

In Russia, he created a neural network to predict accidents at  
nuclear power plants

Specialists of the Kurchatov Institute created a neural network model to predict dangerous situations at nuclear power plants. Development allows you to quickly and more accurately evaluate the risks of repeated criticality – a dangerous state in severe accidents with the loss of coolant.

As explained by a researcher at the nuclear security analysis department of the atomic energy of the NIC “Kurchatov Institute Alexander Glazkov, traditional analysis methods require significant computing resources and often use high security parameters. The new system based on artificial intelligence is able to accumulate “experience” and identify previously unaccounted dangerous conditions.

The key advantage of development is the possibility of realistic modeling of the designated emergency situations. The neural network analyzes thermophysical parameters and significantly reduces the calculation time compared to existing methods.