

Global Credit Research - 02 Aug 2013

Reykjavik, Iceland

Ratings

Category	Moody's Rating
Outlook	Stable
Senior Unsecured MTN	(P)Ba2
Other Short Term	(P)NP

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Key Indicators

Landsvirkjun[1]	12/31/2012	12/31/2011	12/31/2010
FFO interest coverage	2.8x	2.7x	3.2x
CFO / Net Debt	8.4%	9.5%	8.0%
FFO / Net Debt	7.8%	8.2%	7.1%
RCF / Net Debt	7.2%	8.2%	7.1%
RCF / (Capex + Acquisitions - Divestitures)	173.2%	293.2%	622.1%

[1] All ratios are calculated using Moody's Standard Adjustments. Source: Moody's Financial Metrics

Note: For definitions of Moody's most common ratio terms please see the accompanying [User's Guide](#).

Opinion

Corporate Profile

Landsvirkjun is Iceland's largest electric utility, owning the majority of the transmission grid and responsible for around 70% of Iceland's total electricity production of 17.5 TWh. It provides energy for domestic users via electricity sales to public utilities, although the bulk of sales are to power intensive industries (PII), mostly for aluminium smelting, an important source of Iceland's foreign currency earnings.

Landsvirkjun was established on 1 July 1965, as a jointly owned enterprise by its shareholders the Republic of Iceland (50%), the City of Reykjavik (45%) and the Township of Akureyri (5%). Following a period of negotiation, the Republic of Iceland agreed to buy the shares of both the City of Reykjavik and the Township of Akureyri and therefore assumed full ownership of Landsvirkjun as of 1 January 2007. Landsvirkjun remains a partnership and in order to meet the requirements of the partnership agreement, 99.9% of the company is owned by the Republic of Iceland and 0.1% by Eignarhlutir hf, a special purpose vehicle owned by the Republic of Iceland. The ownership changes and the amended law on Landsvirkjun Nr 42/1983 came into effect on 1 January 2007. This act was further amended in 2011.

Rating Rationale

The (P)Ba2/(P)NP ratings assigned to Landsvirkjun's \$1 billion EMTN programme reflect the standalone credit quality of Landsvirkjun, expressed as a baseline credit assessment (BCA) of b1 together with two notches of uplift to reflect the likelihood of extraordinary support being provided by the Government of Iceland (Baa3 stable) in the event this was needed to avoid a payment default. This uplift reflects the high level of commitment that Iceland has shown in the past by the provision of guarantees of collection to support Landsvirkjun's debt and the strategic importance of Landsvirkjun to Iceland, given the company's position as the country's dominant electric utility, and the significant role it plays in the provision of electricity to the aluminium smelting industry.

The (P)Baa3/(P)Prime-3 ratings assigned to Landsvirkjun's \$2.5 billion backed EMTN programme reflect the additional credit support provided by the guarantee of collection from the Icelandic government.

Landsvirkjun's b1 BCA reflects (1) the company's high financial leverage; (2) exposure to aluminium prices in a weak commodity market; (3) concentrated exposure to a comparatively small number of counterparties in the aluminium industry; (4) currency risk; and (5) vulnerability to increases in funding costs in the event of higher interest rates. However, these negatives are partially offset by Landsvirkjun's dominant position in the Icelandic energy market, supported by the company's low-cost renewable generation asset base, albeit in a small and isolated market.

DETAILED RATING CONSIDERATIONS

In our assessment of Landsvirkjun's credit profile, we apply our global Rating Methodology for Unregulated Utilities and Power Companies, published in August 2009. Under this methodology, Landsvirkjun is considered an Unregulated Power Company and the grid output maps to ba2. In assigning the BCA of b1, we give additional weight to the company's exposure to aluminium prices in a weak commodity market, a degree of currency mismatch between revenues and debt service costs, as well as vulnerability to increased funding costs in the event of higher interest rates.

Our assessment of Landsvirkjun takes into account the following factors:

FACTOR 1: MARKET ASSESSMENT, SCALE AND COMPETITIVE POSITION

(a) Market and Competitive Position

Landsvirkjun is Iceland's largest electric utility, owning 65% of Landsnet, the national transmission grid and generating around 70% of the country's electricity production. The company's installed capacity, totalling 1,860 MW, is mainly based on hydro sources, which account for approximately 96% of the total owned capacity, with geothermal plants accounting for the remainder. Given the very low marginal costs of production associated with its hydro sources, Landsvirkjun has a very attractive generation portfolio, albeit in a small and isolated market, where there is only some competition from regional companies, primarily Reykjavik Energy and Hitaveita Sudurnesja.

In scoring the company A on this factor, we recognise Landsvirkjun's significant market position in Iceland, but also consider the relatively small size of the overall market, its relative illiquidity and its concentration exposure to a comparatively small number of counterparties in the aluminium industry.

(b) Geographic Diversity

Landsvirkjun scores Ba on this factor as it operates within a single economic area with low demand volatility as much of its power is sold under long-term contracts.

FACTOR 2: CASH FLOW PREDICTABILITY OF BUSINESS MODEL

(a) Effectiveness of Hedging Strategy

Landsvirkjun is predominantly a wholesale producer, with over 85% of revenues coming from power sales. The balance is from transmission activities, spread between local utilities and PIs. Whilst recognising the attractiveness of the cost structure associated with Landsvirkjun's hydro base, we note that the power price can be very volatile given its linkage to, inter alia, the price of aluminium, when the costs associated with this generation source are largely fixed, thus affecting cash flow predictability.

Transmission revenues account for about 10% of Landsvirkjun's revenues and 15% are derived from sales to

local utilities, which are considered relatively low risk given the number of short and medium-term sales contracts. They are denominated in ISK and linked to the Icelandic consumer price index (CPI). This customer base comprises public utilities, including Reykjavik Energy, and other municipal distribution companies for contracts amounting to 1,850 GWh per annum.

The bulk of sales (about 70% of total revenues) are to PII's. About half of PII sales are through contracts directly linked to aluminium prices and based in US dollars. In 2012, PII customers accounted for around 11 TWh of Landsvirkjun's sales under the following contracts: Alcoa Fjarmaal, Alcan Iceland, Nordural, Icelandic Alloys and Becromal. These contracts have long term maturities, all of which are "take or pay", where the customers have to pay, whether or not they use the electricity. After an amendment to one of the power contracts in October 2010, as the first step in Landsvirkjun's new strategy for pricing energy in Iceland, the company's exposure to aluminium price volatility was reduced, although 49% of PII sales remain linked to aluminium prices. We note that under these contracts Landsvirkjun is exposed to counterparty risk but so far the aluminium smelters have had a track record of timely payments.

Despite the long-term nature of the contracts with the aluminium smelters, Landsvirkjun's cash flows are exposed to a high level of volatility, primarily as a result of the link between the power sale price and the aluminium price. The aluminium price tends to be very volatile. For example, the aluminium price underwent a major correction, when it dropped from over \$3,000 per tonne in July 2008 to around \$1,300 per tonne in February 2009. As of end-July 2013, spot aluminium was around \$1,785. We note that in order to reduce cash flow volatility, the company has adopted a hedging strategy, wherein they hedge a certain percentage of their future energy sales. The actual amount hedged is dependent on market conditions and aluminium price forecasts.

We assign Landsvirkjun a score of B for the Effectiveness of Hedging Strategy sub-factor, reflecting the inherent volatility in much of the cash flows given their link to the aluminium price, as well as the concentration of contracts with a small number of companies.

(b) Fuel Strategy and Mix

Landsvirkjun currently operates 13 hydropower plants and two geothermal plants. Landsvirkjun's electricity production in 2012 was 12.3 TWh, of which 96% was from hydrological resources and 4% from geothermal resources. Overall, Iceland's fuel mix is based on 73% hydro and 27% geothermal sources. The company bought approximately 400 GWh for resale to PII's.

A score of B is assigned for Fuel Strategy and Mix, reflecting the limited diversification of fuel source, partially offset by the value of the renewable nature of its fuel mix.

(c) Capital Requirements and Operating Performance

Following a period of significant expansion of the production plants, current investments are relatively modest. The biggest project is the Budarhals hydro power project for 95 MW of capacity (to produce 585 GWh). The plant is scheduled to be fully operational by year-end 2013. Other investments are mainly related to maintenance, with some investment in developing the transmission grid. Possible further projects include a number of new power projects in Southern Iceland. Geothermal power plants in the North-East of Iceland are also possibilities. Landsvirkjun has however, not undertaken any obligations regarding new projects.

Landsvirkjun has also engaged in a feasibility study on a sub-marine cable between Iceland and Europe. This would be a very significant and strategic project for Iceland. However, no decisions have been made with regard to its construction and Landsvirkjun's possible involvement.

The Capital Requirements and Operating Performance sub-factor is scored A. Operating performance has been solid and future output is considered to be relatively predictable. Overall, moderate levels of capex are required for maintenance and for environment-related expenditure, and availability at Landsvirkjun's plants is generally high (according to historical average the units are available for generation 96% of the time).

FACTOR 3: FINANCIAL POLICY

Landsvirkjun scores B on this factor, given the company's historical reliance on debt funding to finance a large investment programme, albeit historically under the guarantee of collection of its owners, without any equity support. The past financial policies have resulted in the company's leveraged financial profile and consequent refinancing risk.

However, we note that Landsvirkjun has strengthened its liquidity position since the start of the financial crisis and

we expect that the company will continue following its prudent financial policies in terms of maintaining adequate amounts of committed facilities to manage refinancing risk.

FACTOR 4: FINANCIAL STRENGTH METRICS

Landsvirkjun scores weakly on financial metrics. The company is highly leveraged and its ability to deleverage is somewhat constrained by the current weak aluminium price environment.

Spot aluminium prices are currently around \$1,775 per tonne, down from the peaks of early 2008, but nonetheless, an improvement on the lows seen in late 2008 and 2009. We believe aluminium prices could remain under pressure for some time, given the weak end-market environment (excluding China), the high inventory position on the London Metal Exchange, potential stockpile sales by China's State Reserve Bureau and the level of aluminium tied up in financing transactions.

A large portion of Landsvirkjun's debt is subject to variable rates, and hence although the company has benefited from the recent drop in market interest rates, it is also vulnerable to a rise in its total cost of debt as a result of higher credit spreads.

Landsvirkjun's reporting currency is US dollar, the currency in which most of its revenues are derived (68% US dollars, 25% Icelandic krona, 7% Norwegian krona). As a substantial proportion of its debt is US dollar denominated, the company has limited exposure to the weak Icelandic krona. It has, however, some sensitivity to adverse movements in the US dollar against the euro given the weighting towards the latter currency in its funding base (around 33% of debt as of end-2012 was euro denominated).

With the completion of major investment projects, we expect that the company's debt coverage metrics such as funds from operations (FFO)/ net debt and retained cash flow (RCF)/ net debt will improve gradually over time, although will likely remain in the mid- to high-single digits into the medium term. The pace of improvement in Landsvirkjun's credit metrics will be primarily dependent on the level of aluminium prices and funding costs, but also whether the company undertakes any further investment projects or pays dividends.

OTHER CONSIDERATIONS

Landsvirkjun's rating assessment reflects the application of our Rating Methodology for Government-Related Issuers (GRIs). Landsvirkjun's ratings incorporate an uplift for potential government support to its standalone credit quality. The uplift to the BCA of b1 is a result of the Government of Iceland's credit quality, which owns Landsvirkjun, coupled with our assessment of a very high probability of government support in the event of financial distress, as well as high default dependence (i.e., degree of exposure to common drivers of credit quality).

Our assumption of a very high support reflects the high level of commitment that Iceland has shown in the past by the provision of guarantees of collection to support Landsvirkjun's debt and the strategic importance of Landsvirkjun to Iceland, given the company's position as the country's dominant electric utility, and the significant role it plays in the provision of electricity to the aluminium smelting industry.

Under Landsvirkjun's original Act of 1983 (as subsequently amended in 2007), and the partnership agreement, the shareholders were liable for the obligations of Landsvirkjun at the time those were incurred in proportion to their shareholding. Nonetheless, ultimately there was a joint and several liability of all shareholders for the obligations. The Act on Landsvirkjun was amended in 2011. The revised law states that Landsvirkjun must now apply for a guarantee from its owners on a case by case basis and that only financial obligations can benefit from such guarantees. This was a major change as previously the guarantee of collection benefitted all creditors and no specific approvals were required. In this regard, we note that the state's guarantees of the company's financial liabilities and long-term power contracts entered into before the amendment are unaffected. Consequently, all the currently outstanding debt benefits from a guarantee of collection from the Government of Iceland.

Guarantees of collection do not offer bondholders the same degree of protection as a timely payment guarantee. There is a potential risk of non-timely repayment should the company fail to meet its obligations, as exhaustive administrative and legal procedures must be followed before the shareholders are obliged to pay. However, given Landsvirkjun's vital strategic importance to Iceland and other incentives for the shareholders (such as its liability for penalty interest), we expect that the state would intervene in a timely fashion and provide financial or other assistance.

The terms of the \$2.5 billion backed EMTN programme allow for issuance of notes only with the benefit of a guarantee of collection provided by the Republic of Iceland and Eignarhlutir ehf.

The terms of the \$1 billion EMTN programme allow for issuance of notes without a guarantee from the Government of Iceland. Consequently, and notwithstanding the very high support for the company, we differentiate between the ratings of the two programmes.

Our assessment of high default dependence balances Landsvirkjun's position as the country's dominant electric utility with the company's high level of US dollar-denominated revenues from contracts with exporting aluminium smelters with international parent companies.

Liquidity

As of 31 December 2012, Landsvirkjun had \$188 million of cash and cash equivalents, as well as access to \$284 million under committed long-term revolving credit facilities (RCFs). Of this amount, \$200 million relates to a committed revolving facility with international commercial banks, maturing in December 2015 and the remaining \$84 million (ISK10.5 billion equivalent) relates to an RCF facility with Icelandic banks, also maturing in December 2015. In addition, Landsvirkjun had an undrawn ECA facility and an undrawn loan amounting to \$124 million.

Landsvirkjun has a relatively well-spread maturity profile, which mitigates refinancing risk. However, the amounts of maturing debt are still sizeable and cash flow could be challenged by low aluminium prices and increasing interest rates.

We understand that the bank facility in USD (fully undrawn) contains financial covenants but Landsvirkjun shows adequate headroom against the default levels.

Rating Outlook

Given the support assumption embedded within its ratings, the stable outlook on the ratings of Landsvirkjun reflects the stable outlook on the Icelandic government's ratings.

What Could Change the Rating - Up

An improvement in the sovereign rating would be required before we would consider an upgrade of Landsvirkjun's ratings under an assumption of a continued very high support from the government.

What Could Change the Rating - Down

We would expect to downgrade Landsvirkjun's ratings (1) following any downgrade of the sovereign rating; or (2) if we were to perceive that there were a reduced likelihood of the government providing timely support to Landsvirkjun. In addition, a deterioration in the standalone credit quality of Landsvirkjun could exert downward rating pressure.

Rating Factors

Landsvirkjun

Power Companies [1][2]	Aaa	Aa	A	Baa	Ba	B	Caa
Factor 1: Market Assessment, Scale and Competitive Position (20%)							
a) Market and Competitive Position			X				
b) Geographic Diversity					X		
Factor 2: Cash Flow Predictability of Business Model (20%)							
a) Effectiveness of Hedging Strategy						X	
b) Fuel Strategy and Mix						X	
c) Capital Requirements & Operational Performance			X				
Factor 3: Financial Policy (10%)							
a) Financial Policy						X	
Factor 4: Financial Strength Metrics (50%)							
a) FFO + Interest / Interest					X		
b) FFO / Net Debt						X	

c) RCF / Net Debt						X	X
d) FCF / Net Debt						X	
Rating:							
a) Indicated Rating from Grid						ba2	
b) Actual BCA assigned							b1

Government-Related Issuer	Factor
a) Baseline Credit Assessment	b1
b) Government Local Currency Rating	Baa3
c) Default Dependence	High
d) Support	Very High

[1] All ratios are calculated using Moody's Standard Adjustments. [2] As of December 31, 2012. Source: Moody's Financial Metrics™



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