

Fitch Ratings

Fitch Revises Teollisuuden Voima Oyj's Outlook to Negative; Affirms at 'BBB'

Fitch Ratings-Warsaw/London-18 May 2016: Fitch Ratings has revised Teollisuuden Voima Oyj's (TVO) Outlook to Negative from Stable and affirmed its Long-term Issuer Default Rating (IDR) and senior unsecured rating at 'BBB' and Short-term IDR at 'F3'.

The Outlook revision reflects the weakened mid-term outlook for wholesale electricity prices, which will erode the value creation for TVO's shareholders. Value creation is one of the key considerations for our assessment of TVO's credit profile, particularly when the Olkiluoto 3 (OL3) nuclear power plant will be commissioned in late 2018, leading to substantially higher electricity production costs. We may downgrade the rating in the next 12 to 18 months depending on the evolution of the expected value creation and support from the shareholders.

TVO continues to benefit from demonstrated strong shareholder support. The rating is supported by the decision to put a fourth nuclear power station (Olkiluoto 4; OL4) project on hold, resulting in lower capex over the next 5-10 years. TVO is also implementing a cost-cutting plan and has reduced capex for two existing nuclear units Olkiluoto 1 (OL1) and Olkiluoto 2 (OL2).

KEY RATING DRIVERS

Not-for-Profit Nuclear Generator

The ratings reflect TVO's position as a not-for-profit Finnish nuclear generator, producing at-cost electricity for its six shareholders. TVO's largest shareholder (with 58.3%) is Pohjolan Voima (PVO), a not-for-profit generator owned by a consortium of Finnish industrials (mainly pulp and paper) and utilities. Its second-largest shareholder (with 25.8%) is Fortum Power & Heat, a 100% owned subsidiary of Fortum Oyj (BBB+/Stable). For more details on Fitch's analytical approach to rating Mankala companies see "Analytical Features of Finnish Not-for-Profit Electricity Generators" dated 12 December 2013 on www.fitchratings.com).

Delayed OL3

The nine-year delay of the 1,600 MW nuclear power plant OL3 against the original schedule to late 2018 increases production costs through additional financing costs. Combined with a decrease in forward Nord Pool (Nordic electricity exchange) prices, and the weakened mid-term outlook for Finnish area prices the delay continues to erode value creation for TVO's shareholders, who off-take at cost electricity produced by TVO and by OL3 when it is operational. The delay is also negative for TVO's cash flows as the company has to service debt related to OL3, while full cost coverage of OL3 by TVO's shareholders, including interest costs, can only be initiated when the plant is commissioned.

Low All-in Electricity Price

The production costs of TVO's two existing nuclear units, OL1 and OL2, 880MW each, are competitive (long-term average of about EUR20/MWh), compared with Finnish area wholesale electricity prices and Nord Pool system prices that averaged EUR29.7/MWh and EUR21/MWh, respectively, in 2015. We assume that TVO's average production costs will increase to close to EUR30/MWh when OL3 is operational, mainly due to the depreciation and interest costs of the new unit that will start to be compensated by TVO's shareholders.

Weak Power Price Outlook

Electricity producers in Finland are exposed to the weak power price outlook in Nord Pool but are less vulnerable to the very low spot prices in Norway and Sweden (driven by high reservoir level in 2015). This is due to congestion at cross-border interconnectors between the oversupplied price zones and the zones less dependent on hydro production and also due to the country's power generation deficit

in the next few years.

Finland is a net importer of electricity. In 2015 net imports constituted about 20% of Finland's consumption and the country's reliance on imports is higher in cold winters. The Finland area price is likely to be the highest in the Nordic countries in the next few years due to constraints in importing capacity from Sweden. It is likely that the commissioning of OL3 will reduce the price differential between Finnish area prices and Nord Pool system prices, which widened to an exceptionally high EUR8.7/MWh in 2015.

No Merchant, Volume Risk

TVO has no direct wholesale electricity price or volume exposure, as its shareholders are the at-cost off-takers of the electricity produced. Shareholders have an incentive to keep costs low and to off-take their proportion of the energy due to the large fixed costs they have to cover according to TVO's articles of association. If a shareholder fails to cover annual fixed costs (80% of total costs paid one month in advance, which also includes debt instalments) and variable costs (around 20% of costs) in proportion to their off-take, TVO would cut the electricity supply and sell the electricity to another shareholder or onto Nord Pool.

Strong Shareholder Support

Shareholders remain committed to OL3 even as escalating costs erode competitiveness against Nord Pool prices. A EUR300m loan was committed in 2013 in response to the additional delay for OL3, maintaining the equity/debt commitment at 25/75%. The shareholder base has been stable since inception and electricity sold onto Nord Pool has been zero.

Weak Credit Ratios

As TVO is a not-for-profit company, Fitch considers traditional leverage or coverage ratios, which are weak, as less relevant for the ratings than for utilities operating on a fully commercial basis. In 2015, TVO's funds from operations (FFO) after cash interest paid was negative and FFO interest cover was below 1x as interest expense related to OL3 debt in the construction phase is not covered by shareholders but capitalised.

Strong Operational Performance

TVO's nuclear power plants are some of the most efficient in the world, with an outstanding safety record partly due to strict Finnish safety standards. In 2014 TVO achieved its highest production output to date at 14.7TWh due to the extensive refurbishment of both nuclear units. Nuclear production in 2015 was 3% lower than in 2014 driven by an almost three-week shutdown of OL2 due to water leakage in the generator. In the past five years, TVO's achieved a high, 94% average utilisation rate of its nuclear power plant.

Asset Concentration Risk

The ratings are constrained by asset concentration risk, as 99% of total 2015 production was from a single nuclear power plant. This is mitigated by TVO's excellent operational and safety record.

Low Political Risk

Finland has a supportive regulatory environment for the construction of nuclear power plants, given the country's concerns over security of supply (TVO is a key generator of base-load electricity in Finland - it accounted for 17% of Finnish total electricity consumption in 2015), the need for reasonably-priced electricity for its energy-intensive industries, and stringent EU CO2 emission requirements requiring the phase-out of thermal plants.

Olkiluoto 4

OL4 was put on hold in June 2015 partly because of the delays of OL3. This postponement has led to a lower capex plan in the next 5-10 years and supports the rating. We expect that the OL4 project could be reinstated, probably after OL3 is operational in 2018. In Fitch's view, a binding commitment to build OL4, when OL3 is not fully operational, could be negative for the ratings.

Fully Funded Nuclear Liabilities

Under the Finnish Nuclear Act, nuclear operators' (non-discounted) nuclear liabilities (assessed annually) must be fully funded through contributions to a centrally administered fund.

KEY ASSUMPTIONS

Fitch's key assumptions within our rating case for the issuer include:

- Fitch calculates projected EBITDA and credit ratios hypothetically in a profit-making scenario, assuming that TVO is able to sell its electricity output at market prices instead of at-cost prices. This measures the incentive for shareholders to maintain their at-cost off-takes, as well as the theoretical dividend that would instead be paid in a profit-making scenario.
- OL3 is fully operational from 2019.
- Average production costs of TVO to increase to close to EUR30/MWh in the first few years of OL3 operations from about EUR20/MWh in 2011-2014 (with OL1 and OL2).

RATING SENSITIVITIES

Positive: Future developments that may, individually or collectively, lead to positive rating action include:

- A favourable outcome for TVO in its litigation with OL3 construction contract supplier, the Areva-Siemens consortium, with a significant compensation for the delay, thus considerably decreasing TVO's production costs.
- Significantly higher equity funding.

Negative: Future developments that may, individually or collectively, lead to negative rating action include:

- TVO's production costs exceeding Finnish area prices on a sustained basis when OL3 is completed, signifying reduced value creation at TVO for its shareholders.
- Evidence of reduced support from shareholders or structural changes in the Mankala principle lowering the strength of shareholder support.
- Further OL3 delays, impacting TVO's production costs, litigation costs materialising with the OL3 contract supplier, and any adverse regulatory or fiscal changes.
- A binding commitment to the construction of OL4 when OL3 is not fully operational and significant debt funding as a result.
- A decline in operating performance, safety issues and significantly reduced liquidity reserves.
- Expected equity ratio falling towards the minimum covenanted threshold of 25%.

LIQUIDITY

TVO's liquidity is adequate. As of end-March 2016, available liquidity included cash and cash equivalents of EUR160m (including EUR50m of money market funds), an undrawn committed revolving credit facility of EUR1.3bn (EUR1bn expires in 2021 and EUR300m expires in 2019) together with undrawn committed shareholder loans of EUR300m. This was sufficient to cover capex and debt repayments in 2016 and 2017. Fitch expects the company to have committed funding to cover funding needs related to capex and debt refinancing for two years on a rolling basis.

Contact:

Principal Analyst

Timo Tikkala

Analyst

+44 20 3530 1202

Supervisory Analyst

Arkadiusz Wicik

Senior Director

+48 22 338 6286

Fitch Polska S.A.

Krolewska 16

00-103 Warsaw

Committee Chairperson

Josef Pospisil
Managing Director
+44 20 3530 1287

Media Relations: Peter Fitzpatrick, London, Tel: +44 20 3530 1103, Email:
peter.fitzpatrick@fitchratings.com.

Additional information is available on www.fitchratings.com. For regulatory purposes in various jurisdictions, the supervisory analyst named above is deemed to be the primary analyst for this issuer; the principal analyst is deemed to be the secondary.

Applicable Criteria

Corporate Rating Methodology - Including Short-Term Ratings and Parent and Subsidiary Linkage (pub. 17 Aug 2015) (https://www.fitchratings.com/creditdesk/reports/report_frame.cfm?rpt_id=869362&cft=eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJleHAiOiJlbnNlc3Npb25LZXkiOiJVRIAYVks5HskgzNVdKSFJJTVRjWjYs0RWVEpSME9SVlhUWExJWkRUIn0.eWL0afYmPK9rqYwo4zSOEjo6qTKILWI6O5ALerLhhY8)

Additional Disclosures

Dodd-Frank Rating Information Disclosure Form

(https://www.fitchratings.com/creditdesk/press_releases/content/ridf_frame.cfm?pr_id=1004670&cft=eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJleHAiOiJlbnNlc3Npb25LZXkiOiJVRIAYVks5HskgzNVdKSFJJTVRjWjYs0RWVEpSME9SVlhUWExJWkRUIn0.eWL0afYmPK9rqYwo4zSOEjo6qTKILWI6O5ALerLhhY8)

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