

## **Annotation**

The thesis was performed on the design of a lightning proof transformer. The design of a lightning proof transformer is closely related to design. During the first stages, the basic structural schemes of lightning-electric transformers should be selected, as well as in the process of calculating the design of it is individual parts – the magnetic system, windings, insulation parts, bends, etc.

The feasibility study for the selection of power transformers was calculated and a business plan was drawn up. Also in the thesis presents the basic for choosing a transformer and its impact on the environment.

As a result, life safety indicators are considered, the area of the fire is determined when a lightning-proof transformer is ignited, the fire hazard is oil-filled electrical equipment.