

V. Levakin, K. Yefimova, S. Polyvoda, V. Iokst

*State Scientific and Technical Center for Nuclear and Radiation Safety, Kyiv,
Ukraine*

Regulatory Nuclear and Radiation Safety Requirements for NPP Power Supply Systems

The paper presents review of the requirements from the new regulation NP 306.2.205-2016 “Requirements for Power Supply Systems Important to Safety of Nuclear Power Plants” and recommendations of IAEA and WENRA for the construction of electrical systems important to safety of nuclear power plants. The research is focused on main differences of NP 306.2.205-2016 from standards that applied to NPP emergency power supply systems (PNAE G-9-026-90, PNAE G-9-027-91) and which were cancelled in 2016.

Keywords: nuclear power plant, NPP mobile diesel generator, in-house power supply systems, safety system loads, offsite power supply source, open switchgear.