Specialists of the Perm Polytechnic University have developed a virtual reality simulator (VR) for the safe training of electrical personnel. Development allows you to work out skills in working with equipment of substations without risk to life.

Every year, 10–20% of accidents in the energy searches occur due to staff mistakes. Traditional training at landfills costs up to 100 thousand rubles per person and does not always take into account the specifics of specific objects. The VR lane solves this problem by modeling real substations and various working situations.

The program was created on the Unity platform using 3D models of real equipment. Users can work out standard operations, such as the transformer output for repairs, as well as actions for accidents – short circuits or fires. The system indicates errors and explains their causes.

The pilot introduction has already shown a decrease in an accident rate of 3%. In the future, the simulator is planned to be used in educational institutions and to certify employees of enterprises.

The developers emphasize that the technology does not solve all problems – some of the accidents are caused by fatigue or organizational factors. However, to develop practical skills and knowledge of safety precautions, the VR-Trinazer proved its effectiveness.