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Research Update:

Finland-Based Nuclear Power Producer TVO Downgraded To 'BB+' From 'BBB-' On Reduced Cost Competitiveness; Outlook Stable

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Overview

- In our view, the ongoing decline in Finnish power prices over the past year will place pressure on TVO's cost competitiveness and weaken the benefit it offers its shareholders, particularly once its third nuclear reactor is commissioned in 2018/2019.
- We are therefore revising down our assessment of TVO's business risk profile to satisfactory from strong.
- We are also lowering our ratings on TVO to 'BB+/B' from 'BBB-/A-3'.
- The stable outlook reflects our expectation that further downside risk related to Finnish electricity prices has reduced, as has the risk of increased investment costs related to the completion of the third nuclear reactor.

Rating Action

On May 23, 2016, S&P Global Ratings lowered its long- and short-term corporate credit ratings on Finland-based nuclear power producer Teollisuuden Voima Oyj (TVO) to 'BB+/B' from 'BBB-/A-3'. The outlook is stable.

Rationale

The downgrade primarily reflects our view that TVO's cost competitiveness has weakened further because of the deterioration in Finnish power prices and future price expectations. Future prices are currently predicted by the market to be below TVO's expected costs of production when the third nuclear power plant Olkiluoto 3 (OL3) is commissioned in 2018/2019. In our view, this will diminish the cost advantage TVO currently offers to its shareholders. We have therefore revised down our view of its business risk profile to satisfactory from strong.

We forecast that TVO's average production cost will increase to slightly below €30/mwh (megawatt hour) in 2019 from around €20/mwh currently once OL3 is commissioned. This could reduce the economic attractiveness of TVO's business model for its owners if current prices are maintained.

In our view, maintaining a cost advantage will be an important support for TVO's non-profit structure in the long term. If the current power price environment prevails, it will become more difficult for TVO to maintain this advantage and will further increase TVO's reliance on shareholders' ability and willingness to provide contracted financial support.

Although we believe that TVO could sell any residual output through the Nordic spot power market--and that this could cover its cash costs in the short term--it may not be able to cover depreciation and debt amortization if prices remain low. If TVO's production costs remain at or above market prices, we think that other or new shareholders will be less likely to step in to meet obligations left by a shareholder default.

OL3's competiveness has reduced notably given the increase in expected construction costs, to approximately €2 billion. This has stemmed from significant construction delays; it's now nine years behind the original scheduled completion date of 2009. However, we expect that the project will be delivered without any further material budget increases. Despite a turn-key fixed-price contract, TVO remains in arbitration with its suppliers, AREVA-Siemens consortium, regarding the over-runs, and there is no certainty that TVO will receive compensation via this arbitration.

TVO's non-profit cooperative-like "Mankala" business model includes a full cost-cover structure backed by a long-term off-take arrangement with the owners. According to the company's articles of association, the shareholders are severally liable for TVO's annual fixed costs (accounting for about 80%-85% of total costs), including interest expenses and debt installments. They are also responsible for TVO's variable costs in proportion to their off-take. Although the shareholders are not jointly liable for TVO's costs, we believe the shareholders would have a strong interest in supporting TVO should any individual shareholder default, as long as they expect TVO's production costs to be competitive in the long term.

TVO has a concentrated asset base. However, its operational nuclear plants have demonstrated a reliable operational track record, seen in high capacity utilization rates that have remained above 90%. TVO has modernized and upgraded its plants over the years, ensuring that they always have a remaining technical lifetime of 40 years.

We believe that TVO's shareholders view their stakes in TVO as long term. They have shown support by supplying equity in the form of shareholder loans--with currently a further €300 million in committed shareholder loans--to help fund OL3. We note that TVO is exposed to the Finnish forest products industry through two of TVO's major underlying shareholders: Pohjolan Voima Oy--UPM-Kymmene and Stora Enso.

We assess TVO's financial risk as significant based on its high debt leverage, which has increased due to cost overruns in the OL3 project. TVO's financial risk is supported by its full cost-cover structure and articles of association stipulating that the shareholders are responsible for annual fixed costs, as well as other expenses resulting from financing the company.

Because of the company's nonprofit cost-cover structure, its financial ratios are less indicative of its financial risk profile than those of profit-maximizing enterprises. Although partly equity-financed, the construction of OL3 has significantly increased TVO's capital spending and debt in recent years. In addition, interest costs related to OL3's debt are treated as capital expenditure in TVO's accounts and are not passed on to shareholders as production costs. This further weakens TVO's financial measures. This situation is likely to persist for the next couple of years due to continued high investment needs and negative free cash flows during the completion of OL3.

TVO has a relatively short-dated debt-maturity profile--about four years--compared to the economic lifetime of its asset base of over 40 years. This increases the company's exposure to refinancing risk, although, according to its articles of association, TVO can charge its shareholders its yearly fixed costs. These include installments and interest payments on loans falling due annually, in accordance with its loan agreements. That said, TVO's debt does not benefit from any guarantees.

In our base case, we assume:

- Finnish area power prices around €29/mwh reducing to around €25/mwh in the medium term.
- TVO will continue to fully cover its production costs (including interest expenses) for existing plants OL1 and OL2, which we expect will remain competitive in the near term.
- No unexpected outages at OL1 and OL2.
- No further cost overruns in the completion of OL3.
- Use of €300 million of shareholder loan commitments for OL3.

Liquidity

We view TVO's liquidity as adequate and expect that available liquidity sources will cover anticipated cash outflows by well over 1.2x over the next 12 months. Our assessment is based on the company's sound relationships with banks, satisfactory standing in credit markets, and adequate headroom under the financial covenant. We anticipate that TVO's cash, long-term committed credit facilities, and shareholder loan commitments will be sufficient to cover significant cash outflows primarily related to OL3's completion over the next few years. In our opinion, TVO needs to maintain ample liquidity and proactively refinance upcoming funding needs well in advance, to offset refinancing risk.

The company's loan documentation includes one financial covenant, which stipulates an equity-to-assets ratio of 25%. In calculating the ratio, TVO excludes the loans it receives from the Finnish State Nuclear Waste Management Fund, whose proceeds are lent to the shareholders; shareholder loans are included in equity. As of Dec. 31, 2015, the equity-to-assets ratio was about 29.4%.

Principal liquidity sources over the next 12 months include:

- About €160 million in unrestricted cash and equivalents;
- Access to an undrawn €1.3 billion revolving credit facility (RCF), of

which €300 million matures in 2019 and €1 billion in 2021; and
- Shareholder loan commitments totaling €300 million related to the construction of OL3.

Principal liquidity uses are:
- About €400 million of debt maturing in the next 12 months and €380 million in the subsequent 12 months; and
- Expected capital expenditure of about €260 million in the next 12 months and about €650 million in the following year.

Outlook

The stable outlook reflects our opinion that further downside risk to future Finnish area power prices has reduced, as have the expected costs for the completion of OL3. The ratings on TVO's largest shareholders are also stable.

We could lower the rating on TVO if we continued to see pressure in Finnish area power prices, which could be caused by weakening in the Nordic area price or if there was a reduction in Finnish power price premium, or if we felt that the credit quality of its shareholder group had reduced.

We could upgrade TVO if we saw that TVO could sustainably maintain strong cost competitiveness compared with forecast Finnish power prices and if the company's debt burden reduced.

Recovery Analysis

Key analytical factors

- We have lowered the issue rating to 'BB+' from 'BBB-' and assigned a recovery rating of '4' to the senior unsecured €1,300 million RCF (€300 million Facility A and €1,000 million Facility B) and €4.0 billion euro medium-term note program. The recovery rating is supported by the limited amount of prior-ranking debt, but undermined by the large amount of senior unsecured debt. Our recovery expectations are in the lower half of the 30%-50% range.
- In our simulated default scenario, we assume default of one of its shareholders, combined with ongoing pressure on the Finnish power price.
- We value TVO as a going concern, given its importance to the Finland electricity market; it produces approximately 20% of total electricity consumption.

Simulated default assumptions

- Year of default: 2021
- EBITDA at emergence: €325 million
- Implied enterprise value multiple: 6.5x
- Jurisdiction: Finland

Simplified waterfall

- Gross enterprise value at default: €2,112 million
- Administrative costs: €106 million
- Net value available to creditors: €2,006 million
- Priority debt claims: €59 million
- Senior unsecured debt claims: €5,949 million*
- --Recovery expectation: 30%-50% (Lower half of the range)

*All debt amounts include six months' prepetition interest.

Related Criteria And Research

Related Criteria

- Criteria - Corporates - Recovery: Criteria Guidelines For Recovery Ratings On Global Industrials Issuers' Speculative-Grade Debt - August 10, 2009
- Criteria - Corporates - General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers - December 16, 2014
- Criteria - Corporates - General: The Treatment Of Non-Common Equity Financing In Nonfinancial Corporate Entities - April 29, 2014
- Criteria - Corporates - General: Corporate Methodology: Ratios And Adjustments - November 19, 2013
- Criteria - Corporates - General: Methodology: Business Risk/Financial Risk Matrix Expanded - September 18, 2012
- Criteria - Corporates - General: 2008 Corporate Criteria: Analytical Methodology - April 15, 2008
- Criteria - Corporates - General: 2008 Corporate Criteria: Rating Each Issue - April 15, 2008
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers - November 13, 2012
- General Criteria: Methodology For Linking Short-Term And Long-Term Ratings For Corporate, Insurance, And Sovereign Issuers - May 07, 2013
- General Criteria: Use Of CreditWatch And Outlooks - September 14, 2009

Ratings List

Downgraded; CreditWatch/Outlook Action

	To	From
Teollisuuden Voima Oyj		
Corporate Credit Rating	BB+/Stable/B	BBB-/Negative/A-3
Senior Unsecured	BB+	BBB-
Recovery Rating	4L	

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