JANUARY–SEPTEMBER 2018

INTERIM REPORT

Teollisuuden Voima Oyj's Interim Report January 1–September 30, 2018

Teollisuuden Voima's (TVO) climate friendly electricity generation at Olkiluoto 1 and Olkiluoto 2 plant units continued safely through the first three quarters of 2018. At Olkiluoto 3 EPR, preparations for fuel loading continued. Posiva commenced full scale tests of final disposal in it's underground demonstration facilities in June.

Operating Environment

In January 2018, the Ministry of Finance requested an opinion on a draft bill aimed at amending the provision in the legislation on taxation of business income, which limits the right to deduct interest. TVO has proposed amendments to the draft bill to avoid additional burden to the energy sector. The bill is to enter into force at the beginning of 2019.

Preparation of the "Clean Energy for all Europeans" package published by the European Commission in November 2016 continues. In June, agreement was reached on the 32 percent target for the share of renewable energy sources by 2030. As regards energy efficiency, a 32.5 percent improvement target by 2030 was agreed.

Trilogue negotiations on the electricity market design began in late June. In the negotiations, e.g. the rules on capacity mechanisms, that have raised different opinions between Council and Parliament, will be decided. The negotiating parties did not find accommodation on key questions in the second official round of negotiations in September.

Financial Performance

TVO operates on a cost-price principle (Mankala principle). TVO's goal is not to make profit or pay dividends. The shareholders are charged incurred costs on the price of electricity and thus in principle the profit/loss for the period under review is zero, unless specific circumstances dictate otherwise. The shareholders pay variable costs based on the volumes of energy supplied and fixed costs in proportion to their ownership, regardless of whether they have made any use of their share of the output or not. Because of the Company's operating principle, key indicators based on financial performance will not be presented.

The consolidated turnover for the period under review January 1–September 30, 2018 was EUR 257.8 (January 1–September 30, 2017: EUR 240.3 million). The amount of electricity delivered to shareholders was 10,781.7 (9,818.4) GWh. The slightly higher delivery volume to shareholders was due to higher delivery volumes of both the Olkiluoto plant units and the Meri-Pori coal-fired power plant compared to the previous year.

The consolidated profit/loss was EUR -3.3 (-3.2) million.

Financing and Liquidity

TVO's financial situation has developed as planned.

TVO's liabilities (non-current and current) at the end of the period in review, excluding the loan from the Finnish State Nuclear Waste Management Fund relent to shareholders, totaled EUR 4,585.6 (December 31, 2017: 4,412.0) million, of which EUR 679,3 (579.3) million were subordinated shareholder loans. During the period under review, TVO raised a total of EUR 400 (100.0) million in non-current liabilities. Repayments during the period under review amounted to EUR 688,7 (175.9) million.

In April, TVO issued a EUR 400 million bond. The maturity of the bond is six years and the coupon 2%. EUR 306.5 million of the proceeds from the bond were used for the partial repurchase of the EUR 500 million bond maturing in February 2019. In September TVO raised a total of EUR 100.0 million subordinated shareholder loans.

In February, Japan Credit Rating Agency downgraded TVO’s long term rating from AA- to A+ and assessed the outlook as stable. In October 2017, Standard & Poor’s (S&P) placed TVO’s long term issuer rating (BB+) on CreditWatch with negative outlook. In March 2018, S&P removed the rating from CreditWatch Negative and assessed TVO’s outlook as stable. Fitch Ratings affirmed TVO's long term rating at BBB- and assessed the outlook as stable on September 2018.

The OL3 EPR project's share of financing costs has been capitalized in the balance sheet.

TVO uses its right to borrow funds back from the Finnish State Nuclear Waste Management Fund within the framework of legal regulations. On June 30, 2018 the amount of the loan was EUR 666.2 (December 31, 2017: 655.5) million and it has been relent to the Company's A-series shareholders. On March 31, 2018, the loan from the Finnish State Nuclear Waste Management Fund was increased by EUR 10.7 (-371.5) million.

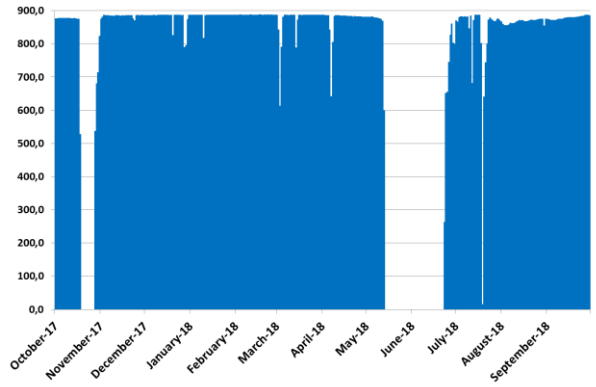
Nuclear Power

Olkiluoto 1 and Olkiluoto 2

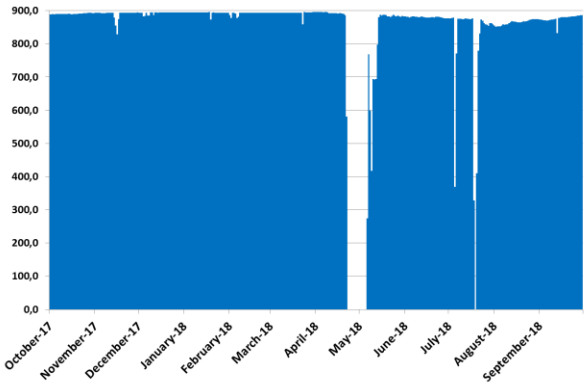
The electricity production of the Olkiluoto power plant units Olkiluoto 1 (OL1) and Olkiluoto 2 (OL2) during the period under review was 10,210 (9,719) GWh. The total load factor was 88.3 (84.5) %.

The plant units operated safely and reliably during the period under review. OL1’s net production was 4,825 (5,430) GWh and the load factor 83.9 (94.5) %. OL2’s net production was 5,385 (4,289) GWh and the load factor 92.6 (74.5) %.

Olkiluoto 1
Average electrical power MW
October 1, 2017–September 30, 2018



Olkiluoto 2
Average electrical power MW
October 1, 2017–September 30, 2018



The Finnish Government approved on 20 September 2018 the extension of the operating licences for the Olkiluoto 1 and 2 plant units of Teollisuuden Voima Oyj. The operation of the plant units can be continued up till the year 2038. TVO submitted application for the extension of the operating licences to the Ministry of Economic Affairs and Employment in January 2017. The Government decision was preceded by the positive statement of the Radiation and Nuclear Safety Authority (STUK) issued in May.

A failure of a 400 kilovolt current transformer at the switchyard operating under the management of national grid company Fingrid occurred on 18 July 2018. As a result of the event, the Olkiluoto 2 plant unit (OL2) was automatically disconnected from the electrical system. Later on the same day the Olkiluoto 1 plant unit (OL1) was disconnected from the national grid due to a grid disturbance. OL1 was synchronized back to the national grid on 19 July and OL2 on 20 July. The amount of unproduced electricity was approximately 63,920 MWh.

Annual outages

The 2018 annual outages of the Olkiluoto nuclear power plant were started on April 23 with a refueling outage at OL2. In addition to refueling, the OL2 outage also included annually recurring maintenance work as well as completion of the installation of a new alternative coolant injection system. The outage lasted more than 13 days.

At OL1, the annual outage commenced on May 13 and was completed on June 23. The most important work of the outage at the plant unit included replacement of the main internals pumps and their frequency converters, renewal of turbine condensers, installation of a new alternative coolant injection system, high-pressure drain forward pumping, and replacement of the high-pressure preheaters and feedwater distributors. A containment leak-tightness test was also carried out.

In addition to TVO's own personnel, up to 1,400 contractor employees took part in the 2018 annual outage works.

The refueling and maintenance outages carried out at the plant units on alternating years are designed to ensure that a good level of operability and production is maintained at the Olkiluoto nuclear power plant at all times.

Olkiluoto 3 EPR

Olkiluoto 3 EPR (OL3 EPR), a nuclear power plant unit under construction, was procured as a fixed-price turnkey project from a consortium (Supplier) formed by Areva GmbH, Areva NP SAS and Siemens AG. As stipulated in the plant contract, the consortium companies have joint and several liability for the contractual obligations.

In accordance with the Supplier's schedule updated in June 2018, regular electricity generation at the plant unit will commence in September 2019. According to the Supplier, fuel will be loaded into the reactor in January 2019, and the first connection to the grid will take place in May 2019. According to the Supplier's plant ramp-up program, the unit will produce 2–4 TWh of electricity, at varying power levels, during the period of time between the first connection to the grid and the start of regular electricity production.

The construction work of the plant unit is mainly finished. Electrical, instrumentation and control (I&C) and mechanical installations are still partly in progress. Simulator training for the operating personnel commenced in February 2017. The hot functional testing was completed in May 2018. In the hot functional tests (HFT), the nuclear and turbine island operated for the first time together as an entity. In HFT it turned out that the pressurizer surge line vibrates. Vibrations will be corrected by modifying surge line's supporting structures. After approved testing and disquisition of the solution, TVO will have the prerequisites to receive statement from Radiation and Nuclear Safety Authority (STUK) on OL3 unit's operating licence, which would allow Finnish government to give a decision on it. The workforce at the site at the end of the period under review was about 2,100 persons. Occupational safety at the site remained at a good level.

The business restructuring plan announced by Areva in 2016 was implemented at the beginning of 2018. The majority of Areva NP's business was transferred to a company named Framatome, of which 75.5 percent is owned by Electricité de France (EDF). The OL3 EPR project and the means required to complete the project, as well as certain other liabilities remained within Areva NP and Areva GmbH.

A comprehensive settlement agreement between TVO and the OL3 EPR plant supplier consortium companies was signed and it came into force in March 2018. The settlement agreement concerns the completion of the OL3 EPR project and related disputes.The agreement is described in more detail in the paragraph "Pending Court Cases and Disputes".

All the realized costs of the OL3 EPR project that can be recognized in the cost of the asset have been entered as property, plant and equipment in the Group balance sheet.

Nuclear Fuel

During the period under review, nuclear fuel purchases amounted to EUR 50.2 (46.4) million and the amount consumed to EUR 42.7 (38.3) million.

The nuclear fuel and uranium stock carrying value on September 30, 2018 was EUR 249.3 (December 31, 2017: 241.7) million.

Nuclear Waste Management

Under the Finnish Nuclear Energy Act, the Company is responsible for the measures related to nuclear waste management and the related costs.

The liabilities in the consolidated financial statement show a provision related to nuclear waste management liability of EUR 974.7 (December 31, 2017: 953.1) million, calculated according to the international IFRS accounting principles. A corresponding amount, under assets, represents the Company’s share in the Finnish State Nuclear Waste Management Fund.

In order to cover the costs of nuclear waste management, TVO makes contributions to the Finnish State Nuclear Waste Management Fund. In December 2017, the Ministry of Economic Affairs and Employment set TVO's liability for nuclear waste management at EUR 1,481.6 (1,450.1) million to the end of 2017 and the Company's funding target for 2018 at EUR 1,470.8 (1,428.4) million.

In March 2018, the Finnish State Nuclear Management Fund confirmed TVO’s nuclear waste management fee for 2017 at EUR 33.6 (49.1) million, which was paid into the Fund on March 31, 2018 (March 31, 2017). The nuclear waste management fee for 2018 will be confirmed in March 2019.

Final Disposal of Spent Nuclear Fuel

Posiva Oy is in charge of executing in Olkiluoto the final disposal of the spent nuclear fuel generated by its owners, TVO at its power plant in Olkiluoto and Fortum at its power plant in Loviisa.

Suppliers of the main encapsulation building equipment have been selected, and the design phase of the main equipment has progressed according to plan. In addition, the decision to construct the encapsulation building is under preparation.

The excavation work of the final disposal facility itself was launched in December 2016. Excavation of the vehicle access tunnels leading to the final disposal facility and excavation of the central tunnel for the integrated systems test have been completed. Raise boring of the canister shaft has been started. The full-scale in-situ system test (FISST) was commenced at the end of June. The aim of the FISST is to demonstrate that safe final disposal can be implemented as designed by Posiva. The test is monitored for several years.

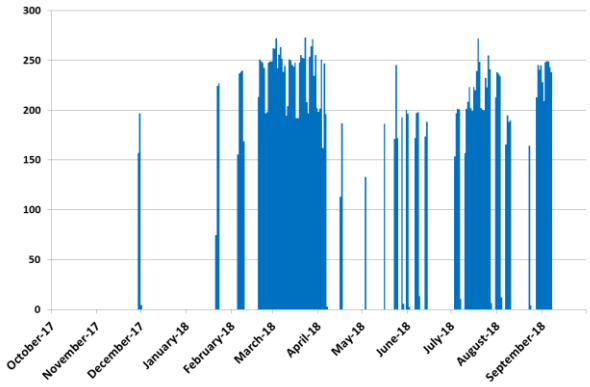
At the end of March, Posiva's owners submitted the Nuclear Waste Management Annual Report for 2017 to the Ministry of Economic Affairs and Employment (MEAE).

Coal Power

Meri-Pori

The amount of electricity produced by TVO's share at the Meri-Pori coal-fired power plant on January 1–September 30, 2018 was 589.2 (122.1) GWh requiring 215.7 (43.6) thousand tons of coal and 459.5 (107.9) thousand tons of carbon dioxide emission rights.

TVO's share of Meri-Pori's production
Average electrical power MW
October 1, 2017–September 30, 2018



TVO and its shareholders have agreed on ownership arrangements of shares entitling to a share of Meri-Pori power plant's production capacity. According to the agreement signed in June, Fortum will acquire TVO's shareholders' shares of the production capacity of the Meri-Pori power plant. Fortum will be entitled to use TVO's share of the Meri-Pori capacity as of the beginning of 2019, and TVO will relinquish its share in Meri-Pori in full in the beginning of July 2020.

Acquisitions of Tangible and Intangible Assets and Shares

Investments during the period under review were EUR 211.2 (225.3) million. Investments of the parent company were EUR 208.3 (223.0) million, of which EUR 161.7 (160.4) million were allocated to the OL3 project.

Carbon dioxide emission rights have been relinquished to the Energy Market authority worth EUR 0.7 (2.7) million. During the period under review, emission rights were acquired worth EUR 7.2 (0.5) million. The Company's need for carbon dioxide emission rights for the period under review are covered by acquired emission rights.

Pending Court Cases and Disputes

According to the comprehensive settlement agreement signed in March 2018, TVO and the Supplier jointly withdrew the pending arbitration proceedings under the International Chamber of Commerce (ICC) rules with respect to costs and losses incurred in relation to delays in the construction of the OL3 EPR project. In June 2018, the ICC tribunal confirmed the arbitration settlement by a consent award, and the arbitration proceedings were terminated. The parties also withdrew the pending appeals in the General Court of the European Union.

The settlement agreement between TVO and the plant supplier consortium companies Areva NP, Areva GmbH and Siemens AG as well as with Areva Group parent company Areva SA, a company wholly owned by the French State, concerning the completion of the OL3 EPR project and related disputes entered into force late March.

The settlement agreement stipulates that:

In order to provide and maintain adequate and competent technical and human resources for the completion of the OL3 EPR project, Areva will source the necessary additional resources from Framatome S.A.S., whose majority owner is Electricité de France (EDF).

The supplier consortium companies undertake that the funds dedicated to the completion of the OL3 EPR project will be adequate and will cover all applicable guarantee periods, including setting up a trust mechanism funded by Areva companies to secure the financing of the costs of completion of the OL3 EPR project.

The turnkey principle of the OL3 EPR plant contract and the joint and several liability of the supplier consortium companies remain in full force.

The agreement also noted the plant supplier’s schedule at the time the agreement was signed, according to which the regular electricity production in the unit would have commenced in May 2019.

The ICC arbitration concerning the costs and losses caused by the delay of the OL3 EPR project is settled by financial compensation of EUR 450 million to be paid to TVO in two installments by the supplier consortium companies.

The parties withdraw all on-going legal actions related to OL3 EPR, including the ICC arbitration and appeals in the General Court of the European Union.

The supplier consortium companies are entitled to receive an incentive payment, in a maximum amount of EUR 150 million, upon timely completion of the OL3 EPR project. In the event that the supplier consortium companies fail to complete the OL3 EPR project by the end of 2019, they will pay a penalty to TVO for such delay in an amount which will depend on the actual time of completion of the OL3 EPR project and may not exceed EUR 400 million.

TVO received the first payment of EUR 328 million of the settlement amount in March at the entry into force of the settlement agreement. The second payment of EUR 122 million is payable upon completion of the OL3 EPR project or, in any event, on December 31, 2019 at the latest. In the first quarter of 2018, TVO made a provision of EUR 150 million reflecting the maximum amount of the incentive payment payable to the supplier consortium companies for timely completion of the OL3 EPR project as agreed in the settlement agreement. In June 2018, TVO received from Areva–Siemens Consortium an updated schedule for the commissioning of the OL3 plant unit. According to the received information, the regular electricity generation at OL3 will start in September 2019, so, in the second quarter of 2018, the provision was withdrawn by EUR 50 million. These settlement payments to TVO, any incentive payment by TVO and any penalty payable to TVO due to any additional project delay have all been taken into account in calculating the final cost of the OL3 EPR project. The amount corresponding to the settlement amount and the rest part of incentive fee to be paid by TVO have been entered as property, plant and equipment in the Group balance sheet.

Personnel

The total number of personnel in the Group at the end of the period under review was 874 (December 31, 2017: 807, September 30, 2017: 794). The number of permanent employees in the Group at the end of the period under review was 855 (December 31, 2017: 784, September 30, 2017: 779).

As the operating phase of OL3 EPR is approaching, the organizations of Electricity Production and Engineering and Expert Services are being strengthened with several dozens of technical professionals this year. Recruitments will be continued in 2019.

The Group's management and operational culture is being developed with the help of the *Better workplace* project. The goals of the project include improving efficiency of operations and securing good preconditions for operations by developing issues related to the work of each individual, the immediate work community and the entire Group. The progress of the project is monitored on a regular basis and the project's effectiveness is measured with e.g. regular personnel surveys.

Environment

In December 2016, The Regional State Administrative Agency for Southern Finland issued decisions on the adjustment of the Olkiluoto nuclear power plant's environmental permit and

water permit regulations. Vaasa administrative court gave adjudication on the issue on June 19 and the decisions became final in July.

Annual General Meeting and Changes in Composition of Board of Directors

TVO's Annual General Meeting on March 23, 2018 approved the financial statements for 2017, confirmed the consolidated income statement and balance sheet, and discharged the members of the Board of Directors and the President and CEO from liability.

All Board members were re-elected. At its organization meeting, the Board elected Matti Ruotsala as Chairman and Lauri Virkkunen as Deputy Chairman. The Board also chose from among its members the members and chairmen of the Board Committees.

TVO's Annual General Meeting had re-elected Lauri Virkkunen as a member of the Board until July 31, 2018 and elected Ilkka Tykkyläinen as a member of the Board since August 1, 2018. In August the Board elected Ilkka Tykkyläinen as Deputy Chairman.

Extraordinary General Meeting

At TVO's Extraordinary General Meeting held in June 2018, TVO and its shareholders agreed on ownership arrangements of shares entitling to a share of Meri-Pori power plant's production capacity. TVO will relinquish its share in Meri-Pori in full in the beginning of July 2020. Because of the arrangements the EGM decided to amend the Articles of Association by removing all provisions pertaining Meri-Pori shares and to reduce the share capital by the proportionate amount of share capital allocated to these shares (class C shares.) The amendments of the Articles of Association will be registered at the same time as the decrease in the share capital is registered. The other amendments to the Articles of Association will be registered when the cancellation of class C shares is registered.

Auditing

The Interim Report is unaudited.

Risks and Uncertainty Factors in the Near Future

The major risks and uncertainty factors in TVO’s operations have been presented in the 2017 Report of the Board of Directors.
If the draft tax law amendment, which would limit the right to deduct interest, would come into force and the level of interest would rise, that would mean a considerable risk of additional costs for TVO.

Assessment of Year-End Developments

Electricity production is expected to continue as in previous years. The prerequisites for nuclear power production at Olkiluoto are good. Nuclear fuel availability is guaranteed by long-term agreements.

Preparing the OL3 EPR plant unit for production use will continue with TVO supporting the Supplier to complete the project. After the hot functional tests, preparation for the fuel loading which will take several months was launched at OL3 EPR. TVO will submit to the authorities a number of supplementary documents relating mainly to the findings of the heat functional testing. After this TVO has the prerequisites to obtain STUK's opinion and safety assessment as well as the Government's decision on the license.

The Meri-Pori coal-fired power plant capacity will be used in 2018 in accordance with the former principles. Fortum’s share of the Meri-Pori power plant has been accepted into the reserve capacity.

The concept and cost optimization phase of Posiva’s final disposal project will continue until the end of 2018.

Events after the Period under Review

TVO published a stock exchange release announcing, that the plant supplier Areva-Siemens Consortium will perform a schedule review on OL3 project and provide TVO an overall rebaseline schedule for the final phases of the project in December, after the end of the interim report period. TVO cannot estimate whether or not the schedule will influence the start of the regular electricity production.

The Olkiluoto wind power plant was dismantled after it had reached the end of it's lifecycle. The power plant started commercial use in 2005. The dismantle work was completed on 4 October.

OL1 unit was disconnected from national electricity grid on 1 October due to a failure on turbine side. The unit was reconnected to the grid on 2 October.

TVO agreed to transfer it's finance and human resources services to Administer Oy on 15 October. The transfer of business will take place on 1 November 2018 and concerns 14 employees, 12 of whom will be transferred to the new operator.

October 19, 2018

Teollisuuden Voima Oyj
Board of Directors

Key Figures of TVO Group

TVO GROUP (IFRS) (M€)	1.1. - 30.9.2018	1.1. - 30.9.2017	1.1. - 31.12.2017
Turnover	258	240	321
Profit/loss for the period	-3	-3	-9
Investments [1]	211	225	299
Equity	1 767	1 674	1 667
Subordinated shareholder loans (hybrid equity) (included in the former) [3]	679	579	579
Non-current and current interest-bearing liabilities (excluding loan from VYR) [2]	3 970	4 014	3 923
Loan from VYR [2]	666	656	656
Provision related to nuclear waste management	975	973	953
Obligatory provisions	100	0	0
Balance sheet total	7 651	7 505	7 374
Equity ratio % [4]	29,4	28,5	28,9
Average number of personnel	871	800	801

[1] Acquisitions of property, plant and equipment, intangible assets and shares are based on gross investments.
[2] The Finnish State Nuclear Waste Management Fund (VYR)
[3] Subordinated loans

[4] Equity ratio % $= 100 \times \frac{\text{equity}}{\text{balance sheet total - provision related to nuclear waste management - loan from the Finnish State Nuclear Waste Management Fund}}$

Key Figures of Teollisuuden Voima Oyj

TEOLLISUUDEN VOIMA OYJ (FAS) (M€)	1.1. - 30.9.2018	1.1. - 30.9.2017	1.1. - 31.12.2017
Parent company's interim financial statement has been made in accordance with the Finnish Accounting Standards (FAS).			
Turnover	255	237	316
Profit/loss before appropriations	-3	1	6
Fuel costs	55	41	57
Nuclear waste management costs	45	49	64
Capital expenditure (depreciation and financial income and expenses)	39	38	51
Investments [1]	208	223	298
Equity	863	858	863
Appropriations	183	184	185
Obligatory provisions	100	0	0
Non-current and current interest-bearing liabilities (excluding loan from VYR and shareholder loans) [2]	3 906	3 916	3 833
Loans from equity holders of the company [3]	679	579	579
Loan from VYR [2]	666	656	656
Balance sheet total	6 570	6 381	6 292
Equity ratio % [4]	29,2	28,3	28,9
Average number of personnel	870	799	800

[1] Acquisitions of tangible and intangible assets and shares are based on gross investments.
[2] The Finnish State Nuclear Waste Management Fund (VYR)
[3] Subordinated loans

[4] Equity ratio % $= 100 \times \frac{\text{equity + appropriations + loans from equity holders of the company}}{\text{balance sheet total - loan from the Finnish State Nuclear Waste Management Fund}}$

ELECTRICITY DELIVERED TO EQUITY HOLDERS OF THE COMPANY (GWh)	1.1. - 30.9.2018	1.1. - 30.9.2017	1.1. - 31.12.2017
Nuclear power	10 193	9 696	13 385
Coal-fired power	589	122	131
Total	10 782	9 818	13 516

CONSOLIDATED FINANCIAL STATEMENT IN BRIEF AND NOTES

Consolidated Income Statement

EUR 1 000	1.1. - 30.9.2018	1.1. - 30.9.2017	1.1. - 31.12.2017
Turnover	**257 783**	**240 272**	**320 928**
Work performed for own purposes	10 788	9 267	12 888
Other income	8 255	8 314	11 844
Materials and services	-86 427	-73 113	-120 911
Personnel expenses	-48 007	-44 054	-57 728
Depreciation and impairment charges	-41 545	-40 970	-54 385
Other expenses	-72 543	-72 819	-92 717
Operating profit/loss	**28 304**	**26 897**	**19 919**
Finance income	9 020	9 408	12 239
Finance expenses	-41 407	-40 032	-42 881
Total finance income and expenses	-32 387	-30 624	-30 642
Share of the profit/loss of joint ventures	789	563	1 290
Profit/loss before income tax	**-3 294**	**-3 164**	**-9 433**
Income taxes	0	0	2
Profit/loss for the period	**-3 294**	**-3 164**	**-9 431**
Profit/loss for the period attributable to:			
Equity holders of the company	-3 294	-3 164	-9 431

Consolidated Statement of Comprehensive Income

EUR 1 000	1.1. - 30.9.2018	1.1. - 30.9.2017	1.1. - 31.12.2017
Profit/loss for the period	-3 294	-3 164	-9 431
Other comprehensive items			
Items that may be reclassified to profit or loss in subsequent periods:			
Changes in fair values of the available-for-sale investments	0	465	-14
Cash flow hedges	6 962	-9 890	-9 181
Total other comprehensive profit/loss items for the period	6 962	-9 425	-9 195
Total comprehensive profit/loss for the period	**3 668**	**-12 589**	**-18 626**
Total comprehensive profit/loss for the period attributable to:			
Equity holders of the company	3 668	-12 589	-18 626

Consolidated Statement of Financial Position

EUR 1 000	30.9.2018	30.9.2017	31.12.2017
Assets			
Non-current assets			
Property, plant and equipment	5 419 741	5 215 029	5 261 866
Intangible assets	10 112	4 809	4 662
Loans and other receivables	791 402	658 775	658 679
Investments in joint ventures	5 392	3 875	4 602
Investments in shares	1 934	1 934	1 934
Derivative financial instruments	27 365	42 170	35 291
Share in the Finnish State Nuclear Waste Management Fund	974 688	972 968	953 136
Total non-current assets	**7 230 634**	**6 899 560**	**6 920 170**
Current assets			
Inventories	256 150	255 770	257 090
Trade and other receivables	43 259	41 574	41 373
Derivative financial instruments	5 739	15 520	14 670
Fund units	0	100 479	0
Cash and cash equivalents	114 764	192 191	140 239
Total current assets	**419 912**	**605 534**	**453 372**
Total assets	**7 650 546**	**7 505 094**	**7 373 542**
Equity and liabilities			
Capital and reserves attributable to equity holders of the company			
Share capital	606 193	606 193	606 193
Share premium reserve and statutory reserve	242 383	242 383	242 383
Fair value and other reserves	2 487	-4 705	-4 475
Subordinated shareholder loans (hybrid equity)	679 300	579 300	579 300
Retained earnings	236 762	250 646	243 293
Total equity	**1 767 125**	**1 673 817**	**1 666 694**
Liabilities			
Non-current liabilities			
Provision related to nuclear waste management	974 688	972 968	953 136
Obligatory provisions	100 000	0	0
Loan from the Finnish State Nuclear Waste Management Fund	666 242	655 518	655 518
Bonds	2 408 496	2 531 467	2 525 834
Other financial liabilities	931 343	974 185	943 997
Derivative financial instruments	27 113	24 624	24 360
Total non-current liabilities	**5 107 882**	**5 158 762**	**5 102 845**
Current liabilities			
Current financial liabilities	601 953	449 473	392 540
Derivative financial instruments	863	34 148	35 934
Advance payments received	40 406	41 611	40 178
Trade payables	30 328	21 444	6 160
Other current liabilities	101 989	125 839	129 191
Total current liabilities	**775 539**	**672 515**	**604 003**
Total liabilities	**5 883 421**	**5 831 277**	**5 706 848**
Total equity and liabilities	**7 650 546**	**7 505 094**	**7 373 542**

TVO GROUP

Consolidated Statement of Changes in Equity

EUR 1 000	Share capital	Share premium reserve and statutory reserve	Fair value and other reserves	Subordinated shareholder loans (hybrid equity)	Retained earnings	Attributable to equity holders of the company	Total equity
Equity 1.1.2018	**606 193**	**242 383**	**-4 475**	**579 300**	**243 293**	**1 666 694**	**1 666 694**
Profit/loss for the period	0	0	0	0	-3 294	-3 294	-3 294
Other comprehensive items:							
Changes in fair values of the available-for-sale investments	0	0	0	0	0	0	0
Cash flow hedges	0	0	6 962	0	0	6 962	6 962
Interest paid of subordinated shareholder loans (hybrid equity)	0	0	0	0	-3 237	-3 237	-3 237
Equity 30.9.2018	**606 193**	**242 383**	**2 487**	**579 300**	**236 762**	**1 667 125**	**1 667 125**

EUR 1 000	Share capital	Share premium reserve and statutory reserve	Fair value and other reserves	Subordinated shareholder loans (hybrid equity)	Retained earnings	Attributable to equity holders of the company	Total equity
Equity 1.1.2017	**606 193**	**242 383**	**4 720**	**479 300**	**256 656**	**1 589 252**	**1 589 252**
Profit/loss for the period	0	0	0	0	-3 164	-3 164	-3 164
Other comprehensive items:							
Changes in fair values of the available-for-sale investments	0	0	465	0	0	465	465
Cash flow hedges	0	0	-9 890	0	0	-9 890	-9 890
Subordinated shareholder loans (hybrid equity)	0	0	0	100 000	0	100 000	100 000
Interest paid of subordinated shareholder loans (hybrid equity)	0	0	0	0	-2 846	-2 846	-2 846
Equity 30.9.2017	**606 193**	**242 383**	**-4 705**	**579 300**	**250 646**	**1 673 817**	**1 673 817**

Consolidated Statement of Cash Flows

EUR 1 000	30.9.2018	30.9.2017	31.12.2017
Operating activities			
Profit/loss for the period	-3 294	-3 164	-9 431
Adjustments:			
Income tax expenses	0	0	-2
Finance income and expenses	32 387	30 624	30 642
Depreciation and impairment charges	41 545	40 970	54 385
Share of the profit/loss of joint ventures	-789	-563	-1 290
Other non-cash flow income and expenses	-33 240	-28 246	-15 683
Sales profit/loss of property, plant and equipment and shares	14	-255	-224
Change in working capital:			
Increase (-) or decrease (+) in non-interest-bearing receivables	-2 998	3 254	4 097
Increase (-) or decrease (+) in inventories	941	-5 402	-7 666
Increase (+) or decrease (-) in short-term non-interest-bearing liabilities	7 629	-15 074	-26 366
Interest paid and other finance expenses	-2 769	-3 328	-4 260
Interest received	3 862	5 727	5 734
Taxes paid	0	0	2
Cash flow from operating activities	**43 288**	**24 543**	**29 938**
Investing activities			
Acquisition of property, plant and equipment	-238 109	-214 482	-287 195
Proceeds from sale of property, plant and equipment	15	2	41
Acquisition of intangible assets	-92	-104	-143
Acquisition of shares	0	-6	-6
Investments in fund units	0	100 000	200 000
Proceeds from sale of shares	0	486	486
Loan receivables granted	-10 725	-15 516	-15 603
Repayments of loans granted	0	387 049	387 278
Cash flow from investing activities	**-248 911**	**257 429**	**284 858**
Financing activities			
Withdrawals of subordinated shareholder loans (hybrid equity)	100 000	100 000	100 000
Withdrawals of long-term loans	410 725	100 000	100 000
Repayment of long-term loans	-690 438	-549 165	-632 135
Interest paid of subordinated shareholder loans (hybrid equity)	-2 501	-1 904	-3 710
Increase (+) or decrease (-) in current financial liabilities	362 362	-50 948	-50 948
Cash flow from financing activities	**180 148**	**-402 017**	**-486 793**
Change in cash and cash equivalents	**-25 475**	**-120 045**	**-171 997**
Cash and cash equivalents at the beginning of period	140 239	312 236	312 236
Cash and cash equivalents at the end of period	**114 764**	**192 191**	**140 239**

Notes to the Interim Report

ACCOUNTING POLICIES

The interim financial statements have been prepared in accordance with IAS 34 Interim Financial Reporting -standard. The accounting policies adopted are consistent with those of the Group's annual financial statements for the year ended on 31 December 2017. Additionally the changes according to the revised IAS/IFRS standards have been adopted.

MANAGEMENT'S CRITICAL ACCOUNTING ESTIMATES AND ASSUMPTIONS

The preparation of Interim Report requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, income and expenses. The actual results may differ from these estimates. Significant assumptions made by the management in applying Group's accounting policies and crucial uncertainties were the same as the ones applied to the annual financial statements as for the year ended on 31 December 2017.

MERI-PORI

TVO and its shareholders have agreed on ownership arrangements of shares entitling to a share of Meri-Pori power plant's production capacity. According to the agreement signed in June, Fortum will acquire TVO's shareholders' shares of the production capacity of the Meri-Pori power plant. Fortum will be entitled to use TVO's share of the Meri-Pori capacity as of the beginning of 2019, and TVO will relinquish its share in Meri-Pori in full in the beginning of July 2020.

OLKILUOTO 3 EPR

According to the comprehensive settlement agreement signed in March 2018, TVO and the Supplier jointly withdrew the pending arbitration proceedings under the International Chamber of Commerce (ICC) rules with respect to costs and losses incurred in relation to delays in the construction of the OL3 EPR project. In June 2018, the ICC tribunal confirmed the arbitration settlement by a consent award, and the arbitration proceedings were terminated. The parties also withdrew the pending appeals in the General Court of the European Union. The settlement agreement between TVO and the plant supplier consortium companies Areva NP, Areva GmbH and Siemens AG as well as with Areva Group parent company Areva SA, a company wholly owned by the French State, concerning the completion of the OL3 EPR project and related disputes entered into force late March.

These settlement payments to TVO, any incentive payment by TVO and any penalty payable to TVO due to any additional project delay have all been taken into account in calculating the final cost of the OL3 EPR project. The amount corresponding to the settlement amount and the incentive fee to be paid by TVO have been entered as property, plant and equipment in the Group balance sheet.

TVO GROUP

SEGMENT REPORTING

Segment structure in TVO

The Group has two reportable segments; nuclear power and coal power.

The electricity of the nuclear power segment is produced at two nuclear power plant units, Olkiluoto 1 and Olkiluoto 2 (OL1 and OL2). A new unit, Olkiluoto 3 (OL3), is under construction at Olkiluoto. The subsidiary of TVO, TVO Nuclear Services Oy (TVONS), of which operation is related to nuclear power, is also included in the nuclear power segment.

The electricity of coal-fired power segment is produced by TVO share at the Meri-Pori coal-fired power plant.

Segment calculation principles

TVO Group discloses in the segment information; turnover, profit/loss for the period and assets, which the chief operation decision maker follows.

The chief operation decision maker follows reporting according to Finnish Accounting Standards (FAS). Adjustments made under IFRS accounting policies are reported in group level.

TURNOVER BY SEGMENTS

EUR 1 000	30.9.2018	30.9.2017	31.12.2017
Nuclear power	226 188	229 851	307 561
Coal-fired power	31 595	10 421	13 367
Total	**257 783**	**240 272**	**320 928**

PROFIT/LOSS FOR THE PERIOD BY SEGMENTS

EUR 1 000	30.9.2018	30.9.2017	31.12.2017
Nuclear power	-1 617	3 970	10 597
Coal-fired power	-796	-2 727	-3 402
Profit/loss before appropriations (FAS)	-2 413	1 243	7 195
The impact of the nuclear waste management obligation	-2 378	-6 049	-19 032
The impact of financial instruments	196	169	37
Other IFRS adjustments	512	910	1 079
Share of the profit/loss of joint ventures	789	563	1 290
Total (IFRS)	**-3 294**	**-3 164**	**-9 431**

ASSETS BY SEGMENTS

EUR 1 000	30.9.2018	30.9.2017	31.12.2017
Nuclear power	6 568 138	6 373 872	6 286 732
Coal-fired power	2 623	8 125	5 744
Total (FAS)	6 570 761	6 381 997	6 292 476
The impact of the nuclear waste management obligation	1 049 024	1 062 664	1 029 849
The impact of financial instruments	-5 315	20 033	12 348
The impact of finance leases	54 033	55 750	54 889
Other IFRS adjustments	-22 337	-18 214	-19 611
Share of the profit/loss of joint ventures	4 380	2 864	3 591
Total (IFRS)	**7 650 546**	**7 505 094**	**7 373 542**

TVO GROUP

CHANGES IN PROPERTY, PLANT AND EQUIPMENT

EUR 1 000	30.9.2018	30.9.2017	31.12.2017
Opening net book amount	**5 261 866**	**5 040 266**	**5 040 266**
Increase	203 917	224 607	298 600
Decrease	-5 963	-9 969	-31 063
Depreciation and impairment charges	-40 366	-40 029	-53 130
Accumulated depreciation from deduction	287	154	7 193
Closing net book amount	**5 419 741**	**5 215 029**	**5 261 866**

CHANGES IN INTANGIBLE ASSETS

EUR 1 000	30.9.2018	30.9.2017	31.12.2017
Opening net book amount	**4 662**	**7 758**	**7 758**
Increase	7 306	653	821
Decrease	-729	-2 662	-2 662
Depreciation and impairment charges	-1 179	-940	-1 255
Closing net book amount	**10 060**	**4 809**	**4 662**

TVO GROUP

FINANCIAL RISK MANAGEMENT

The objectives of financial risk management and finance policy are the same as those applied to the annual financial statement for the year ended 31 December 2017.

DERIVATIVE FINANCIAL INSTRUMENTS

Nominal values of the derivative financial instruments *

EUR 1 000	**30.9.2018**	**30.9.2017**	**31.12.2017**
Interest rate swaps	2 161 071	2 449 518	2 499 518
Forward foreign exchange contracts and swaps [1)]	126 002	145 877	142 709
Cross-currency swaps	325 452	696 181	642 395
Total	**2 612 526**	**3 291 576**	**3 284 622**

[1)] Forward contracts are mainly used for hedging fuel purchases against currency risk. The opposite forward contracts, which have been acquired to adjust these hedging amounts are netted in the table with each other, whereby the nominal describes the protected position.

Fair values of the derivative financial instruments *			**30.9.2018**			**30.9.2017**			**31.12.2017**
EUR 1 000	Positive	Negative	Total	Positive	Negative	Total	Positive	Negative	Total
Interest rate swaps									
Cash flow hedges	159	-9 191	-9 032		-18 423	-18 423	382	-14 738	-14 356
Fair value hedges	11 934	-754	11 180	21 563	-1 604	19 959	19 155	-1 565	17 591
Non-hedges	554	-1 315	-761						
Forward foreign exchange contracts and swaps									
Cash flow hedges	12 344	-1 023	11 322	13 987	-2 314	11 673	12 033	-2 663	9 370
Non-hedges	608	-104	504	857	-231	626	715	-224	491
Cross-currency swaps									
Non-hedges	7 506	-15 589	-8 083	21 283	-36 200	-14 917	17 676	-41 105	-23 429
Total	**33 104**	**-27 976**	**5 128**	**57 690**	**-58 772**	**-1 082**	**49 961**	**-60 294**	**-10 333**

* Cross-currency swaps related to Private Placements included.

TVO GROUP DEBT STRUCTURE

30 September 2018

EUR 1 000	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027-	Total
Loans from financial institutes	29 206	44 413	144 413	135 213	405 413	30 413					789 070
Public bonds		251 719	131 955	500 000	153 000	500 000	420 000	500 000		163 000	2 619 673
Loans from other sources			79 114		56 117						135 231
Finance lease liabilities		1 726	1 735	1 744	1 752	1 761	1 770	43 544			54 032
Commercial papers	265 920	96 442									362 362
Total	295 127	394 300	357 216	636 956	616 282	532 174	421 770	543 544		163 000	3 960 369

MATURITY OF TVO GROUP'S CREDIT COMMITMENTS

30 September 2018

EUR 1 000	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027-	Total
Syndicated revolving credit facility				300 000		1 000 000					1 300 000
Bilateral revolving credit facility											
Bilateral bank loan		100 000									100 000
Total		100 000		300 000		1 000 000					1 400 000

Both syndicated and bilateral facilities are undrawn.

The average interest rate on loans and derivatives on 30 September 2018 was 1.80 % (2017: 2.15 %).

On September 30 2018, the Group's had undrawn credit facilities amounting to EUR 1,400 million (2017: EUR 1,680 million). In addition, the Group's had subordinated shareholder loan (hybrid equity) commitments totaling EUR 250 million (2017: EUR 350 million) and cash and cash equivalents amounting to EUR 115 million (2017: EUR 140 million).

Cash and cash equivalents consist of cash on hand, demand deposits and other current, liquid investments. Fund units consist of fund unit investments that are valued at fair value.

TVO GROUP

DISCLOSURE OF FAIR VALUE MEASUREMENTS BY THE LEVEL OF FAIR VALUE MEASUREMENT HIERARCHY

			30.9.2018			31.12.2017
EUR 1 000	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Financial assets at fair value						
Derivative financial instruments at fair value through profit or loss		8 667			18 391	
Derivative financial instruments designated as cash flow hedges		12 503			12 414	
Derivative financial instruments designated as fair value hedges		11 934			19 155	
Equity and fund units investments						
Investments in other shares [1)]			1 934			1 934
Total		**33 104**	**1 934**		**49 961**	**1 934**
Financial liabilities at fair value						
Derivative financial instruments at fair value through profit or loss		17 008			41 329	
Derivative financial instruments designated as cash flow hedges		10 214			17 401	
Derivative financial instruments designated as fair value hedges		754			1 565	
Total		**27 976**			**60 294**	

1) On 30 September 2018, TVO has unquoted shares worth EUR 1,934 (2017:1,934) thousand. Direct market prices are not available for unquoted shares and therefore their fair value is determined using methods based on management judgement.

Fair value estimation

The derivative financial instruments are initially recognized at fair value on the date a derivative contract is entered into and are subsequently measured at fair value. The fair values are determined using a variety of methods and financial valuation techniques, and assumptions are based on market quotations at the balance sheet date (Level 2). The fair value of the interest rate swaps is the present value of the estimated future cash flows. The forward contracts are measured using the market quotes at the closing date.

BOOK VALUES OF FINANCIAL ASSETS AND LIABILITIES BY CATEGORIES

			30.9.2018			31.12.2017
EUR 1 000	Financial liabilities measured at amortized cost	Book Value	Fair value	Financial liabilities measured at amortized cost	Book Value	Fair value
Non-current liabilities						
Other financial liabilities*	3 339 839	3 339 839	3 431 066	3 469 831	3 469 831	3 581 560

* Bonds and EUR-fixed loans included

For other financial assets and liabilities than the ones presented in the table, the book value corresponds to their fair value.

TVO GROUP

ASSETS AND PROVISION RELATED TO NUCLEAR WASTE MANAGEMENT OBLIGATION

The balance sheet contains assets and liabilities concerning the nuclear waste management obligation

EUR 1 000	30.9.2018	30.9.2017	31.12.2017
The carrying value of TVO's share in the Finnish State Nuclear Waste Management Fund (non-current assets)	974 688	972 968	953 136
Provision related to nuclear waste management (non-current liabilities)	974 688	972 968	953 136

TVO's legal liability as stated in the Nuclear Energy Act and the Company's share in the Finnish State Nuclear Waste Management Fund

EUR 1 000	30.9.2018	30.9.2017	31.12.2017
Liability for nuclear waste management according to the Nuclear Energy Act	1 481 600	1 450 100	1 481 600
Funding target obligation	1 470 800	1 428 400	1 470 800
TVO's share in the Finnish State Nuclear Waste Management Fund	1 470 800	1 428 400	1 436 600
Difference between the liability and TVO's share of the fund	10 800	21 700	45 000

The costs of decommissioning of the power plant and disposal of spent fuel are covered by the provision related to the nuclear waste management obligation. Cost estimates are updated annually and the technical plans and total cost estimates every third year.

TVO contributes funds to the Finnish State Nuclear Waste Management Fund to cover future obligations based on the legal liability calculated according to the Nuclear Energy Act. The difference between the funding obligation target decided by the Ministry of Economic Affairs and Employment (MEAE) and TVO's actual share of the Finnish State Nuclear Waste Management Fund is paid in Q1 each year. TVO's share in the Finnish State Nuclear Waste Management Fund on September 30, 2018 is EUR 1,470.8 million. The carrying amount in the balance sheet is EUR 974.7 million. The difference is due to the fact that IFRIC 5 limits the carrying amount of TVO's interest in the Finnish State Nuclear Waste Management Fund to the amount of the related liability since TVO does not have control over the Finnish State Nuclear Waste Management Fund.

The Ministry of Economic Affairs and Employment (MEAE) has adopted the procedure mentioned in the Nuclear Energy Act (section 40, subsection 3) and specified in the Government Decision 1339/1996 for a temporary reduction of the funding target when confirming Teollisuuden Voima Oyj's funding target obligation for 2018.

TVO has issued the State the shareholders' guarantees as security to cover the unexpected events as determined in the Nuclear Energy Act. The guarantees are presented in the note Obligations and other commitments.

OBLIGATIONS AND OTHER COMMITMENTS

Pledged promissory notes and financial guarantees

EUR 1 000	30.9.2018	30.9.2017	31.12.2017
Pledged promissory notes to the Finnish State Nuclear Waste Management Fund	666 242	655 518	655 518
Guarantees given by shareholders related to the nuclear waste management obligation	135 970	187 500	187 500

Investment commitments

Agreement-based commitments regarding the acquisition of property, plant and equipment:

EUR 1 000	30.9.2018	30.9.2017	31.12.2017
OL1 and OL2	97 000	104 000	95 000
OL3	350 000	711 000	697 000
Total	**447 000**	**815 000**	**792 000**

Pending Court Cases and Disputes

Pending Court Cases and Disputes are to be found on pages 8–9.