

Teollisuuden Voima Oyj (TVO) (/gws/en/esp/issr/83573665)**Fitch Downgrades Teollisuuden Voima Oyj to 'BBB-'; Outlook Stable**

Fitch Ratings-Warsaw/London-24 May 2017: Fitch Ratings has downgraded Teollisuuden Voima Oyj's (TVO) Long-Term Issuer Default Rating (IDR) and senior unsecured rating to 'BBB-' from 'BBB' and affirmed the company's Short-Term IDR at 'F3'. The Outlook is Stable.

The downgrade reflects our expectations of lowered value creation for TVO's shareholders in the next five years due to a weak medium-term outlook for wholesale electricity prices in Finland. Value creation is one of the key considerations for TVO's ratings, particularly when the Olkiluoto 3 (OL3) nuclear power plant will be commissioned in late 2018, leading to substantially higher electricity production costs.

TVO continues to benefit from demonstrated strong support from its shareholders evidenced through arrangements for fixed and variable cost coverage and shareholder loans covering part of the funding.

KEY RATING DRIVERS

Lowered Value Creation: As a result of the decrease in futures electricity wholesale prices in the past few years we expect lowered value creation for TVO's shareholders. We expect TVO's average production costs will increase to close to EUR30/MWh in 2019-2020 after the commissioning of OL3 (mostly due to depreciation and interest costs that will start to be compensated by TVO's shareholders) from about EUR20/MWh in 2016. This compares with Finnish area futures electricity prices of about EUR25/MWh for 2019-2020 and leads to a negative differential between market prices and costs in that period.

Not-for-Profit Nuclear Generator: The ratings reflect TVO's position as a not-for-profit Finnish nuclear generator, producing at-cost electricity for the company's 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 "Finnish Not-for-Profit Electricity Generators' Analysis" dated 18 August 2016 on www.fitchratings.com.

Arbitration Regarding OL3 Delay: Both TVO and the Areva-Siemens consortium, construction contract supplier, have filed claims against each other to the International Chamber of Commerce (ICC) regarding the nine-year delay of the 1.6GW plant OL3 plant and cost overruns.

Our view is that a favourable outcome for TVO in its litigation with the supplier, with a significant compensation for the delay, thus considerably decreasing TVO's production costs could be credit-positive, while a substantial compensation for the contract supplier would be negative. As a result of the partial award from ICC received by TVO in November 2016 resolving the great majority of the matters in favour of TVO, we believe that TVO is unlikely to be a significant net payer in the arbitration process. The arbitration proceeding is still underway. Our rating case does not assume any compensation payments.

Impact of Areva's Restructuring: Fitch believes that the restructuring of Areva, who is the leading member of the Areva-Siemens consortium, creates both long- and short-term challenges for TVO. Areva's technological know-how is critical during the final stages of the OL3 project as the European Pressurised Reactor (EPR) used in OL3 is first-of-its-kind. There are currently three other EPR reactors under construction (Taishan 1 and 2; Flamanville 3) and two under planning phase (Hinkley Point C) but the technology is yet unproven, which creates uncertainty over the availability of technological know-how in the long term.

Strong Shareholder Support: Shareholders remain committed to OL3 even as escalated costs of OL3 due to the delay erode competitiveness against market power prices. A EUR300 million loan was committed in 2013 and remains unused 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.

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.

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 - its nuclear plant accounted for 17% of Finnish total electricity consumption in 2016), the need for reasonably-priced electricity for its energy-intensive industries, and stringent EU CO2 emission requirements requiring the phase-out of thermal plants.

DERIVATION SUMMARY

As TVO is a not-for-profit company, Fitch views traditional leverage or coverage ratios, which are weak compared with other European utilities, as less relevant for the ratings than for utilities operating on a fully commercial basis. In 2016, 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.

Compared with many other European utilities, TVO's ratings are constrained by asset concentration risk, as almost all electricity production is from a single nuclear power plant. This is mitigated by TVO's excellent operational and safety record as TVO's nuclear power units are some of the most efficient in the world, with an outstanding safety record partly due to strict Finnish safety standards.

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 2016 (with OL1 and OL2).

RATING SENSITIVITIES

Future Developments That May, Individually or Collectively, Lead to Positive Rating Action

- 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 or structural increase in Finnish area futures electricity prices, both leading to improved value creation at TVO for its shareholders.
- Significantly higher equity funding.

Future Developments That May, Individually or Collectively, Lead to Negative Rating Action

- TVO's production costs significantly exceeding Finnish area prices on a sustained basis when OL3 is completed, leading to value destruction at TVO for its shareholders.
- Evidence of reduced support from shareholders or structural changes in the Mankala principle undermining 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 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 2017, available liquidity included unrestricted cash and cash equivalents of EUR224 million (excluding 30% haircut applied by Fitch to EUR150 million money market funds), undrawn committed credit facilities of EUR1.6 billion, together with undrawn committed shareholder loans of EUR300 million. This is sufficient to cover capex and debt repayments in 2017 and 2018. 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.

After the commissioning of OL3, expected in late 2018, and subsequent reduction in business risks for TVO and lowered annual capex we expect the company to have sufficient committed funding for at least the next 12 months.

Contact:

Principal Analyst
Ana Gaspar
Director
+44 20 3530 1601

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 1314

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

Criteria for Rating Non-Financial Corporates (pub. 10 Mar 2017) (<https://www.fitchratings.com/site/re/895493>)

Parent and Subsidiary Rating Linkage (pub. 31 Aug 2016) (<https://www.fitchratings.com/site/re/886557>)

Additional Disclosures

Dodd-Frank Rating Information Disclosure Form (<https://www.fitchratings.com/site/dodd-frank-disclosure/1024137>)

Solicitation Status (<https://www.fitchratings.com/site/pr/1024137#solicitation>)

Endorsement Policy (<https://www.fitchratings.com/regulatory>)

ALL FITCH CREDIT RATINGS ARE SUBJECT TO CERTAIN LIMITATIONS AND DISCLAIMERS. PLEASE READ THESE LIMITATIONS AND DISCLAIMERS BY FOLLOWING THIS LINK:

[HTTPS://WWW.FITCHRATINGS.COM/UNDERSTANDINGCREDITRATINGS](https://www.fitchratings.com/understandingcreditratings)

(<https://www.fitchratings.com/understandingcreditratings>). IN ADDITION, RATING DEFINITIONS AND THE TERMS OF USE

OF SUCH RATINGS ARE AVAILABLE ON THE AGENCY'S PUBLIC WEB SITE AT WWW.FITCHRATINGS.COM

(<https://www.fitchratings.com>). PUBLISHED RATINGS, CRITERIA, AND METHODOLOGIES ARE AVAILABLE FROM THIS

SITE AT ALL TIMES. FITCH'S CODE OF CONDUCT, CONFIDENTIALITY, CONFLICTS OF INTEREST, AFFILIATE

FIREWALL, COMPLIANCE, AND OTHER RELEVANT POLICIES AND PROCEDURES ARE ALSO AVAILABLE FROM THE

CODE OF CONDUCT SECTION OF THIS SITE. DIRECTORS AND SHAREHOLDERS RELEVANT INTERESTS ARE

AVAILABLE AT [HTTPS://WWW.FITCHRATINGS.COM/SITE/REGULATORY](https://www.fitchratings.com/site/regulatory) (<https://www.fitchratings.com/site/regulatory>).

FITCH MAY HAVE PROVIDED ANOTHER PERMISSIBLE SERVICE TO THE RATED ENTITY OR ITS RELATED THIRD

PARTIES. DETAILS OF THIS SERVICE FOR RATINGS FOR WHICH THE LEAD ANALYST IS BASED IN AN EU-REGISTERED ENTITY CAN BE FOUND ON THE ENTITY SUMMARY PAGE FOR THIS ISSUER ON THE FITCH WEBSITE.

Copyright © 2017 by Fitch Ratings, Inc., Fitch Ratings Ltd. and its subsidiaries. 33 Whitehall Street, NY, NY 10004. Telephone: 1-800-753-4824, (212) 908-0500. Fax: (212) 480-4435. Reproduction or retransmission in whole or in part is prohibited except by permission. All rights reserved. In issuing and maintaining its ratings and in making other reports (including forecast

information), Fitch relies on factual information it receives from issuers and underwriters and from other sources Fitch believes to be credible. Fitch conducts a reasonable investigation of the factual information relied upon by it in accordance with its

ratings methodology, and obtains reasonable verification of that information from independent sources, to the extent such

sources are available for a given security or in a given jurisdiction. The manner of Fitch's factual investigation and the scope of

the third-party verification it obtains will vary depending on the nature of the rated security and its issuer, the requirements and

practices in the jurisdiction in which the rated security is offered and sold and/or the issuer is located, the availability and

nature of relevant public information, access to the management of the issuer and its advisers, the availability of pre-existing

third-party verifications such as audit reports, agreed-upon procedures letters, appraisals, actuarial reports, engineering

reports, legal opinions and other reports provided by third parties, the availability of independent and competent third-party

verification sources with respect to the particular security or in the particular jurisdiction of the issuer, and a variety of other

factors. Users of Fitch's ratings and reports should understand that neither an enhanced factual investigation nor any third-

party verification can ensure that all of the information Fitch relies on in connection with a rating or a report will be accurate

and complete. Ultimately, the issuer and its advisers are responsible for the accuracy of the information they provide to Fitch

and to the market in offering documents and other reports. In issuing its ratings and its reports, Fitch must rely on the work of

experts, including independent auditors with respect to financial statements and attorneys with respect to legal and tax

matters. Further, ratings and forecasts of financial and other information are inherently forward-looking and embody

assumptions and predictions about future events that by their nature cannot be verified as facts. As a result, despite any

verification of current facts, ratings and forecasts can be affected by future events or conditions that were not anticipated at the

time a rating or forecast was issued or affirmed.

The information in this report is provided "as is" without any representation or warranty of any kind, and Fitch does not represent or warrant that the report or any of its contents will meet any of the requirements of a recipient of the report. A Fitch rating is an opinion as to the creditworthiness of a security. This opinion and reports made by Fitch are based on established criteria and methodologies that Fitch is continuously evaluating and updating. Therefore, ratings and reports are the collective work product of Fitch and no individual, or group of individuals, is solely responsible for a rating or a report. The rating does

not address the risk of loss due to risks other than credit risk, unless such risk is specifically mentioned. Fitch is not engaged in the offer or sale of any security. All Fitch reports have shared authorship. Individuals identified in a Fitch report were involved in, but are not solely responsible for, the opinions stated therein. The individuals are named for contact purposes only. A report providing a Fitch rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. Ratings may be changed or withdrawn at any time for any reason in the sole discretion of Fitch. Fitch does not provide investment advice of any sort. Ratings are not a recommendation to buy, sell, or hold any security. Ratings do not comment on the adequacy of market price, the suitability of any security for a particular investor, or the tax-exempt nature or taxability of payments made in respect to any security. Fitch receives fees from issuers, insurers, guarantors, other obligors, and underwriters for rating securities. Such fees generally vary from US\$1,000 to US\$750,000 (or the applicable currency equivalent) per issue. In certain cases, Fitch will rate all or a number of issues issued by a particular issuer, or insured or guaranteed by a particular insurer or guarantor, for a single annual fee. Such fees are expected to vary from US\$10,000 to US\$1,500,000 (or the applicable currency equivalent). The assignment, publication, or dissemination of a rating by Fitch shall not constitute a consent by Fitch to use its name as an expert in connection with any registration statement filed under the United States securities laws, the Financial Services and Markets Act of 2000 of the United Kingdom, or the securities laws of any particular jurisdiction. Due to the relative efficiency of electronic publishing and distribution, Fitch research may be available to electronic subscribers up to three days earlier than to print subscribers.

For Australia, New Zealand, Taiwan and South Korea only: Fitch Australia Pty Ltd holds an Australian financial services license (AFS license no. 337123) which authorizes it to provide credit ratings to wholesale clients only. Credit ratings information published by Fitch is not intended to be used by persons who are retail clients within the meaning of the Corporations Act 2001

Solicitation Status

Fitch Ratings was paid to determine each credit rating announced in this Rating Action Commentary (RAC) by the obligatory being rated or the issuer, underwriter, depositor, or sponsor of the security or money market instrument being rated, except for the following:

Endorsement Policy - Fitch's approach to ratings endorsement so that ratings produced outside the EU may be used by regulated entities within the EU for regulatory purposes, pursuant to the terms of the EU Regulation with respect to credit rating agencies, can be found on the EU Regulatory Disclosures (<https://www.fitchratings.com/regulatory>) page. The endorsement status of all International ratings is provided within the entity summary page for each rated entity and in the transaction detail pages for all structured finance transactions on the Fitch website. These disclosures are updated on a daily basis.