

Mutual collaboration was signed between ZTR and FNC of UPS

Delegation of administration of JSC "Federal Network Company of the United Power system" ("FNC of UPS"), headed by Deputy of Chairman of Board - Chief engineer Andrey Vladimirovich Cherezov and Deputy of Chairman of Board – Nikolay Nikolaevich Shwets visited PJSC "Zaporozhtransformator" (ZTR) that resulted in signing the report for mutual collaboration between the companies.

Pavel Yevgenevich Alfutin – the Senior expert of substation department and Aleksey Nikolaevich Ivashkin the senior expert of technological development of electrical equipment production were included into delegation.

Within business trip representatives of "FNC of UPS" became familiar with the current condition of ZTR after modernization of technological equipment, new modification of the transformer equipment as well as control system of transformers during operation.

"Zaporozhtransformator is one of the main suppliers of the transformer and reactor equipment for "FNC of UPS", – mentioned **Igor Kleyner General Director of PJSC "ZTR"**. – Today 80% of the installed transformer park at the objects of Federal Network Company make up equipment manufactured by ZTR. One of the



purpose of delegation business trip has become the discussion of signing the report of long-term maintenance of the earlier installed transformers exceeded normative service life." Business trip resulted report signing for mutual collaboration between Deputy of Chairman of Board – Chief engineer of Federal Network Company – A.V. Cherezov and General Director of PJSC "ZTR" I.V. Kleyner.

Report signing increases ZTR authority in Russian market, confirms high level of reliability of equipment manufactured by "Zaporozhtransformator" as well as ensures collaboration between the specialists of the company both in the part of the quality improvement of the newly manufactured equipment and term prolongation of the equipment supplied earlier to the objects of Federal network company.

"Considering mutual interests in the development of collaboration, we're sure that meeting of administrations of ZTR and FNC of UPS as the main Customer of equipment in Russian market is considered to be the confirmation of high level of reliability of our equipment, – mentioned Igor Kleyner. It gives us confidence that tomorrow ZTR will remain one of the main manufacturer of transformers and reactors for our Russian partners."

ZTR has completed project concerning updating of autotransformers for Russia

In the year 2011 the specialists of PJSC «Zaporozhtransformator» (ZTR) developed project as for updating of 4 transformers rated for power 330 MVA voltage 750/330kV purposed to improve reliability of energy unit operation of NPP Kalininskay, Russia.

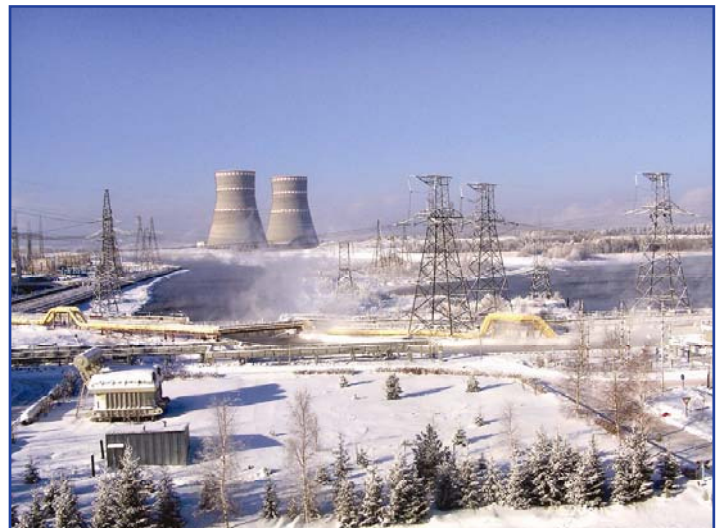
Within updating project for improvement of safety and reliability of equipment, outdated cooling system will be replaced to the modern one with application of plastic radiators. Such renovation will reduce costs for operation of equipment, improve effectiveness of the transformer operation and provide its qualitative operation and also will permit to use not only forced as well as natural system of oil and air circulation.

"project execution will minimize costs for ten equipment operation as well as prolong service life of autotransformer for 10 and more years, – mentioned the head of design office of PJSC "ZTR" **Yuriy KOBERNIK**. – As autotransformers are equipped with monitoring systems for the further operation condition of equipment, its parameters and characteristics will be controlled regularly."

Replacement of driving gears and OLTC tap-changers, installation of additional current transformers, replacements of conservators and oil-filled HV bushings used up total resource for the bushings of modern structure are stipulated by project of modernisation.

Project was developed according to valid norms and regulations

of unified system of design documentation (USDD) and with implementation of actions ensuring environmental protection, explosion and fire safety during transformer operation.



Market of non-traditional energy is increased by ZTR

Three transformers rated for power 40 MVA voltage 150 KV manufactured by PJSC "Zaporozhtransformator" (ZTR) is delivered for wind power plant (WPP) in Botievo. Shipment of second transformer is scheduled for the year 2013. Five transformers will be manufactured and delivered by ZTR.

WPP in Botievo is included into the structure of wind power plants "DTEC Priazovskiy" and considered to be one of the largest wind power plant in Ukraine with the specified power 200MW. First wind equipment of power plant is commissioned in October of the year 2012.

The terms of manufacturing and transformer shipment, warranty periods, reliability of the transformer structure and components were main requirements for the customer when the supplier was specified. Due to the high reputation of PJSC "ZTR", quality of the delivered equipment, broad spectrum of rendered services as well as technical consultations carried out by ZTR specialists, PJSC "Zaporozhtransformator" has won in bidding for the transformer delivery for WPP in Botievo.

"Our company has the effective cooperation with "DTEK" ltd. for several years, - mentioned

the Head of Sales office in Ukraine, Belarus and Moldova, Galina Karyaka. This project is to be unique, operation of WPP in Botievo will reduce emissions of hotbed gases into atmosphere by 730 ths. tons of CO₂. Level of competitiveness is increased as well as authority of the company in the national market is improved by means of ZTR participation in projects of alternative energy."

Donbass thermal-energetic company (DTEC) – is the largest energetic company of Ukraine, its enterprises operate in the field of mining and preparation of coal as well as in the market of generation and delivery of power. DTEC is to be energetic subdivision of System Capital Management – leading financial and industrial group of Ukraine.

The largest wind facility is opened in Ukraine in October in the year 2012. Wind power plant (WPP) in Zaporozhye region included into the wind facility "DTEC Priazovskiy" was put into operation by energetic holding.

In the end of the year 2012 all 30 wind equipment of the first term, installed power 90MW, will be connected to the United energetic system of Ukraine. Another 110MW of WPP in Botievo will be put into operation up to 2014.

Up to the year 2018 DTEC is planned to invest EUR 1.85 billion into the construction of wind facility "DTEC Priazovskiy" (Zaporozhye region) and "DTEC Mangush" (Donetskaya region).



Insulating production will be modernized by ZTR

Cost of the new equipment complex is USD 600 thd.

Project as for modernization of insulating production is completed at PJSC "Zaporozhtransformator" (ZTR) within the investment program related to the improvement of conditions and labour efficiency. Two machines with numeric program control as for the treatment of laminated cardboard as well as four-way longitudinal milling machine for insulating production were put into operation.

Machines are intended for the treatment of new multilayered material – "laminate", based on the fulled-board, glued by synthetic compound. Machines are successfully put into operation and provide production of qualitative insulating parts for the current factory orders.

Treating unit completed with numerical control unit ROVER C.9.50 for laminate treatment permits to manufacture body of parts of different configuration: support, pressing rings, step parts, etc.

Cutting unit with numerical control unit WNT-750 is intended for cutting of laminating plates. Software with automatization of the plate supply provides cutting of high quality as well as rectangular parts.

Fixed – bed milling machine Superset XL completed with fast replacement of tool HSK80 manufactured by SCM, Italy was successfully put into operation and permits to manufacture insulation parts (rods) made of laminated cardboard with improved qualitative

as well as precision characteristics. Insulating distance is decreased by the reduction of tolerance during the rod manufacturing, it permits to decrease outline dimensions and transformer mass.

Italian company BIESSE has become the manufacturer of the new equipment – manufacturer of special machines for woodwork and slabby materials. "Staff has been successfully trained for operation at the new equipment of high technology and today they perform specified targets", – mentioned **Vyacheslav VALCHUK, Chief Technologist of PJSC "Zaporozhtransformator"**.



ZTR insulating production provides the main transformer units with insulating parts of different design. Implementation of new equipment is directed for the reduction of cycle of cardboard part manufacturing due to the reduction of technological operation numbers, increase of efficiency as well as improvement of qualitative and precision part parameters. The following operations such as painting, gluing, pressing of

workpieces could be excluded due to the laminate application; it will significantly reduce cycle of production.

Cost of the new equipment complex for the insulating production made up USD 600 ths. Implementation of new equipment – is another step to increase competitiveness of ZTR production, improvement of quality and reduction of labour input.