RESULTS OF THERMOGRAPHIC DIAGNOSTICS OF ELECTRIC GRID CONTACT JUNCTIONS AND GENERATORS OF OIL SHALE POWER PLANTS

N. DOROVATOVSKI*, O. LIIK**

* National Grid of Estonia,
  42 Kadaka Rd., Tallinn 12915, Estonia
** Department of Electrical Power Engineering
  Tallinn University of Technology,
  5 Ehitajate Rd., Tallinn 19086, Estonia

Thermographic monitoring allows implementation of the diagnostics of electrical equipment on the higher technological level comparing with the conventional methods. The methods of thermographic (infra-red) diagnostics of high-voltage electric grid contact junctions and electrical generators of oil shale power plants of Eesti Energia Ltd are described in the paper. The analysis of the measurement and fault data is given as well. The results of the research enable to compose the plans for preventive maintenance and scheduled repairs of the electric equipment. Thermographic diagnostics saves substantial financial and material resources and increases the reliability of power supply.

*Corresponding author: e-mail Nikolai.Dorovatovski@energia.ee
** olev.liik@itu.ee