Nuclear power plants after Chernobyl

Nuclear power plants like Chernobyl are no longer being built today. In contrast, today's have the so-called. containment, a protective building that absorbs radiation and prevents the penetration of radioactive material into the environment, and which houses the reactor, primary pumps and other equipment. After the Chernobyl disaster, safety measures in power plants were raised to a higher level. Although the reactors work on the same principles of physics, the staff goes through stricter controls, the teams have backup teams, and the systems are far more reliable – if one fails, there are spare ones that will take over its function.

"You have power supply with a system of huge batteries that are constantly in function and have their reserves. In the event of a power outage, you always have a drive that works until the diesel generator starts. You also have a tank that will supply electricity, which is important due to the circulation of water, cooling the reactor. The reactor has a lot of heat that it has to maintain. It's like when you make coffee, so when it starts to boil, you turn off the hob, but it's still hot. It will boil over for you ", explains the former director of the PE" Nuclear facilities of Serbia ", Jagoš Raičević.

Referring to the Fukushima catastrophe from 2011, Raicevic notes that it was caused by an earthquake and that it was a design error, and that it cannot be compared to Chernobyl, after which no human error occurred in nuclear power plants.

"Those two catastrophes have significantly improved the state of safety in nuclear power plants, which are far safer today than they would be if there were no such accidents because of Chernobyl and Fukushima." Of course, the price is paid. The world is connected. The criteria apply to everyone. You cannot build a nuclear power plant in Serbia today according to some Serbian criteria, because Bulgaria and all the surrounding countries will rebel. Neither Croatia nor other countries can, "Raicevic points out for Sputnik.

The future of the nuclear industry

Although the Chernobyl disaster "braked" the nuclear industry worldwide, the use of nuclear power plants remained significant. One of the largest is located in France, where during 2018, about 70 percent of the produced electricity came from nuclear sources. He also points out that in the last 20 years there has been talk of a new, fourth generation of nuclear reactors, which should function differently from the current ones:

"It is a concept in which you will not have just one nuclear reactor, but one that is the main one, which will make electricity, and several nuclear plants, which will solve the issue of long-lived nuclear waste and which will provide you with completely safe operation. Security

is not provided by the fact that the failure of one system will lead to the activation of another. Safety is provided by the design itself, which will prevent the accident, “Raicevic explains.

According to data from April 2020, there are a total of 440 nuclear reactors in 30 countries in the world. Most of them are in the United States (95), then in France (57), then in China (47), then in Russia (38), Japan (33), South Korea (24), India (22), Canada 19).

Source: rs-lat.sputniknews.com