and gas customer accounts across Ireland, which equated to a 37% electricity market share.

ESB is majority owned (95%) by the Government of Ireland through the Minister for Public Expenditure Reform (85%) and the Minister for Communications, Climate Change and Natural Resources (10%). The remaining 5% stake is held by an employee share ownership trust.

## Detailed Credit Considerations

### Two-thirds of earnings from price-regulated networks business supported by consistent and transparent regulatory frameworks

Approximately two-thirds of ESB's earnings before depreciation and amortisation (EBITDA) in 2016 came from the group's price-regulated transmission and distribution businesses. Regulated revenues, cost allowances and operational incentives are subject to multi-year price controls imposed by regulators in RoI (Commission for Energy Regulation, CER) and in Northern Ireland (Utility Regulator, UR).

The current five year regulatory period in RoI, PR4, started in January 2016 for both the distribution and transmission businesses. In our view the current period represents an extension of a consistent and predictable regulatory framework, with no material changes to the regulatory principles implemented in previous price controls, and limited evolutionary reforms of the kind introduced for recent energy networks price controls in Great Britain.

Overall, we view the PR4 settlement as challenging, but manageable for ESB. Positively, all capital expenditure (capex) and operating expenditure (opex) spent by ESB during the previous period, PR3, was allowed on the basis that it was necessary and efficient. With respect to PR4, overall allowed revenues of €5.3 billion (real, 2014) are in line with ESB's submission. As expected, given the low interest rate environment, the allowed WACC of 4.95% (pre-tax, real) was lower than PR3's 5.95% (revised to 5.2% for 2014/15). In addition, the CER set opex and capex allowances for PR4 that will require ESB to achieve cost efficiency improvements; however these targets are achievable in our view, and there remains some potential upside from incentive mechanisms. CER is still to make a decision on certain outstanding items, although these seem unlikely materially to affect ESB over the next 2-3 years, including: (1) recovery of pension costs associated with a 2010 staff agreement (which are currently not covered by the tariffs, and about which ESB is still discussing with the regulator); (2) a bonus and penalty scheme in relation to certain qualitative targets; and (3) the scope and timing of the investment programme for the roll-out of smart meters.

The capex allowance provides for a significant investment programme, which in part reflects an element of 'catch-up' following the underspend in PR3. The CER's projections for the regulated asset base (RAB) imply a growth over the five year period of 12% to €6.0 billion (real, 2014) on the distribution side, and of 32% to €2.8 billion (real, 2014) on the transmission side. Growth on the transmission side reflects the need to accommodate new wind farms, many of which are to be commissioned by 2019 in order to benefit from the REFIT tariff scheme.

### Final RP6 determination for Northern Ireland is challenging, but with limited impact on overall credit quality

We view as challenging the final determination for ESB's Northern Ireland networks business (NIE), published by the Utility Regulator (UR) in June for the regulatory period from October 2017 to March 2024 (RP6). Specifically, NIE's earnings may suffer because (1) the allowance for direct network investment capex is 5.8% lower than that included in NIE's business plan; and (2) the allowed return has been cut further since the draft determination from 3.29% (vanilla, real) to 3.18% due to market movements in the projected cost of new debt compared to 4.1% proposed by NIE.

More positively, (1) the allowed cost of debt in the RP6 allowed return covers the actual cost of existing debt and an allowance for the cost of new debt is substantially adjusted to reflect the expected prevailing market rate, as per the iBoxx BBB corporate index, at the time of issue of new debt; and (2) the UR increased NIE's opex allowances by £51m meaning that the final opex allowance is 1.8% below NIE's business plan, compared to 13.7% below in the draft determination.

Overall, we estimate that the RP6 price settlement will have only limited impact on the overall robust credit quality of ESB given that (1) NIE Networks' EBITDA of €177 million represented just 13% of group earnings in 2016; (2) NIE Networks has already identified €25.1 million of direct network investment capex reduction, or approximately 55% of the gap towards the regulatory target; (3) the lower WACC reflects the current low interest rate environment and NIE Networks will benefit from lower rates as it refinances its debt, although the company has limited maturities over the period; and (4) more generally, ESB is well positioned against our guidance for the current rating.

### **Remaining one third of earnings from higher-risk generation and supply businesses, but ESB well-placed to cope with low power prices and evolving market**

The majority of group earnings not derived from regulated network businesses are from ESB's power generation business (ESB Generation and Wholesale Markets, GWM), which accounted for 33% of EBITDA in 2016.

Power prices in Ireland have fallen significantly in recent years with current prices at c. €47/MWh. While this is c.12% higher than average prices in 2016 it is still c.10% below average prices in 2015 of €52/MWh. Continued low power prices would have a negative impact on ESB's earnings from power generation. We estimate the contribution of this division to fall to less than 25% of group EBITDA by 2019.

The current capacity payment mechanism helps stabilise generation earnings even as load factors for some of ESB's older gas-fired power plants decline as they have been pushed out of merit. The level of potential remuneration under this mechanism is likely to fall from 2018 as part of the re-design of the Irish electricity market (the I-SEM reforms) which have been delayed, and are expected to be ready for implementation by May 2018. However, we expect payments for ancillary services (needed to manage increasing intermittent renewable generation) will increase, potentially offsetting the lower capacity payments. At this stage, the impact of the I-SEM reforms on the wholesale power price is unclear; our power price forecasts assume it will be neutral.

ESB commissioned the 885 megawatt combined cycle gas-fired plant at Carrington, near Manchester, in September 2016. The €820 million investment was achieved within budget and positively contributed to EBITDA in 2016. We expect the impact of the project on group credit metrics should be positive as it generates earnings (we estimate annual EBITDA of €65-85 million) and repays associated debt.

### **Moderate risk from decarbonisation of the power sector**

The European Union has committed to reduce greenhouse gas emissions by 40% from 1990 levels by 2030 and the Government of Ireland has set a target of 40% of electricity consumption to come from renewable energy by 2020. These targets are designed to significantly decarbonise the regional/national economy. Achieving these reductions will create a variety of risks and opportunities for ESB's GWM business.

We believe ESB is moderately well-positioned to manage the challenges related to these targets. Two-thirds of ESB's EBITDA is provided by regulated networks, which will provide resilient earnings under a variety of decarbonisation scenarios. Although renewables currently make up only 11% of ESB's capacity, over 50% of ESB's GWM capex programme between 2017 and 2021 is expected to focus on renewable generation investment, which will benefit from the existing REFIT incentive schemes.

### **Solid financial performance against an improving macroeconomic environment**

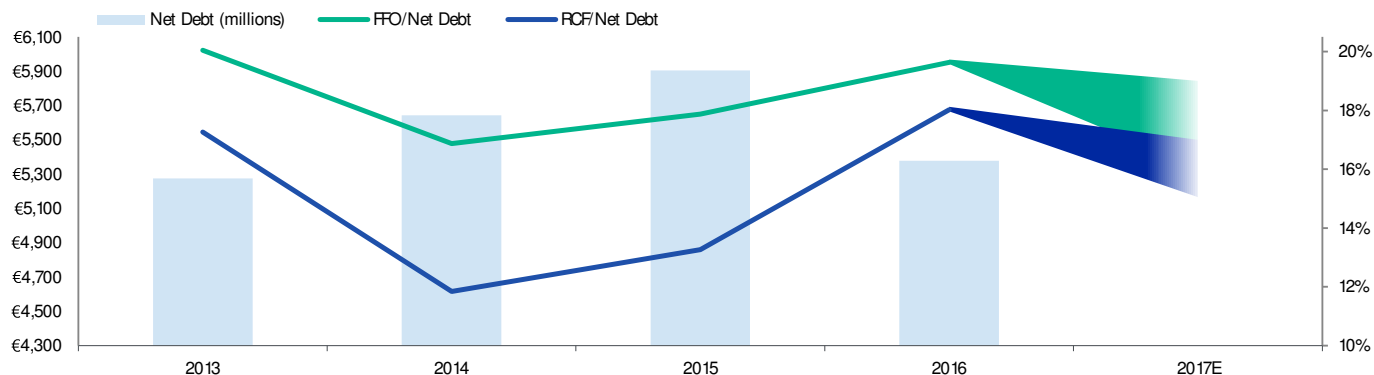
The group's financial profile improved in 2016, with FFO to net debt increasing to 19.6% from 17.9%. This reflected the combination of flat FFO, and lower reported net debt. Stable FFO was itself based on a slight 1.8% like-for-like decline in EBITDA to €1,324 million, which reflected an improved Networks' performance and first time contribution from Carrington, offset by the negative translation effects of weaker sterling from its UK investments including NIE Networks. Lower reported net debt, which declined by €451 million to €4,524 million at end-2016, reflected positive working capital movements, and a favourable currency effect of approximately €300 million on sterling denominated liabilities which are used to finance its UK investments.

Against an improving macroeconomic environment (which Moody's estimates will be reflected in GDP growth of 4.5% and 3.7% in 2017 and 2018 respectively), we estimate EBITDA will be broadly stable in 2017, before resuming growth from 2018. With annual capex estimated to rise towards €1 billion, the outlook is for net debt to increase gradually from 2017, partly also as the favourable working

capital movement in 2016 unwinds. We therefore estimate FFO/net debt will decline slightly in 2017, but to remain in the region of 18%, consistent with Moody's guidance for a Baa1 rating.

Exhibit 3

### We estimate FFO/net debt and RCF/net debt will decline from 2016 highs before stabilising



Source: Moody's Financial Metrics, Moody's assumptions

### Prudent financial policy means leverage will remain moderate despite significant capital expenditure programme

In January 2015, ESB completed the payment of €421 million of special dividends to its shareholders, which it agreed in 2013 to fund through the sale of non-core assets. The final tranche was partially funded by a drawdown of ESB's credit facilities rather than, as originally envisaged, through the sale of the peat-fired generation assets at West Offaly and Lough Ree.

We expect the Irish government to act in a flexible manner and to support ESB in its explicit aim to sustain a minimum Baa1 rating. To this end, we expect the company to remain moderately levered (with net debt to fixed assets below 60%) for the foreseeable future despite what we consider to be a material capital investment programme agreed with the CER as part of the RoI networks price control. The company will need regular access to capital markets to fund what we expect to be around €1 billion capital outlay per annum.

### Government-Related Issuer methodology considerations

ESB is 95%-owned by the Irish government, and as such Moody's considers the company's rating according to its methodology for Government-Related Issuers (GRIs), published in August 2017. At A3, ESB's rating is based upon Moody's evaluation of the company's stand-alone credit strength, the baseline credit assessment or BCA of baa1, and incorporates a one notch uplift for potential government support. The stable outlook on ESB's A3 ratings mirrors the stable outlook on the government's bond rating.

### Liquidity Analysis

We consider ESB to have a sound liquidity position. As at 31 December 2016, the company reported approximately €364 million of cash and cash equivalents and €1.51 billion of undrawn committed facilities, including a €1.44 billion revolving credit facility maturing in 2022.

We estimate that ESB would have sufficient liquidity through cash, committed facilities and approximately €1.3 billion of retained cash flow to fund approximately €1.3 billion of capital expenditure and about €700 million of debt amortisations and maturities over the next 18 months, including a €300 million bond (matured in September 2017), if it did not have access to capital markets or other sources of funding not already committed.

In June 2016, ESB issued a €600 million bond and refinanced €285 million portion of its €500 million maturing in 2019. In February 2017, ESB issued a €500 million bond with a twelve year maturity.

### Rating Methodology and Scorecard Factors

Our rating assessment of ESB is based on our methodology for Regulated Electric & Gas Networks, published in March 2017 and also takes into account the Government-Related Issuer methodology, published in August 2017.

Whilst the methodology grid maps ESB to A2 based on three years of historic metrics and A2 based on our forward view of financial metrics, the BCA of baa1 is lower. This reflects the additional risk compared to peers rated under the methodology posed by the material contribution to group earnings from unregulated businesses, such as power generation and electricity supply.

Exhibit 4

#### Electricity Supply Board Rating Factors Grid

Regulated Electric and Gas Networks Industry Grid [1][2]	Current FY 12/31/2016		Moody's 12-18 Month Forward View As of 9/7/2017 [3]	
Factor 1 : Regulatory Environment and Asset Ownership Model (40%)	Measure	Score	Measure	Score
a) Stability and Predictability of Regulatory Regime	Aa	Aa	Aa	Aa
b) Asset Ownership Model	Aa	Aa	Aa	Aa
c) Cost and Investment Recovery (Ability and Timeliness)	A	A	A	A
d) Revenue Risk	Aa	Aa	Aa	Aa
<b>Factor 2 : Scale and Complexity of Capital Program (10%)</b>				
a) Scale and Complexity of Capital Program	Baa	Baa	Baa	Baa
<b>Factor 3 : Financial Policy (10%)</b>				
a) Financial Policy	Baa	Baa	Baa	Baa
<b>Factor 4 : Leverage and Coverage (40%)</b>				
a) FFO Interest Coverage (3 Year Avg)	4.7x	A	4.1x - 4.3x	A
b) Net Debt / Fixed Assets (3 Year Avg)	52.4%	A	53% - 55%	A
c) FFO / Net Debt (3 Year Avg)	18.1%	A	16% - 19%	Baa
d) RCF / Net Debt (3 Year Avg)	14.3%	A	15% - 17%	A
<b>Rating:</b>				
Indicated Rating from Grid Factors 1-4		A2		A2
<b>Rating Lift</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
a) Indicated Rating from Grid		A2		A2
b) Actual Rating Assigned				(P)Baa1
<b>Government-Related Issuer</b>		<b>Factor</b>		
a) Baseline Credit Assessment		baa1		
b) Government Local Currency Rating		A2		
c) Default Dependence		High		
d) Support		Moderate		
e) Final Rating Outcome		A3		

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

[2] As of 31/12/2016; 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 5

Category	Moody's Rating
<b>ELECTRICITY SUPPLY BOARD (ESB)</b>	
Outlook	Stable
Issuer Rating	A3
Senior Unsecured MTN -Dom Curr	(P)A3
ST Issuer Rating -Dom Curr	P-2
<b>ESB FINANCE DESIGNATED ACTIVITY COMPANY</b>	
Outlook	Stable
Bkd Senior Unsecured	A3

Source: Moody's Investors Service

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