

19 MAY 2023

Fitch Affirms Teollisuuden Voima Oyj at 'BBB-'; Outlook Stable

Fitch Ratings - Milan - 19 May 2023: Fitch Ratings has affirmed Finnish nuclear generation company Teollisuuden Voima Oyj's Long-Term Issuer Default Rating (IDR) at 'BBB-' with Stable Outlook. A full list of rating actions is below.

The affirmation reflects the start of commercial operations of 1.6GW Olkiluoto 3 (OL3) nuclear power plant in May 2023, as well as the solid combined operational performance of the existing nuclear power plants, Olkiluoto 1 and 2. It also incorporates sound liquidity and tangible shareholder support for the OL3 project despite its multi-year delays, with improved shareholder value creation in the current high and volatile energy price environment.

Adjusted gross debt peaked in May 2023 at around EUR5.4 billion, when its EUR651 million nuclear waste liability loan is added, after which we expect declines by around EUR150 million per year.

Key Rating Drivers

Start of OL3: We expect OL3 capacity utilisation to be maintained largely above 90%, with the first annual outage to take place in March 2024. We expect annual production for TVO of around 27TWh from 2023, representing more than 30% of the entire Finnish national supply, up from 16TWh produced in 2022. Overall the OL3 construction will mark the end of a 14-year delay to the original schedule, with a total cost of approximately EUR5.8 billion (or EUR3.6 million per MW). This is high but lower than that of other nuclear projects under construction in Europe.

Expected Progressive Debt Reduction: We forecast adjusted net debt to progressively reduce to EUR4.9 billion in 2026. This is due to full cost coverage by shareholders from May 2023, including depreciation and financial charges, and limited maintenance investments of around EUR130 million per year.

Solid Value Creation Prospects: The currently volatile and high energy price environment supports abundant shareholder value creation given the reliable, stable and fairly low nuclear cost of production. TVO's expected blended cost of production, including capital costs, is expected at around EUR35/MWh throughout 2023-2025 even when accounting for current inflationary, interest rate and uranium price pressures. Conversely, Nord Pool futures for the Finnish area are trending around EUR55/MWh for 2024-2025 marking a sensibly increased differential compared with historical trends.

No Compensation for Recent Delays: No agreement over the OL3 delay experienced since September 2022 has been reached with the Areva-Siemens consortium, which on the other hand

recently honoured its EUR193 million remaining agreed payments 30 days after the start of OL3 commercial operation (set off against TVO's final milestone construction payment), while another EUR57 million are expected two years later.

OL3's trust mechanism currently includes all the funds needed to cover TVO's remaining compensation and the two-year guarantee period. In light of the above, the available EUR400 million shareholder loan commitment until end-2023 represents a liquidity buffer, which we do not expect to be drawn.

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 five shareholders. TVO's largest shareholder (58.5%) is Pohjolan Voima Oyj, a not-for-profit electricity generator owned by a consortium of Finnish industrials (mainly pulp and paper companies UPM-Kymmene Oyj (through its 100%-owned subsidiary UPM Energy Oy) and Stora Enso Oyj (BBB-/Positive)) and utilities. Its second-largest shareholder (with 25.8%) is Fortum Power & Heat Oy, a 100% owned subsidiary of Fortum Oyj (BBB/Stable).

No Merchant, Volume Risk: TVO has no direct exposure to wholesale electricity prices, onerous margin calls, or volumes, as its shareholders are at-cost off-takers of the electricity produced. If a shareholder fails to cover annual fixed costs (80% of total costs, paid one month in advance, which also includes debt instalments falling due annually) and variable costs (about 20% of costs) in proportion to their off-take, TVO would cut the supply and sell the electricity to another shareholder or at the Nord Pool exchange. The shareholders have a very long record of regular off-taking.

Low Political Risk: The not-for-profit nature and shareholder full cost recovery principle shield TVO from political interventions, clawbacks and windfall taxes affecting European utilities and in particular renewables electricity generators. Furthermore, due to the ceased imports from Russia, its increase in electricity production is essential for the country and European security of supply. Public consensus on nuclear in Finland and the inclusion of nuclear generation into the EU taxonomy for sustainable finance further reduces the risk of onerous funding cost in the medium-to-long term.

Derivation Summary

As TVO is a not-for-profit company Fitch views traditional leverage or coverage ratios as less relevant for the ratings than for utilities operating on a fully commercial basis. Such ratios are weak compared with that of other European utilities focused on electricity generation such as Fortum Oyj (BBB/Stable), RWE AG (BBB+/Stable), Orsted A/S (BBB+/Stable) or Statkraft AS (A-/Stable).

During construction of OL3, TVO's funds from operations (FFO) after cash interest paid was typically negative and its FFO interest coverage usually below 1x as interest expense related to OL3 debt in the construction phase was not covered by shareholders, but capitalised, until the start of OL3 operations in May 2023.

We rate Finnish electricity generation companies operating under the Mankala principle using the same analytical framework as for utilities operating in a commercial environment as underlined by the corporate rating criteria and the key peer comparators described in Global Electricity Generation:

Ratings Navigator Companion.

However, we place more emphasis on the links with the shareholders and the value creation for them due to Mankala companies' specific features, such as the not-for-profit business model. Given Mankala companies' cash flow profiles, debt and liquidity management plays a crucial role in determining the ratings. We consider company-specific traits, such as asset base and concentration, market position, strategic importance, and the legal and regulatory framework in the same way as typical electricity utilities.

Key Assumptions

- Fitch calculates projected EBITDA and credit ratios in a profit-making scenario, assuming that TVO is able to sell its electricity output at market prices instead of at cost. This measures the incentive for shareholders to maintain their at-cost off-takes, as well as the dividend that would be paid in a profit-making scenario
- Average production cost of TVO to increase to about EUR35/MWh as OL3 becomes operational, from about EUR20/MWh (with OL1 and OL2 only)
- Finnish area prices averaging EUR55/MWh in 2024-2026

RATING SENSITIVITIES

Factors That Could Individually or Collectively Lead to Positive Rating Action/Upgrade

- Solid record of OL3 operations together with a satisfactory medium- to long-term power price environment sustaining value creation for TVO shareholders,
- record of progressive debt reduction consistent with the remaining average useful life of the assets, combined with
- unchanged credit quality or support from shareholders

Factors That Could, Individually or Collectively, Lead to Negative Rating Action/Downgrade

- Significant technical issues leading to additional costs for TVO, if not covered by shareholders
- TVO's production costs significantly exceeding Finnish area prices on a sustained basis, leading to value destruction for TVO shareholders
- Evidence of weaker credit quality or support from shareholders or structural changes in the Mankala principle undermining the strength of shareholder support
- Adverse regulatory or fiscal changes
- Deterioration in operating performance, safety issues and significantly reduced liquidity reserves

Best/Worst Case Rating Scenario

International scale credit ratings of Non-Financial Corporate issuers have a best-case rating upgrade scenario (defined as the 99th percentile of rating transitions, measured in a positive direction) of three notches over a three-year rating horizon; and a worst-case rating downgrade scenario (defined as the 99th percentile of rating transitions, measured in a negative direction) of four notches over three years. The complete span of best- and worst-case scenario credit ratings for all rating categories ranges from 'AAA' to 'D'. Best- and worst-case scenario credit ratings are based on historical performance. For more information about the methodology used to determine sector-specific best- and worst-case scenario credit ratings, visit <https://www.fitchratings.com/site/re/10111579>.

Liquidity and Debt Structure

Adequate Liquidity: Cash and cash equivalents as at end-March 2023 were EUR169 million. TVO also had committed undrawn credit facilities of EUR925 million maturing in 2024, and committed undrawn shareholder loans of EUR400 million valid until end-2023. Available liquidity is sufficient to meet TVO's operating needs, capex and cumulative debt repayments of EUR1.2 billion in 2023-2024.

As OL3 came onstream in 2023 and shareholders started to fully cover costs (including interest costs and asset depreciation), we expect total debt to gradually decline.

Issuer Profile

TVO has OL1, OL2 and OL3 nuclear power plants with more than 3GW capacity in its key assets. Once OL3 operates at full capacity, TVO is expected to cover around 30% of all electricity consumed in Finland.

REFERENCES FOR SUBSTANTIALLY MATERIAL SOURCE CITED AS KEY DRIVER OF RATING

The principal sources of information used in the analysis are described in the Applicable Criteria.

ESG Considerations

Unless otherwise disclosed in this section, the highest level of ESG credit relevance is a score of '3'. This means ESG issues are credit-neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity. For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/esg.

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Rating Actions

ENTITY/DEBT	RATING		RECOVERY	PRIOR
Teollisuuden Voima Oyj (TVO)	LT IDR	BBB- 	Affirmed	BBB- 
	ST IDR	F3	Affirmed	F3
• senior unsecured	LT	BBB-	Affirmed	BBB-

RATINGS KEY OUTLOOK WATCH

POSITIVE		
NEGATIVE		
EVOLVING		

RATINGS KEY OUTLOOK WATCH

STABLE



Applicable Criteria

[Corporate Rating Criteria \(pub.28 Oct 2022\) \(including rating assumption sensitivity\)](#)

[Corporates Recovery Ratings and Instrument Ratings Criteria \(pub.09 Apr 2021\) \(including rating assumption sensitivity\)](#)

Applicable Models

Numbers in parentheses accompanying applicable model(s) contain hyperlinks to criteria providing description of model(s).

Corporate Monitoring & Forecasting Model (COMFORT Model), v8.1.0 [\(1\)](#)

Additional Disclosures

[Solicitation Status](#)

Endorsement Status

Teollisuuden Voima Oyj (TVO) EU Issued, UK Endorsed

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