Research Update:

Swedish Power Company Vattenfall Outlook Revised To Stable From Positive; 'BBB+/A-2' Ratings Affirmed

December 15, 2023

Rating Action Overview

- We believe that risks in the Nordic power market have increased over the last few years, and that price volatility will be larger in the future. We also anticipate that Vattenfall's underlying EBITDA exposure to unregulated power production will gradually increase over 2024-2026, likely to 80%-85%.
- Vattenfall AB's business risk has therefore not developed as favorably as we expected when we assigned a positive outlook in November 2021, and, because of likely increased investment, we expect management to steer toward the upper end of its financial policy of funds from operations (FFO) to debt of 22%-27% over the medium to long term.
- Nevertheless, we continue to view Vattenfall's position in Sweden as very strong, generating about 45% of the electrical power in the country, with an already very low emission profile and a diverse generation mix, which support a strong business risk profile.
- We also expect Vattenfall's financial position to remain robust and supportive for the rating over the coming years.
- We therefore revised our outlook on Vattenfall to stable from positive and affirmed our 'BBB+/A-2' long- and short-term issuer credit ratings. At the same time, we affirmed our Nordic regional scale rating on Vattenfall at 'K-1', our 'BB+' issue rating on its junior subordinated debt, and our 'BBB+' rating on its senior unsecured debt.
- Since we now see a higher exposure to industry risk, we have revised our minimum expectation for the 'bbb' stand-alone credit profile (SACP) and 'BBB+' rating to around 25% from 20% previously.
- The stable outlook indicates that we expect Vattenfall's current ample rating headroom will decrease over time, returning to FFO to debt below 30%.

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Rating Action Rationale

We believe that Vattenfall's business risk is increasingly exposed to a volatile power market, implying a reducing share of regulated earnings. We expect Vattenfall's share of regulated earnings, such as electricity networks and district heating, to decrease gradually below 20% over 2024-2026, versus 25%-30% historically (we therefore continue to calibrate credit metrics to our standard volatility table). This is a consequence of additional installed generation capacity in wind and expectations of higher generation earnings on the back of improving power price realization, at least until 2025.

We believe the current financial headroom will be reduced by an ambitious investment plan and hence credit metrics will likely approach the upper part of the group's financial policy range of FFO to debt of 22%-27% over time. Vattenfall's credit metrics have been strong over the past several years, with S&P Global Ratings-adjusted FFO to debt at about 54% in 2022, and we expect the ratio to remain within 30%-40% over 2024-2025, mostly as a consequence of increased price realizations. However, based on its stated guidelines, through additional investments over the next three to five years, Vattenfall may well consume the headroom above our anticipation of around 30% FFO to debt. We expect the bulk of investments to be in wind generation. In its November 2023 capital market day, the utility repeated its intention to keep the adjusted FFO to debt in the 22%-27% range (calculated close to our adjustments), and we perceive management as very committed to honoring this financial policy. Therefore, if there is sustained lack of profitable investment opportunities, we don't fully rule out dividends reaching the upper part of the 40%-70% pay-out ratio range.

Vattenfall revised its hedging strategy in late 2022, as the correlation between the hedgeable system price in the Nordics and the various price areas deviated negatively and had an adverse effect on price realization. As a result, Vattenfall now hedges less of its generation. We expect Vattenfall to be able to achieve higher prices from generation, leading to higher, but more volatile earnings. Indeed, we expect Nordic power prices to be more volatile than before the energy crisis in 2022, triggered by the Russian- Ukraine war, but at higher levels (above €40 per megawatt hour (/MWh). This compares with Vattenfall's price realization for the first nine months of 2023 of €35/MWh and the system price for the first nine months of 2023 of €56.1/MWh. In 2022, the price realization was a mere €27/Mwh. Currently Vattenfall has hedges in place covering around 50% of its 2024 generation and 35% of 2025's, compared with 66% in 2022.

In addition, the share of Vattenfall's wind generation that benefits from subsidies has decreased over the last years, also making the segments results more volatile. We expect around Swedish krona (SEK)13 billion-SEK15 billion in underlying EBITDA from the division in 2023, much less than the SEK22 billion achieved in 2022. The key driver for this has been strong power prices over 2022-2023, which accelerate the end of the subsidy period in Denmark, where Vattenfall has about one-third of its installed wind capacity. The high merchant price therefore implied that investments been recovered at a higher speed, achieving the full possible subsidized level earlier than expected. With that said, we still estimate the share of subsidies at around 20%-30% of the total wind segment EBITDA over the coming year, providing some support to EBITDA stability. We do not view it as strong as regulated operations, however.

With its investment geared toward renewables and an already low emission profile, we believe Vattenfall is among the best positioned utility companies in Europe. With its net-zero target set for 2040, Vattenfall is well on its way to phase out fossil fuels in the energy mix. The company's emission intensity is already below the EU taxonomy threshold of 100 grams of carbon dioxide equivalent per kilowatt hour. This means Vattenfall needs to invest less to achieve net zero than many pan-European peers do. Instead Vattenfall can focus its investment on increasing capacity. Its capital expenditure (capex) program is heavily skewed toward wind power, which should represent about 76% of the 2023-2024 SEK50 billion management-guided growth capex, despite its recent setback in U.K. offshore wind, where it decided to pause and impair by SEK5.5 billion its Norfolk Boreas Offshore project. We believe this highlights the industry risk in offshore wind, in the form of challenging market conditions, rising costs, soaring inflation, supply chain crunches, and increasing costs of capital. See "Vattenfall's SEK5.5bn Impairment Relating To Norfolk Boreas Offshore Will Not Immediately Affect Its Business Profile," published July 20, 2023, on RatingsDirect.

Separately from this setback, Vattenfall has brought several wind parks online in 2023, including the large 1,500 megawatt (MW) offshore park Hollandse Kust Zuid and the 240MW onshore park South Kyle. Also, the company has successfully shared the risk associated with large wind projects, such as through the sale of a 49.5% stake in the fully unsubsidized Hollandse Kust Zuid to BASF commissioned in 2023, and potentially in the coming Nordlicht 1 and 2 projects in Germany, expected to generate a combined 6 terawatt hours (TWh) annually when commissioned, which is expected in 2027-2028. In our view, this adds some stability to an otherwise unregulated business segment.

We believe it is unlikely that Vattenfall will embark on any major nuclear spending within the next five years, but we will monitor closely its potential involvement in Sweden's new nuclear program. The Swedish government (which owns 100% of Vattenfall) aims to have the market to build new nuclear capacity equivalent to two large nuclear plants by 2035 and potentially 10 new reactors by 2045. Several arrangements to facilitate the expansion have been announced, including SEK400 billion of loan guarantees. The government has also announced its willingness to arrange risk-sharing mechanisms, but further details are still unclear. We note that Vattenfall has acquired land for a potential development. We therefore believe Vattenfall, as the largest operator in Sweden, may be particularly well positioned to participate, and that it will carefully evaluate such an investment. Future investment could therefore be directed toward nuclear, which would, depending on how it is structured, expose Vattenfall to sizable cost overruns, technical risk, or increased financial exposure. However, this would likely take place after the end of our current base case horizon.

Vattenfall is in final discussions on the divestment of its Berlin district heating operations, set for a final decision this month. Selling Heat Berlin would only slightly affect our base case, diluting the share of credit-supportive regulated earnings but removing Vattenfall's last coal-fired plants and potentially--after taxes and dividends--reducing its debt. If kept, it would likely require heavy decarbonization investments in the coming years.

Investments in wind, heat, and distribution system operations remain high as Vattenfall plans to remain an integrated utility. Of the SEK50 billion Vattenfall plans to invest in growth of operations over 2023-2024, 76% is targeted toward wind, 11% to district heating, and 6% to electricity distribution systems. We view investment in distribution systems, and secondarily in district heating, as supportive of the business risk profile in highly rated countries, namely Sweden and others in northern Europe. However, this capex direction is unlikely to significantly raise, if at all, the regulated share of Vattenfall's future consolidated earnings.

Outlook

The stable outlook reflects our assumption that the share of EBITDA from unregulated operations will be 15%-20% over 2024-2026, excluding subsidized wind, driven by a more profitable power generation segment and an expansion of wind operations. This risks adding volatility to earnings, but will be partly compensated for by better price realization, Vattenfall's strong position in the Nordic utility market and well-advanced position in the path toward net-zero. We also expect continuity in the company's relationship with the Swedish government.

Upside scenario

We could upgrade Vattenfall by one notch if we were to conclude that the financial risk profile had sustainably strengthened, with FFO to debt around 30% and sufficient visibility on the long-term debt trajectory, as well as a clear commitment from management to keep a strong financial risk profile. This could occur if the current headroom is not consumed by additional capex as expected, potentially due to a lack of meaningful and profitable projects to invest in. We could also raise the rating by one notch if the relationship with the government strengthened, potentially through changes to Vattenfall's ownership directive.

Downside scenario

We believe downside risk is currently remote. We could lower the rating if we believe that Vattenfall's position in the power generation business was weakening; for example, if realized power prices remain low or if the expansion in renewables were to deteriorate the group's profitability. These factors could have negative financial consequences for the company and, unless countermeasures are implemented, lead to weaker credit measures, such as prolonged FFO to debt around 25%. We could also downgrade Vattenfall if government support weakened, for example, if the government privatized a significant part of its stake. However, we consider this as unlikely over the near to medium term.

Aggressive investment in nuclear, without tangible support or risk-sharing by the Swedish government, could also lead to downside pressure. Although the discussions about nuclear have increased, and the government has stated its intention to implement strong incentives, we believe that any tangible investment is unlikely within the next five years.

Company Description

Vattenfall is one of the largest electricity and heat producers in Europe and is 100% owned by the Swedish state. At year-end 2022, the company reported sales of about SEK240 billion and S&P Global Ratings-adjusted EBITDA of about SEK48 billion. Vattenfall's business portfolio is split between unregulated power generation, mainly in Sweden, the Netherlands, and Germany (39% of 2022 underlying EBITDA), on- and offshore wind generation (40%), the customer and solutions segment (15%), electricity distribution networks in Sweden and U.K. (8%), and heat business in Germany, Sweden, and the Netherlands (-1%). The group generated about 108.9TWh of electricity and sold about 14.1TWh of heat in 2022. Of the total generated electricity, 77.2TWh were generated in Sweden, representing around 45% of the annual power generated in the country.

Our Base-Case Scenario

Assumptions

- Swedish GDP growth of -0.8% and consumer price index inflation at 6.2% in 2023.
- Power prices in the Nordic region; we assume system prices will stabilize around €40-€45/MWh 2024, compared with €55/MWh in January-November 2023 and €136/MWh in 2022.
- EBITDA of SEK40 million-SEK50 billion in 2023-2024 before rising sharply to SEK65 million in 2025 due the decreased hedges.
- Capex of about SEK77 billion in total over 2023-2024.
- Vattenfall's hedged generation segment, with approximately 55% at €30/MWh and 50% at €47/MWh in 2023 and 2024, respectively, then falling sharply.
- Weighted average cost of capital under the Swedish regulatory framework for the distribution system operator at least at 2.35% for 2020-2023 and for 2024-2027; however, the final terms for the upcoming regulatory period 2024-2027 is still pending.
- No major acquisitions.
- Dividend payments around 40%-70% of profit.
- We do not assume a divestment of district heating operations in Berlin at this stage.

Key metrics

Vattenfall AB--Key forecast ratios

Industry sector: Energy					
	--Fiscal year ended Dec. 31-				
(Mil. SEK)	2021a	2022a	2023e	2024f	2025f
Revenue	180,119	239,644	165,000-170,000	197,000-202,000	261,000-266,000
EBITDA	46,084	48,107	38,000-43,000	46,000-51,000	62,000-67,000
Funds from operations (FFO)	36,490	40,293	31,000-35,000	37,000-41,000	50,000-54,000
Capital expenditure (capex)	24,909	24,765	33,000-37,000	37,000-41,000	42,000-46,000
Debt	14,516	75,154	100,000-130,000	110,000-135,000	120,000-160,000
Debt/EBITDA (x)	0.3	1.6	2.7-3.1	2.3-2.7	1.9-2.3
FFO/debt (%)	251.4	53.6	27-31	30-34	36-40

All figures are adjusted by S&P Global Ratings, unless stated as reported. a--Actual. e--Estimate. f--Forecast. SEK--Swedish krona.

Liquidity

We assess Vattenfall's liquidity as adequate. We expect the group will maintain liquidity sources that exceed liquidity uses by about 1.6x over the next 12 months. At the end of the third quarter, available cash was almost SEK65 billion. As the power market has become more volatile, however, we expect that there will continue to be some volatility in the ratio of liquidity sources to liquidity uses, likely as a consequence of margin calls.

We believe management has a very proactive approach to liquidity. It took several steps to improve liquidity quickly in 2022 when the energy market was particularly volatile. Furthermore, it typically refinances main credit facilities early, and is regularly active in the international bond market, with, for example, a £250 million green hybrid bond in May 2023, highlighting its access to markets. We assume liquidity sources will exceed uses even if EBITDA decreases by 15% and we understand that the company's credit facilities are free from onerous financial covenants. We also view Vattenfall as having solid relationships with banks. We also believe its status as state-owned company and status as the largest utility in the Nordic region further support this position and facilitate market access.

According to our calculations, Vattenfall's liquidity sources as of Sept. 30, 2023, comprised:

- Available cash and marketable securities of about SEK67.8 billion.
- Access to committed undrawn credit lines of about SEK24 billion maturing in November 2025. In addition, Vattenfall has about SEK35 billion of committed shorter duration facilities that we don't include in our analysis, because they are less than one year. The revolving credit facility does not carry any financial covenants.
- Forecast FFO of SEK38 billion-SEK44 billion.

Principal liquidity uses as of Sept. 30, 2023, are:

- Reported financial liabilities of SEK25 billion due within one year.
- Some working capital movements
- Capex of SEK36 billion-SEK39 billion annually in both 2023 and 2024.
- Dividends paid in 2024 of around SEK10 billion

Ratings Score Snapshot

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Issuer Credit Rating	**BBB+/Stable/--**
Nordic Regional Scale	K-1
Business risk:	Strong
Country risk	Very low
Industry risk	Moderately high
Competitive position	Excellent
Financial risk:	Intermediate (using our Standard Table)
Cash flow/leverage	Intermediate
Anchor	bbb+
Modifiers:	
Diversification/Portfolio effect	Neutral (No impact)
Capital structure	Neutral (No impact)

Ratings Score Snapshot (cont.)

Issuer Credit Rating	BBB+/Stable/--
Nordic Regional Scale	K-1
Financial policy	Negative (-1 notch)
Liquidity	Adequate (No impact)
Management and governance	Satisfactory (No impact)
Comparable rating analysis	Neutral (No impact)
Stand-alone credit profile:	bbb
Related government rating	AAA+
Likelihood of government support	Moderate (+1 notch from SACP)

Related Criteria

- General Criteria: Environmental, Social, And Governance Principles In Credit Ratings, Oct. 10, 2021
- General Criteria: Group Rating Methodology, July 1, 2019
- Criteria | Corporates | General: Corporate Methodology: Ratios And Adjustments, April 1, 2019
- Criteria | Corporates | General: Reflecting Subordination Risk In Corporate Issue Ratings, March 28, 2018
- General Criteria: Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017
- General Criteria: Rating Government-Related Entities: Methodology And Assumptions, March 25, 2015
- Criteria | Corporates | General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- Criteria | Corporates | Industrials: Key Credit Factors For The Unregulated Power And Gas Industry, March 28, 2014
- Criteria | Corporates | General: Corporate Methodology, Nov. 19, 2013
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- General Criteria: Methodology: Industry Risk, Nov. 19, 2013
- Criteria | Corporates | Utilities: Key Credit Factors For The Regulated Utilities Industry, Nov. 19, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities, Nov. 13, 2012
- General Criteria: Principles Of Credit Ratings, Feb. 16, 2011
- General Criteria: Stand-Alone Credit Profiles: One Component Of A Rating, Oct. 1, 2010

Ratings List

Ratings Affirmed; Outlook Action

	To	From
Vattenfall AB		
Issuer Credit Rating	BBB+/Stable/A-2	BBB+/Positive/A-2
Nordic Regional Scale	--/--/K-1	--/--/K-1
Senior Unsecured	BBB+	BBB+
Junior Subordinated	BB+	BB+
Commercial Paper	A-2	A-2

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.spglobal.com/ratings for further information. A description of each of S&P Global Ratings' rating categories is contained in "S&P Global Ratings Definitions" at https://disclosure.spglobal.com/ratings/en/regulatory/article/-/view/sourceId/504352. Complete ratings information is available to RatingsDirect subscribers at www.capitaliq.com. All ratings affected by this rating action can be found on S&P Global Ratings' public website at www.spglobal.com/ratings. Alternatively, call S&P Global Ratings' Global Client Support line (44) 20-7176-7176.