

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; however, it derives 65-70% of cash flows from power generation.

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.

When assessing Vattenfall's BCA, Moody's applies its Rating Methodology for Global Regulated Electric Utilities. The following are the key drivers in determining the rating.

ASSESSMENT OF BUSINESS RISK FACTORS

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. Regulated network and low-risk district heating activities contribute 30%-35% of EBITDA, respectively, at the group level, with the most significant proportion of profitability coming from generation. 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 (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 is reinforced by its strength and diversity - it is the largest Scandinavian electric utility and Germany's third-largest power generation company and second-largest transmission operator; in addition, it has a sizeable supply business. This positions it as a leading Northern European utility. Its exposure is rather well-spread: while deriving strong cash flows from the volatile, more hydro- and nuclear-based Scandinavian generation market, these risks are somewhat mitigated by its exposure to the more thermal-based German market. Moreover, Vattenfall's geographic and fuel mix was further diversified in 2006 when it acquired around 20% of the generation capacity in the Danish market. These assets add more thermal generation to the company's Nordic mix, although they remain a relatively small component. A prudent hedging strategy and ownership of some upstream assets (such as lignite mines in Germany) also reduce some of the generation risk, contributing to our assessment of a medium risk exposure for generation. Nonetheless, volatile commodity pricing, together with more expensive carbon dioxide (CO₂), will continue to keep prices high and competitive and Vattenfall could be subject to risks arising from a political, pricing and environmental perspective in its core Northern European markets.

Generation is the most significant contributor to profitability, and this is expected to increase over time given (i) strong cash flows off the back of strong power prices, (ii) relatively higher investments in this segment and (iii) lower returns from network and possibly district heating businesses. Therefore, in the longer term, Vattenfall's business risk profile is expected to gradually weaken, as anticipated earnings contributions from more volatile unregulated activities, generation and supply continue to grow.

The rating also factors in a degree of event risk. Vattenfall has clearly stated in its strategy that it wishes to grow to around a 10% market share in Europe (currently 5%) through organic growth or acquisitions, while maintaining a single-A rating. The possibility of further significant M&A activity is therefore factored into the A2 stable rating. While Vattenfall has not made any such investments since its acquisition of assets in Denmark in 2006, Moody's believes that this target remains a key plank of its strategy. The two countries most likely to offer interesting large-scale investment opportunities in the near to medium term are the UK, where investments in new nuclear capacity appear very likely, and in the Netherlands, where the owners of the Dutch utilities, Essent and Nuon, have announced they will sell stakes in their generation and supply assets.

Vattenfall may also divest assets. Low returns on the German network business together with EU pressure to "unbundle" has led Vattenfall, in common with E.ON, to declare that it will consider offers for its high-voltage transmission business in Germany.

ASSESSMENT OF FINANCIAL RISK FACTORS

Currently, Vattenfall's financial profile is very strong for its A2 rating category, with adjusted funds from operations/net debt of 54.7% and retained cash flow (RCF)/net debt of 41.5% at FYE 2007.

Some of Vattenfall's financial flexibility at its current rating level will likely be absorbed by its substantial SEK173 billion investment programme over the 2008-12 period (an increase on the previous year's already large SEK 134 billion plan). 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. Vattenfall 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.

High organic investments, together with dividends of 40-60% of net profit after tax, will absorb free cash flow and debt levels are likely to rise. Nonetheless, cash flows should also grow and the financial profile of the group is expected to remain strong for the rating category based on the current 2008-12 plan.

Moody's would, nonetheless, expect that, if substantial M&A activity were to take place, this could weaken the financial profile and bring it in line with the parameters for the current rating. Moody's also notes that, given its 100% ownership by the Swedish state, Vattenfall would be unlikely to have access to additional equity if it did want to make an acquisition.

Moody's notes that the target ratio range of adjusted RCF-to-net debt - 15% to 19% for Vattenfall's current rating category - accommodates the increasing migration in the company's portfolio towards more volatile and

competitive generation businesses. Moody's would, nonetheless, need to consider any material acquisition (or divestment) outside the current plan on a case-by-case basis both for financial and business risk impact; the riskiness of an acquisition could have a corresponding impact on the company's target ratios.

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. Over the next 12 months, Moody's expects Vattenfall to generate cash from operations in the region of around EUR4 billion. In addition, the company had approximately EUR2 billion of cash and liquid funds available at the end of H1 2008 - not including a minimum EUR0.35 billion (SEK3.1 billion) that must be held by Vattenfall Europe to cover its nuclear operations (under the so-called "Solidarity Agreement"). This, together with availability under committed credit facilities as noted below, should in large measure be sufficient to meet committed capital expenditure and dividends over the next 12 months. Moody's notes, however, that Vattenfall is likely to access the capital or bank markets in 2009 to refinance SEK8 billion of which EUR630 million of bonds mature in 1H2009.

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.

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. External sources of liquidity include mainly a seven-year committed EUR1 billion 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, Vattenfall has committed 364 bilateral credit lines of EUR400million and a SEK100million overdraft facility.

OTHER GRI FACTORS

In accordance with Moody's GRI rating methodology, the A2 senior unsecured ratings of Vattenfall reflect the impact of the following factors on its BCA:

- 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.

Rating Outlook

The outlook is stable. This reflects the strong financial profile of the company, but also recognises the challenge of a large investment programme and some regulatory, environmental and political challenges. The rating also builds in flexibility to make further acquisitions in line with Vattenfall's growth intentions. In this regard, Moody's also notes that any large-scale acquisition would in all probability be debt-financed as, given its current 100% share ownership, it is unlikely that the company could rely on any fresh equity.

What Could Change the Rating - Up

Moody's notes that the company's financial profile is expected to continue to stay strongly positioned for its rating category in the absence of any large acquisition or series of acquisitions. Positive pressure could develop if the risk of dilution of the group's financial profile diminishes. Moody's believes that such strategic investments remain a plank of Vattenfall's strategy and, hence, does not see any short-term pressure developing.

What Could Change the Rating - Down

Negative rating pressure could materialise in the event of a significant debt-funded acquisition, in combination with a severe downturn in the operating, regulatory or political environment beyond the assumed financial flexibility. However, Moody's does not see this as likely and expects acquisitions or investments to be subject to Vattenfall's investment 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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