

Credit Opinion: Vattenfall AB

Vattenfall AB

Stockholm, Sweden

Ratings

| Category | Moody's Rating |
|-------------------------------|-----------------------|
| Outlook | Stable |
| Issuer Rating | A2 |
| Senior Unsecured MTN | A2 |
| Subordinate MTN | A3 |
| Vattenfall Treasury AB | |
| Outlook | Stable |
| Bkd Senior Unsecured | A2 |
| Bkd Subordinate MTN | A3 |
| Bkd Commercial Paper | P-1 |

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Key Indicators

Vattenfall AB

| | Dec-2007 | Dec-2006 | [1]Dec-2005 |
|--|-----------------|-----------------|--------------------|
| FFO Interest Coverage | 9.3x | 10.0x | 8.8x |
| FFO/ Net Debt | 54.7% | 52.0% | 33.7% |
| RCF/ Net Debt | 41.5% | 42.8% | 26.4% |
| RCF/ (Capex + Acquisitions - Divestures) | 129.6% | 169.6% | 85.9% |
| EBITA margin | 18.7% | 20.9% | 22.3% |

[1] Restated

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

Opinion

Corporate Profile

Vattenfall AB (Vattenfall, A2 stable), 100% Swedish state-owned, is the largest utility in the Nordic sector as well as the third-largest electricity producer in Germany. It is active in all aspects of the electricity chain as well as district heating.

Recent Developments

Moody's recently affirmed the ratings following the announcement that the company has made an offer to acquire 100% of Nuon NV's generation and supply operations for a EUR8.5 billion enterprise value for 100% of the shares, equal to EUR10.3 billion for the equity of NV Nuon 's (Nuon) generation and supply company after dividends.

The transaction will imply a two-step process whereby Vattenfall would initially acquire 49% of Nuon's generation and supply activities, with the remaining 51% of the shares to be acquired after two, four and six years under fixed

terms. The acquisition is expected to become effective in Q2 2009, subject to certain conditions including the finalisation of the unbundling plan of Nuon by the Dutch Ministry of Economic Affairs, the approval by the European Commission and at least 80% acceptance by Nuon's shareholders. Moody's notes that the Management and Supervisory Boards of Nuon have unanimously recommended the offer to Nuon's shareholders.

Rating Rationale

Under Moody's methodology, Vattenfall is a Government Related Issuer. The A2 senior unsecured ratings of Vattenfall reflect the baseline credit assessment (BCA) of the group and the one-notch credit enhancement resulting from its 100% ownership by the Kingdom of Sweden.

The following are the key drivers in determining the rating:

--The BCA of 7 (on a scale of 1 to 21, with 7 mapping to an A3 rating)

- Local currency rating of the Kingdom of Sweden: Aaa.

- Dependence is low, taking into account the high degree of geographic diversification in the revenue base, with European operations contributing over half of revenues at the group level.

- The probability of support is medium, reflecting the 100% state ownership and the strategic importance of Vattenfall within Sweden. However, Moody's believes that the Swedish government has a high degree of market orientation, and the authorities would hesitate to intervene in support of partially or even fully state-owned companies except in the most extreme circumstances, such as when the firm controls substantial utility infrastructure and nuclear and hydro assets, as is the case with Vattenfall. Moody's does not believe that there is any near-term likelihood of privatisation, despite the change to a conservative-led government in 2006, which resulted in a number of less strategic state-owned companies being considered for privatisation.

ASSESSMENT OF BUSINESS RISK FACTORS

When assessing Vattenfall's BCA, Moody's applies its Rating Methodology for Global Regulated Electric Utilities. The BCA of 7 (on a scale of 1 to 21, with 7 mapping to an A3 rating) reflects Vattenfall's overall medium risk business profile. Moody's recognises that the acquisition of Nuon's generation and supply activities is consistent with Vattenfall's strategy, aimed at establishing the company as a leading European energy player, and should enable the acceleration of its investment strategy focused on renewable energy sources. The transaction should also potentially improve Vattenfall's balance between generation and supply activities and increase the strength and scale of Vattenfall's operations, thus diversifying the company's generation portfolio by geography, market and fuel mix.

The share of regulated business (regulated network and low-risk district heating activities) which currently represents a contribution of around 30%-35% EBITDA level is expected to reduce over time, given the shift towards competitive generation and supply businesses. This is as a result of this acquisition, if it goes ahead, and Vattenfall's intention to make further organic investments in generation. Hence the business risk of the company is likely to weaken as anticipated earnings contributions from more volatile generation and supply activities continue to grow with their EBITDA contribution trending towards 70%-75% in the medium term.

Moody's normally considers regulated network activities to be lower risk than more volatile generation and supply as they are monopoly businesses that normally offer greater predictability of cash flow. Nonetheless, Moody's recognises that, in Vattenfall's two key markets with regulated network activity (Sweden and, in particular, Germany), there is pressure on regulated tariffs that has had negative effects on returns in these segments. Whilst returns are expected to improve over time following further regulatory discussions, they are nonetheless expected to remain rather tight.

Vattenfall's business position will be reinforced by its growing strength and diversity - it is the largest Scandinavian electric utility and Germany's third-largest power generation company and third-largest transmission operator with a sizeable supply business. The likely acquisition of Nuon's generation and supply activities would bring leading market shares in the Dutch generation and supply businesses. The Dutch market is an interesting opportunity for Vattenfall, given its relatively high fragmentation, the growth potential in relation to generation activities, the proximity and good connectivity of the Dutch market with contiguous countries. In addition, the country is increasingly emerging as a gas and biomass hub. It also poses a step further in Vattenfall's strategy of growing to around 10% market share of Europe (currently at 5%).

The acquisition would also enable Vattenfall to establish its presence in gas activities and diversify its portfolio of generation assets by adding c.4GW of additional installed capacity. Nuon PLB's generation mix, dominated by thermal sources such as gas (68%) and coal (23%), would add mid-merit and peak capacity to Vattenfall's mix, characterised by a predominance of hydro (32%) and nuclear (22%) baseload capacity. However, the combined group would present a generation mix marginally more exposed to thermal sources, which will make the entity relatively more vulnerable to CO₂-related pricing movements. Overall, the group will still be exposed to volatile commodity pricing, although there are a number of mitigants: Vattenfall has a relatively prudent hedging strategy,

operating in different markets will bring diversification to a certain extent and it has some ownership of upstream assets (such as lignite mines in Germany).

ASSESSMENT OF FINANCIAL RISK FACTORS

Prior to the Nuon transaction, Vattenfall's financial profile had been very strong for its A2 rating category, with adjusted funds from operations/net debt above 50% and retained cash flow (RCF)/net debt above 40%

The EUR10.3 billion acquisition is expected to be largely debt financed, and will add to the non-adjusted net debt at the end of 2008 of SEK66 billion from SEK44 billion at the end of 2007.

Vattenfall also has a fairly significant investment programme over the 2009-13 period -- although the company stated, following the acquisition announcement, that it will reduce from SEK202 billion to SEK191 billion. The bulk of Vattenfall's investment plan is aimed at upgrading and expanding existing generation capacity as well as adding some new plants in a number of areas. The company has made the reduction of CO2 emissions a key driver of its strategy; this is reflected in its focus on investments in new, and relatively expensive, technological advancements such as carbon capture storage, and low CO2 emitting combined heat and power (CHP) plants in Germany. Additionally, Vattenfall is committed to developing its renewables capability in Germany and Sweden. Vattenfall also intends to invest in network upgrades. Continued pressure on network profitability, particularly in Germany, and some likely pressure on district heating margins as a result of higher fuel costs, are also likely to have some impact on profitability.

To ease the financial impact of the acquisition, Vattenfall has also stated its intention of divesting some assets - estimated at around EUR1.5 billion or more. This is expected to include its high-voltage transmission business in Germany.

The Nuon acquisition and the large capex programme is expected to largely absorb the financial headroom at the current rating level, bringing Vattenfall's financial profile more in line with the parameters expected for the current rating category (RCF/ net debt between 15%-19%). However, given the significant, and increasing, focus of the company on generation activities and the volatility/margin risk associated with those, the company should ensure a comfortable positioning at the higher end of the band on a sustainable basis in order to preserve a stable rating. Moody's notes that given Vattenfall's exposure to commodity and electricity prices, a large and sustained drop in demand and price could have a negative impact on Vattenfall's profitability in the intermediate term, although Vattenfall is well hedged in 2009 and into 2010.

Liquidity

Vattenfall AB (A2/P-1) is the guarantor of Vattenfall Treasury AB (its treasury management arm). Vattenfall has a healthy liquidity position due to strong cash flow and significant liquid assets, as well as ample back-up lines. At year end 2008, Vattenfall had SEK23 billion (around EUR2 billion) of available cash and cash equivalents and short term investments and a EUR1 billion committed revolving credit facility, syndicated with 12 banks, which matures in 2013. Drawings under the facility are subject to representations that no adverse change in the group's financial condition has occurred. In addition the company has a committed EUR400 million bilateral credit and SEK100 million overdraft facility; although both mature in 2009. Vattenfall has two commercial paper (CP) programmes: a Euro CP programme of US\$2 billion and a domestic programme of SEK15 billion. Usage of the programmes varies, depending largely on pricing and need.

The consideration for the acquisition of the initial 49% of Nuon's shares would be initially funded through committed debt financing of EUR5 billion with nine banks and using Vattenfall's freely available cash reserves. Moody's notes that Vattenfall must maintain a minimum EUR0.35 billion at Vattenfall Europe to cover its nuclear operations (under the so-called "Solidarity Agreement"). Moody's believes this financing should be sufficient to complete the transaction and that current facilities and operating cash flow should enable the company to carry out its investment plan and meet debt repayments due in 2009.

Vattenfall's general policy is to keep no less than 10% of group turnover in cash or committed back-up lines. Should the next 90 days of debt maturities exceed this amount, then this sets the minimum level of cash and committed lines that Vattenfall is required to hold.

Rating Outlook

The outlook is stable. This reflects the company's medium business risk profile and the fact that the company has sufficient financial flexibility to absorb the potential Nuon acquisition and stay within the current ratio guidelines. Moody's believes that the company is comfortably positioned within this rating category.

What Could Change the Rating - Up

Moody's notes that positive pressure is unlikely to develop in the near term, given Vattenfall's recent acquisition announcement, its substantial investment strategy and its long-term strategy to continue to grow its operations. Moody's notes its somewhat reduced financial flexibility following the transaction although planned divestments

should help ease the situation.

What Could Change the Rating - Down

Negative rating pressure could develop in the event of further significant debt-funded acquisitions or investments, particularly if in combination with a severe downturn in the operating environment resulting in a sustained reduction in Vattenfall's credit metrics. However, Moody's expects future investments to be subject to Vattenfall's financial criteria, including that of maintaining a single-A rating.

In addition to the factors listed above affecting the BCA, the ratings may also be affected by changes in the ratings of the supporting government, or by changes in Moody's assessment of default dependence and support described in the rating rationale, none of which are foreseeable in the medium term.

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