

## Vattenfall AB

**Primary Credit Analyst:**

Alf Stenqvist, Stockholm (46) 8-440-5925; alf\_stenqvist@standardandpoors.com

**Secondary Contact:**

Andreas Kindahl, Stockholm (46) 8-440-5907; andreas\_kindahl@standardandpoors.com

### Table Of Contents

---

Major Rating Factors

Rationale

Outlook

Business Description

Government Support And GRE Methodology Impact

Business Risk Profile: Risks From Nuclear And Coal-Fired Generation  
Constrain Vattenfall's Large And Diverse Operations

Financial Risk Profile: Under Pressure From Weaker Earnings and Large  
Investments

# Vattenfall AB

## Major Rating Factors

### Strengths:

- Strong position in the northern European electricity and heat markets.
- Competitive generation portfolio in Sweden.
- Prudent trading and hedging policies.
- Share of stable, regulated and monopoly-like operations.
- Moderate likelihood of extraordinary support from the Swedish state as the sole shareholder.

### Corporate Credit Rating

A/Negative/A-1

*Nordic National Scale Rating*

--/--/K-1

### Weaknesses:

- Challenging market outlook characterized by falling generation spreads and rising carbon dioxide costs.
- Exposure to competitive markets and volatile electricity prices.
- Operating risk and, in recent years, poor availability in nuclear operations.
- Significant capital expenditure program.

## Rationale

The ratings on Swedish-based multi-utility Vattenfall AB reflect its strong and diverse position in the northern European electricity and heat markets and competitive electricity generation portfolio in Sweden and, to some extent, Central Europe. In addition, Vattenfall generates stable cash flow from low-risk electricity distribution and district heating operations.

Standard & Poor's Ratings Services considers these strengths to be balanced by Vattenfall's exposure to volatile wholesale power prices and the high carbon intensity of the non-Nordic part of Vattenfall's electricity generation fleet, the latter of which results in rising costs from full exposure to payments for carbon dioxide emission allowances under Phase III of the EU ETS (Emission Trading System) from 2013. A further constraint on the ratings, in our view, is Vattenfall's weakened financial risk profile following its €9.8 billion acquisition of N.V. Nuon Energy (Nuon; not rated) in 2009. In addition, we consider Vattenfall's Swedish krona (SEK) 165 billion (about €17.8 billion) capital-expenditure program (2011-2015)--which will be partly debt funded--to be aggressive.

Our 'A' long-term rating is based on Vattenfall's stand-alone credit profile, which we assess at 'a-', as well as on our opinion that there is a "moderate" likelihood that the government of the Kingdom of Sweden (AAA/Stable/A-1+) will provide timely and sufficient extraordinary support to Vattenfall in the event of financial distress.

### Key business and profitability developments

Vattenfall's earnings in 2010 were above our expectations, supported by higher production volumes, lower operating costs, and the effect of higher average electricity prices in the Nordic region (Nordic average spot prices rose 52% year on year). However, lower dark and spark spreads (the theoretical gross margin in coal-fired and gas-fired electricity generation, respectively) in the group's continental European operations partly cancelled out these gains. Furthermore, operating performance in the group's otherwise profitable nuclear generation fleet remained poor in 2010--although we note that availability and, consequently, production in its Swedish nuclear

plants has now improved; nuclear output increased by 38% in the first quarter of 2011 compared with the corresponding period in 2010.

We think Vattenfall's exposure to volatile wholesale power prices is mitigated by the group's prudent strategy of selling forward the bulk of its output. According to Vattenfall's first quarter 2011 report, the group has sold forward 77% and 97%, respectively, of its 2011 expected Nordic and European continent output. For 2012 and 2013, it has sold forward 76% and 38% (Nordic output) and 85% and 21% (continental European output). However, locked-in prices are lower than hedges currently expiring and are likely to pressure Vattenfall's profitability over the near- to medium-term, in our view. Furthermore, from 2013, under Phase III of the ETS, all Vattenfall's carbon dioxide emission allowances will be paid for, which we think will weigh on Vattenfall's large electricity generation operations in continental Europe. These generation assets are largely fossil-fuel based.

We will monitor the extent to which Vattenfall's management can offset the combined effects of spread compression, a sluggish recovery in demand, and rising carbon dioxide costs with the implementation of cost savings and efficiency improvements. For example, we note that Vattenfall has launched a cost-cutting program aimed at reducing operating expenses by SEK6 billion annually by year-end 2013. In addition, the group has indicated its intention to divest less profitable assets in non-core markets, which we expect will partly materialize in 2011.

### **Key cash flow and capital-structure developments**

Vattenfall's financial gearing remains high, and, combined with our expectations of continued weak operating income, weighs on the group's financial risk profile.

Although adjusted funds from operations (FFO) to debt recovered to about 22% in 2010 (compared with about 16% in 2009) and continued to strengthen in the first quarter of 2011. We believe that cash flow credit metrics will come under pressure over the near to medium term, however. This is likely to result from debt incurred as a result of high investment levels and pressure on profitability from weakening generation margins in the group's main markets. However, we understand that Vattenfall is seeking to bolster cash flow by reducing capital spending, improving operational effectiveness, and executing asset disposals such as the phased divestment of assets in non-core markets. These measures, we believe, will be critical in supporting Vattenfall's efforts to reduce debt and strengthen cash flow credit measures on a sustainable basis. In the long term, however, we believe Vattenfall's earnings will be closely linked to power prices and generation margins.

### **Liquidity**

The short-term rating is 'A-1' and we view the group's liquidity as adequate. Vattenfall has a policy of maintaining the equivalent of 10% of the group's turnover in cash or committed credit lines (this currently equates to SEK20 billion-SEK25 billion) or the equivalent of the next 90 days' debt maturities, whichever is greater. Our assessment of Vattenfall's adequate liquidity position is, however, based on our expectations that the group will maintain, over a rolling 12 month period, liquidity sources of above 1.2x liquidity uses (this was above 1.3x at end-2010) and to have no material funding deficit within 12-24 months at any given point.

As of March 31, 2011, the group's liquidity was supported by available cash and short-term investments of SEK35.5 billion. Vattenfall also had access to an unused €1 billion (about SEK9 billion) committed credit facility maturing in February 2013, which contains no rating triggers or onerous covenants. In addition, Vattenfall signed an agreement for a new five-year revolving credit facility for €2.55 billion (about SEK23 billion) in January 2011, intended for back-up. This facility was undrawn as of March 31, 2011. This compares with SEK35.6 billion (including a SEK13.3 billion installment for Nuon due in 2011) of reported short-term debt and interest-bearing provisions, as of

the same date.

The group faces significant debt payments--including two €1.5 billion installments for Nuon--in 2011 and in 2013, and about SEK5 billion-SEK7 billion in dividends annually. This is in addition to about SEK165 billion of planned investments in 2011-2015, which we understand are front loaded. The group expects to invest SEK42 billion in 2011, SEK35 billion in 2012, and SEK30 billion in 2013. A portion of the investments in 2011 and, potentially, in 2012 could be debt funded and will add to Vattenfall's already significant debt burden, if not met by asset disposals. Consequently, we believe these payments will need to be addressed in the next few years to reduce funding and refinancing risk.

## Outlook

The negative outlook reflects our concern that Vattenfall could struggle to maintain cash flow credit metrics in line with our rating expectations on a sustainable basis. Our concern is based on a number of factors, including a high debt burden following the Nuon acquisition, lower profitability in its key electricity generation segment, margin pressure from rising carbon dioxide costs, uncertainty about the success and timeliness of disposals, and ongoing high investment and dividend levels.

We currently expect FFO to debt to remain at about 20% over the near to medium term and that Vattenfall manages to reduce debt levels. We note, however, that execution risks--relating to cost cutting efforts, disposal programs, and improving nuclear availability--and general market uncertainty remain factors that could cause the group's key credit metrics to deteriorate beyond our expectations.

We could lower the ratings by one notch if we believe Vattenfall is unlikely to maintain a ratio of FFO to debt (adjusted) of more than 20% on a sustainable basis. The ratings could also come under pressure if we see evidence of government support weakening. This would most likely be the effect of privatization of a significant part of the government's shareholding, which, however, we deem unlikely to happen over the near to medium term. Similarly, we could lower the ratings if Vattenfall unexpectedly undertakes a material debt-financed acquisition, if its operating performance deteriorates beyond our current expectations, or if it expands its investment program beyond current levels.

Conversely, we could revise the outlook to stable if Vattenfall were to successfully implement measures to maintain a financial profile at the level we consider commensurate with an 'a-' stand-alone credit profile.

## Business Description

With a turnover of about SEK213 billion (about €24 billion) in 2010, Vattenfall is the largest electricity and heat generator in the Nordic region, with significant coal-fired, nuclear, and hydropower production capacity. The group generated about 172.5 terawatt-hours (TWh) of electricity and 44.5TWh of heat in 2010, making it the largest heat producer in Europe. Vattenfall has a strong market position in its core market areas, which were recently defined as Sweden, Germany, and the Netherlands.

### Strategy

Vattenfall received a revised assignment from its government owner and, to counter market challenges, redefined its vision and announced an updated strategic direction during 2010.

Vattenfall's new vision is to "develop a sustainable diversified European energy portfolio with long-term increased profits and significant growth opportunities". Vattenfall has also announced it will focus on its core markets where it has a strong position (Sweden, Germany, and the Netherlands), and on three main products (electricity, heat, and gas). Consequently, we expect the group to divest non-core assets and businesses in the near term, and, over the medium to long term, expand through organic investments in targeted business areas and geographies. This includes capacity replacements and life-time extensions supported by small bolt-on acquisitions. Management's near-term goals will also likely be capital-expenditure reductions and the improvement of groupwide operational efficiency.

**Table 1**

Vattenfall AB--Operating Statistics							
	--Year ended Dec. 31--						
	2010	2009	2008	2007	2006	2005	2004
Total capacity, electricity(MW)	39,923	39,296	34,572	35,230	35,114	32,448	32,918
Generation (TWh)	172.5	158.9	162.1	167.6	164.4	169.1	167.1
Of which nuclear (%)	21.0	21.0	28.0	31.0	33.0	35.0	37.0
Of which fossil based (%)	52.0	50.0	47.0	46.0	45.0	41.0	43.0
Of which hydro (%)	25.0	26.0	24.0	22.0	21.0	24.0	20.0
Electricity sold (TWh)	194.6	189.0	189.3	193.8	191.1	200.3	186.4
Retail customers (000s)	7,773	7,508	4,790	4,702	4,917	4,973	5,040
Type of network (kV)	up to 130	up to 440	up to 440	up to 440	up to 440	up to 440	up to 440
District-heating deliveries (TWh)	44.5	37.9	35.6	36.2	35.2	34.1	34.5

MW--Megawatts. TWh--Terawatt-hours. kV--Kilovolts.

## Government Support And GRE Methodology Impact

In accordance with our criteria for government-related entities, our view of a "moderate" likelihood of extraordinary government support is based on our assessment of Vattenfall's:

- "Strong" link with the Swedish government, given the group's 100% state ownership (through the Ministry of Enterprise, Energy, and Communications) and the government's influence on high-level strategic decision-making; and
- "Limited" role, given the group's strong, but not dominant, market position in Sweden, increasing exposure to non-Nordic markets, and its operations in a fully liberalized electricity market, such that it could conceivably be replaced by a private-sector entity or another GRE.

## Business Risk Profile: Risks From Nuclear And Coal-Fired Generation Constrain Vattenfall's Large And Diverse Operations

Vattenfall's "strong" business risk profile is underpinned by the group's:

- Strong, diverse, and integrated position in the northern European electricity market. Vattenfall is a leading electricity generator in Northern Europe, in Sweden in particular, and the largest heat provider in Europe. It is also the largest electricity retailer and the second largest electricity distributor in Sweden, as well as a leading energy provider in the Netherlands and a large player in Germany.

- **Competitive generation portfolio.** We regard asset quality as fairly high and supportive of the ratings. Vattenfall has a modern, flexible, and competitive generation portfolio, which is well diversified geographically and in terms of generation mix. It comprises lignite plants, nuclear plants, and a significant proportion of low-cost hydro-generation plants, which supports the ratings. The acquisition of Nuon added significant gas-fired capacity to Vattenfall's generation portfolio as well as some wind power (including a portfolio of wind-development projects) and bio-mass capacity. Vattenfall has made significant investments in renewable energy and has constructed large wind farms, mainly in Sweden, Denmark, and the U.K. According to the group's roadmap for investments in renewable energy, Vattenfall aims to add significant wind power capacity over the medium to long term as a part of its vision of becoming climate neutral. We regard Vattenfall's lignite-fired plants in Germany as cost competitive, given the group's integrated mining operations, which reduces operational risks. Carbon dioxide-intensive production is a negative rating factor, however, because the full cost of emission allowances will affect margins after 2012.
- **Stable cash flow from electricity distribution and heating operations.** Vattenfall's stability is underpinned by its regulated electricity distribution and monopoly-like heating operations, which accounted for about 28% of EBIT in 2010. In Sweden, where Vattenfall mainly operates regional electricity distribution networks, regulatory restrictions have eased over recent years and we view the regulatory framework as favorable to credit quality. This works on a cost-plus basis and enables Vattenfall to generate stable and reasonable operating cash flows, in our view. A new regulatory model that will set tariffs on an ex-ante basis (forward looking) is planned to come into effect in Sweden by 2012, but is not likely to alter the return profile materially. District heating is unregulated in Sweden, but is low-risk, in our view, and generally generates very stable and predictable cash flows.

These supports are partly offset by:

- **A challenging industry and market outlook, leading to pressure on profitability requiring ongoing cost optimization.** Power and gas utilities, Vattenfall included, face an increasingly complex, volatile, and uncertain operating environment, exacerbated by rising regulatory uncertainty. Vattenfall's profitability is likely to be constrained by falling and increasingly volatile power and gas prices, possible chronic oversupply of electricity and gas in Europe, as well as rising costs of production; the full auctioning of carbon dioxide emission certificates under the EU ETS will, in our opinion, reduce the group's operating earnings and cash flows over the near and medium term. Vattenfall emitted 91.5 million tonnes of carbon dioxide in 2010 and receives about 61 million tonnes for free annually until 2012. Accordingly, we expect Vattenfall to face an incremental cost of about €915 million-€1.2 billion, on an annual basis, to cover its shortage of carbon allowances in 2013 and onwards, assuming a carbon dioxide price of €15-€20 per tonne. New coal plants to be commissioned in the next few years, however, will likely increase carbon dioxide emissions by about 15 million tonnes. Vattenfall aims to reduce its carbon dioxide emissions to about 65 million tonnes by 2020 by disposing of carbon dioxide-intensive generation plants in non-core locations, co-combustion with biomass, and fuel switching from coal to gas.
- **Exposure to volatile wholesale power prices.** Vattenfall's overall profitability is closely correlated to, and dependent on, achieved power prices and generation spreads. Nordic power prices are highly volatile and seasonal, owing to their dependence on hydro generation levels, weather, oil and gas prices, and, increasingly, carbon dioxide emission allowance prices. Central European power prices are more closely linked to the price of commodities, particularly coal, oil, and gas. Power prices are becoming increasingly volatile across Europe, mainly due to the significant addition of intermittent renewable electricity generation sources.
- **High capital intensity.** This involves significant ongoing investments in Vattenfall's generation capacity and

distribution networks. Due to high capital intensity, the industry's return/break-even horizons are often further out, because of the need to invest heavily in fixed assets/production capacity. Operating leverage and, consequently, the need for high capacity utilization adds to the group's risk profile. Vattenfall's nuclear operations are most sensitive to the need for high capacity utilization.

- Risks related to nuclear generation. In addition to Vattenfall's poor record in recent years as a nuclear operator, nuclear operations carry significant financial and operating risks. Nuclear operations remain exposed to inherent political risks as well as stricter environmental and safety requirements following the March 2011 nuclear incident in Japan. See "Credit FAQ: Japan's Nuclear Crisis Could Have Lasting Effects For European Nuclear Operators".
- Ownership and governance structure. Vattenfall's government ownership and governance structure could negatively affect strategic decision-making. Vattenfall is often subject to political pressure on issues such as environmental investment, investment strategy, and power prices and negative political intervention cannot be ruled out. We also believe it could be more challenging for Vattenfall to implement cost efficiencies due to its government ownership, which might restrict its flexibility in comparison with its listed peers.

## Financial Risk Profile: Under Pressure From Weaker Earnings and Large Investments

### Financial policies

Vattenfall's financial targets, based on long-term averages, include cash flow interest coverage after maintenance investments of 3.5x-4.5x (4.6x in 2010 according to Vattenfall) and an 11% return on net assets (9.1%), which is derived from the group's 15% post-tax return on equity target (10% in 2010). Vattenfall has stated its commitment to maintaining a rating in the 'A' category.

### Intermediate financial risk profile

We view Vattenfall's financial risk profile as "intermediate", reflecting healthy cash flow from operations and modest leverage over the cycle. This is restricted by a still-ambitious investment plan and high dividend payments, which put pressure on Vattenfall's credit measures.

The main strengths of Vattenfall's "intermediate" financial risk profile, according to our classifications, are:

- Focus on debt reduction and strengthening of the group's balance sheet. Vattenfall's management has taken measures to strengthen its balance sheet over the medium-term, mainly by sharply reducing investment levels. The group also intends to continue to dispose of non-core assets and to boost profitability.
- Some flexibility in capital spending, especially over the medium term. Vattenfall has the ability to adjust its growth-related capital expenditure budget according to demand. We understand that expansionary investments occur only if economically justified. For this reason, we assume lower spending and more conservative management of cash flow during difficult times.
- Adequate liquidity and financial flexibility. Vattenfall is a well-established borrower with strong banking relationships and good access to public debt markets. The group uses a wide variety of funding alternatives. Vattenfall's debt and committed back-up facilities do not include any rating triggers, onerous financial covenants, or material adverse change clauses. On March 31, 2011, the average time to maturity was 6.2 years (excluding hybrid instruments and loans from associated companies and minority owners) against Vattenfall's target of a minimum of five years. On March 31, 2011, the group's debt maturities were reasonably well spread, although

with some concentration in the medium term.

These strengths are offset by the group's:

- Moderately aggressive dividend policy. According to the group's financial targets, revised in 2006, dividends should amount to 40%-60% of net income. Over the past three years, dividends have been at the low end of the range, although for 2010 it was 50% (SEK6.5 billion paid in May 2011), which was about the same level as free cash flows before dividends in 2010. We view Vattenfall's full state ownership as possibly providing some flexibility because the Swedish government may allow some flexibility in dividend payouts if the group experiences financial difficulty.
- High investment levels pressuring cash flows. Despite recent reductions in capital spending, Vattenfall's SEK165 billion capital expenditure program for 2011-2015 is likely to lead to negative discretionary cash flow over the near term. The high investment levels reflect the group's ambition to complete coal plants under construction and its strategy of further increasing the proportion of renewable energy sources in its generation portfolio. To achieve this, we understand the group will continue to invest extensively in wind, biomass, and natural gas power, and heat generation projects. Over the medium term, however, Vattenfall should be able to generate positive cash flows and reduce debt.
- Weak credit metrics. Although Vattenfall's FFO-to-debt ratio improved to 22% (from 16% in 2009) and the debt-to-EBITDA ratio decreased to 3.0x in 2010 (4.2x), the ratios remain weak given our expectations of pressure on operating cash flows in next few years.

### Accounting

Vattenfall's consolidated accounts are prepared under International Financial Reporting Standards. Our key analytical adjustments accounts relate to postretirement benefit obligations, asset-retirement obligations (AROs), surplus cash, hybrid capital, and operating lease adjustments (see table 2):

- Unfunded postretirement obligations added about SEK18.9 billion to adjusted debt at the end of 2010, with limited tax effects because most of the unfunded obligations were in Germany.
- We added SEK23.9 billion to reflect future decommissioning liabilities relating to Vattenfall's proportional share of nuclear and mining operations. We calculate the AROs related to Vattenfall's Swedish nuclear operations net of the group's share of the Swedish nuclear decommissioning fund. The AROs are based on Vattenfall's legal obligation to assume 100% of the decommissioning liabilities related to the Ringhals plant and 66% of the liabilities related to the Forsmark plant. The proportionate net liability was SEK6.3 billion for the group's Swedish nuclear plants at the end of 2010. From this liability, we deduct related deferred tax assets of about SEK1.7 billion (based on an effective tax rate of 26.3%). Vattenfall's gross pro rata decommissioning liability for its German plants was SEK17 billion at the end of 2010. Vattenfall's German minority-owned nuclear plants have set aside cash to cover future nuclear decommissioning liabilities. This cash is deposited with Vattenfall and is included in the group's debt (loans from associated companies; SEK10.5 billion as of Dec. 31, 2010). Consequently, these funds are deducted from our ARO adjustment. The balance of adjustments is related to mining operations (SEK12.8 billion).
- In line with Vattenfall's accounts, we treat the liability pertaining to the acquisition of the remaining 51% of the shares in Nuon (SEK43.3 billion) as debt. It shall, according to Vattenfall, be paid in three tranches: in July 2011, 2013, and 2015.
- We give Vattenfall credit for surplus cash (SEK39.2 billion on Dec. 31, 2010), which we view as readily available, and deduct it from gross debt.

- We have reclassified to equity from debt 50% of the nominal value of hybrid instruments (SEK8.9 billion) that we consider to have intermediate equity content.
- Operating lease adjustments amounted to SEK4.6 billion.
- We adjust Vattenfall's debt with the market value of currency derivatives (a positive value of SEK2.7 billion as at year-end 2010), margin calls received (SEK5.1 billion at year-end 2010) and liabilities to minority owners (SEK8.9 billion).
- SEK4.2 billion of accrued interest (as of Dec. 31, 2010) was added to adjusted debt.

Table 2

Reconciliation Of Vattenfall AB Reported Amounts With Standard & Poor's Adjusted Amounts (Mil. SEK)*						
--Fiscal year ended Dec. 31, 2010--						
<b>Vattenfall AB reported amounts</b>						
	Debt	EBITDA	Interest expense	Cash flow from operations	Cash flow from operations	Capital expenditures
Reported	188,277	60,706	6,544	41,231	41,231	40,028
<b>Standard &amp; Poor's adjustments</b>						
Operating leases (p. 122)	4,553	233	232	605	605	411
Intermediate hybrids reported as debt (p. 111)	-4,465	--	-252	252	252	--
Postretirement benefit obligations (p. 112)	18,892	167	1,137	-60	-60	--
Accrued interest not included in reported debt (p. 114)	4,207	--	--	--	--	--
Surplus cash and near cash investments (p. 47)	-39,210	--	--	--	--	--
Capitalized interest (p. 105)	--	--	874	-874	-874	-874
Capitalized development costs (p. 103)	--	-286	--	-286	-286	-286
Asset retirement obligations (company information), of which:	23,901	--	1,356	-111	-111	--
Proportional consolidation nuclear AROs Sweden	28,716	--	--	--	--	--
Proportional consolidation nuclear AROs Germany	16,996	--	--	--	--	--
Loans from associates already included in reported debt	-10,488	--	--	--	--	--
Provisions mining operations (p.113)	12,760	--	--	--	--	--
Nuclear waste fund assets	-22,430	--	--	--	--	--
Deferred tax asset on Swedish net nuclear liability	-1,653	--	--	--	--	--
Interest income (p. 101)	--	--	--	--	--	--
Reclassification of working-capital cash flow changes	--	--	--	--	-1,123	--
Minority interests	--	--	--	--	--	--
Other, of which:	-16,740	-374	--	--	--	--
Participation in results of associated companies (p. 84)	--	-624	--	--	--	--

Table 2

Reconciliation Of Vattenfall AB Reported Amounts With Standard & Poor's Adjusted Amounts (Mil. SEK)* (cont.)						
Capital gains/losses (p. 84)	--	250	--	--	--	--
Asset impairment charges (p. 84)	--	--	--	--	--	--
Currency derivatives (p. 47)	-2,668	--	--	--	--	--
Margin calls received (p. 47)	-5,149	--	--	--	--	--
Liabilities to minority owners (p. 47)	-8,923	--	--	--	--	--
Total adjustments	-8,862	-261	3,348	-475	-1,598	-749

**Standard & Poor's adjusted amounts**

	Debt	EBITDA	Interest expense	Cash flow from operations	Funds from operations	Capital expenditures
Adjusted	179,415.1	60,445.5	9,891.8	40,756.2	39,633.2	39,278.6

\*Page numbers refer to Vattenfall AB's 2010 annual report (English).

Table 3

Vattenfall AB--Peer Comparison					
	Vattenfall AB	Fortum Oyj	EnBW	Statkraft AS	CEZ a.s.
Rating as of May 24, 2011	A/Negative/A-1	A/Stable/A-1	A-/Negative/A-2	A-/Stable/A-2	A-/Stable/--
Stand-alone credit profile	a-	a-	a-	bbb	bbb+
Business risk profile	Strong	Strong	Strong	Strong	Strong
Financial risk profile	Intermediate	Intermediate	Intermediate	Significant	Intermediate
GRE qualifier	Moderate	Moderate	Low	Moderately high	Moderately high
Installed capacity end-2010 (GW)	39.8	9.7	15.5	16.0	15.0
Electricity production 2010 (TWh)	172.5	47.4	66.7*	57.4	68.4
Of which hydro (%)	21	46	11**	87	5***
Of which nuclear (%)	25	46	51	0	41
Of which renewables (%)	2	0	0	1	0
Of which thermal (%)	52	7	35	11	54
Gas sales 2010 (TWh; excl. trading)	64	N/A	54	N/A	N/A
Heat sales 2010 (TWh)	44.5	26.1	5.3	1.1	16.9
Regulated income (% of EBIT)	16	17	25	4	18

--Fiscal year ended Dec. 31, 2010--

(Mil. €)					
Revenues	23,683	6,296	18,406	3,750	7,943
EBITDA	6,701	2,408	2,855	1,985	3,717
Net income from cont. oper.	1,441	1,300	1,171	909	1,884
Funds from operations (FFO)	4,392	1,343	2,297	1,814	3,079
Capital expenditures	4,416	1,149	1,496	379	2,393
Free operating cash flows (FOCF)	101	232	842	1,371	597
Cash dividends paid	617	888	419	1,021	1,148
Discretionary cash flows (DCF)	-516	-656	422	350	-551
Debt	19,895	8,129	9,120	5,482	6,736
Equity	15,164	8,689	7,509	9,653	9,057

Table 3

Vattenfall AB--Peer Comparison (cont.)					
<b>Adjusted ratios</b>					
EBITDA margin (%)	28.3	38.5	15.6	53.1	46.7
EBIT interest coverage (x)	4.2	7.3	2.4	8.9	9.2
EBITDA interest coverage (x)	6.1	8.8	3.1	9.1	12.4
Return on capital (%)	11.1	10.9	11.9	13.0	17.4
FFO/debt (%)	22.1	16.5	25.2	33.1	45.7
Target FFO/Debt (%)	>20	>20	>20	15-20	>25
Net cash flow/capital expenditure (%)	86.7	39.6	125.5	212.5	80.7
FOCF/debt (%)	0.8	2.9	9.2	25.0	8.9
Common dividend payout ratio (%)	50.0	68.3	31.9	112.3	59.8
DCF/debt (%)	(2.3)	(8.1)	4.6	6.4	(8.2)
Debt/EBITDA (x)	3.0	3.4	3.2	2.8	1.8
Debt/debt plus equity (%)	56.7	48.3	54.8	36.2	42.7

N/A Not applicable. \*2009 generation. \*\*including renewables. \*\*\*including others.

Table 4

Vattenfall AB -- Financial Summary*					
--Fiscal year ended Dec. 31--					
	2010	2009	2008	2007	2006
Rating history	A/Negative/A-1	A/Negative/A-1	A-/Stable/A-2	A-/Stable/A-2	A-/Stable/A-2
<b>(Mil. SEK)</b>					
Revenues	213,572	205,407	164,549	143,639	135,802
EBITDA	60,446	51,633	45,621	44,882	42,495
Net income from continuing operations	12,997	12,896	17,095	19,769	18,729
Funds from operations (FFO)	39,633	35,097	31,727	34,368	36,642
Capital expenditures	39,279	46,997	30,567	18,798	16,037
Free operating cash flow	1,478	-2,354	6,619	13,853	20,021
Discretionary cash flow	4,085	-9,605	-1,734	5,997	13,892
Debt	179,415	215,113	103,420	90,215	98,384
Equity	136,750	147,164	145,204	129,465	109,337
<b>Adjusted ratios</b>					
EBITDA margin (%)	28.3	25.1	27.7	31.2	31.3
EBIT interest coverage (x)	4.2	3.1	5.2	6.0	6.1
EBITDA interest coverage (x)	6.1	4.7	7.4	8.9	8.8
Return on capital (%)	11.1	10.1	12.3	12.5	12.4
FFO/debt (%)	22.1	16.3	30.7	38.1	37.2
Free operating cash flow/debt (%)	0.8	(1.1)	6.4	15.4	20.4
Discretionary cash flow/debt (%)	(2.3)	(4.5)	(1.7)	6.6	14.1
Debt/EBITDA (x)	3.0	4.2	2.3	2.0	2.3
Debt/debt and equity (%)	56.7	59.4	41.6	41.1	47.4

\*Fully adjusted (including postretirement obligations). Excess cash and investments netted against debt.

**Ratings Detail** (As Of May 24, 2011)\***Vattenfall AB**

Corporate Credit Rating	A/Negative/A-1
<i>Nordic National Scale Rating</i>	--/--/K-1
Commercial Paper	A-1
<i>Nordic National Scale Rating</i>	K-1
Senior Unsecured (20 Issues)	A
Subordinated (1 Issue)	A-
Subordinated (1 Issue)	BBB

**Corporate Credit Ratings History**

23-Dec-2009	A/Negative/A-1
30-Jun-2009	A/Stable/A-1
06-Sep-2006	A-/Stable/A-2
02-Sep-2010	<i>Nordic National Scale Rating</i> --/--/K-1

**Business Risk Profile**

Strong

**Financial Risk Profile**

Intermediate

**Debt Maturities**

As of Dec. 31, 2010¶

2011: SEK27.5 bil.

2012: SEK2.1 bil.

2013: SEK30.4 bil.

2014: SEK14.8 bil.

2015: SEK20.6 bil.

2016 and thereafter: SEK54.4 bil.

¶Excluding loans from minority owners and associated companies, provisions, and accrued interest.

\*Unless otherwise noted, all ratings in this report are global scale ratings. Standard & Poor's credit ratings on the global scale are comparable across countries. Standard & Poor's credit ratings on a national scale are relative to obligors or obligations within that specific country.

**Additional Contact:**

Industrial Ratings Europe; CorporateFinanceEurope@standardandpoors.com

**Additional Contact:**

Industrial Ratings Europe; CorporateFinanceEurope@standardandpoors.com

Copyright © 2011 by Standard & Poors Financial Services LLC (S&P), a subsidiary of The McGraw-Hill Companies, Inc. All rights reserved.

No content (including ratings, credit-related analyses and data, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of S&P. The Content shall not be used for any unlawful or unauthorized purposes. S&P, its affiliates, and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact or recommendations to purchase, hold, or sell any securities or to make any investment decisions. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P's opinions and analyses do not address the suitability of any security. S&P does not act as a fiduciary or an investment advisor. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain credit-related analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, [www.standardandpoors.com](http://www.standardandpoors.com) (free of charge), and [www.ratingsdirect.com](http://www.ratingsdirect.com) and [www.globalcreditportal.com](http://www.globalcreditportal.com) (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at [www.standardandpoors.com/usratingsfees](http://www.standardandpoors.com/usratingsfees).