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**ELECTRICAL PART OF THERMAL  
AND NUCLEAR POWER PLANTS**

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## **Meet a New Rubric in the Journal *Thermal Engineering* (*Teploenergetika*)!**

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Dear colleagues,

With the article presented below, the journal *Teploenergetika* (*Thermal Engineering*) opens a new rubric: “ELECTRICAL PART OF THERMAL AND NUCLEAR POWER PLANTS.” In the Editorial Board’s opinion, such extension of the range of topics traditionally covered in the journal will open the possibility to consider thermal and nuclear power plants, facilities the thermal and electrical parts of which are mutually dependent and inseparably linked to each other, in a more systematic manner.

Supposedly, materials published under the new rubric will contain information about innovative electrical equipment the use of which makes it possible to obtain a synergetic effect from its joint operation with the classic thermal power equipment and with new process installations used at modern power stations. Matters concerned with diagnosing the technical state of equipment and extending its service life will be taken up.

We plan to publish articles reflecting the results from works on analyzing the operating modes of power plants’ main electrical equipment with evaluating the influence of these modes on the performance efficiency and reliability, and on the service time between repairs of turbines, pumps, and other mechanisms of power plant auxiliaries. Such questions as the effect of short-circuit faults in the grids adjacent to power plants on the process equipment and the consequences from loss of power system steady-state and transient stability will also be considered in articles.

New ideas and developments in the field of power plant automatic emergency control systems, setting up joint control of turbines and generator excitation, setting up relay protection and automatic control systems of electrical equipment, and their influence on the process equipment will be of interest for the journal readers.

Recent years have seen an increasingly growing use of computer technologies and microprocessor devices. Microprocessor devices place more stringent demands on the power supply quality and on the electromagnetic environment as compared with the previously dominated electromechanical devices. It is planned to allocate place on pages of the journal *Teploenergetika* (*Thermal Engineering*) for articles aimed at solving problems of securing stable operation of low-current equipment under the conditions of its interaction with strong electric and magnetic fields induced by the power plant electrical equipment. The new rubric will also pay attention to application of new types of grounding devices, grounding loops, and secondary circuit shielding methods at power plants, which is one of aspects relating to the problem of securing electromagnetic compatibility between low-current devices and heavy-current equipment, and protection from high-frequency and impulse interference.

It is also expected that regulatory documents relating to the electrical part of thermal and nuclear power plants—both those currently in force and being developed—will be discussed on the journal pages.

The Editorial Board invites specialists to take part in preparing articles for the journal that reflect the results of scientific research works and topical questions relating to design and operation of power plants’ electrical part.

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