

Globally, about 15 percent of electricity comes from nuclear power. One third of all nuclear power plants is located in Europe, while 60 new reactors are being built. Nuclear power plants are also developing in our region and Serbia is surrounded by a dozen nuclear reactors. For now, we also know that Slovenia and Croatia will build a new reactor for their Krško nuclear power plant. Is Serbia safe and ready to react in the event of an accident in the area? Do we know how Serbia disposes of radioactive waste?

Although most countries announced that they would give up nuclear energy after the disaster in Fukushima, that did not happen. The world is not giving up on nuclear energy. Djordje Lazarevic from the Sector for Development and Application of Nuclear Technologies, as a guest in the RTS morning program, pointed out that it is unlikely that humanity will be able to do without nuclear energy in the future, but that the problem is unfortunate events in the past.

Nuclear power plants are designed to withstand the strongest earthquake, plane crash, tsunami. When asked how safe we are, Lazarevic says that after the last big accident in Fukushima, post-Fukushima demands were made and that today's nuclear power plants cannot be built without satisfying all those requirements.

"We are very safe because of these post-Fukushima requirements. In order to be able to build a reactor at all, it must last 72 hours without electricity supply from outside, to dissipate heat from a reactor that is already in operation. After all, there are active and passive drainage systems. "The minimum for today's power plants is to have four of these systems, two of which are protected in the same way as the nuclear power plant itself from shock waves, air strikes, earthquakes, tsunamis and the like." explains Lazarević.

A moratorium on the construction of nuclear power plants still applies in Serbia, but we are surrounded by nuclear power plants. As many as ten reactors are at a distance of 400 kilometers. Romania, Bulgaria, Croatia and Hungary have nuclear power plants. They are all building or preparing to build new blocks. Less than 70 kilometers away, Hungary is building a new reactor in Paks.

Lazarevic says that at the EU level there is a cross-border concept that requires that a country that decides to build a nuclear plant is obliged to do safety analyzes for the sake of its population, but also to send those impact and safety studies to all countries in Europe, especially to its neighbors.

"Through this cross-border cooperation, we received a study of the impact on the environment and the population of the new two blocks of the nuclear power plant that is being built in Paks and which will replace the existing four in the foreseeable future," Lazarevic added.

Can the neighbors stop the construction of the nuclear power plant?

At the beginning of August, Croatia and Slovenia announced that they would build a new block in Krško, and Austria is already opposed. When asked if the neighbors can stop the construction of such facilities, Lazarevic said that it is difficult and that there is no such situation in practice.

“Once the country decides on that energy source, it is obliged to do all possible safety analyzes, and the neighbors can indicate and request additional analyzes, but we do not have a mechanism to stop construction in practice. There can be braking, but so far there has been no experience with that some neighboring countries managed to stop the construction of a nuclear power plant,” Lazarevic explained.

In the event of a nuclear accident in one of the neighboring countries, Lazarevic says that we are ready to react.

“Periodically, for three years, the country’s response to the world’s nuclear accident is held. Thus, in 2017, we had a simulated accident at a power plant in Hungary, where the loss of electricity supply to the heat dissipation system was simulated, and we showed that we would adequately “We assessed and determined what could be the radioactive elements that could move towards our country, and we had the equipment to determine that and to respond and protect the environment and the population in an appropriate way,” Lazarevic added.

Germany had 17 nuclear power plants and shut down half of them after the disaster in Fukushima. The process is slow, and the question arises as to how safe closed nuclear power plants are. Lazarevic says that they are safe, because these are countries that have mastered nuclear technologies.

“When the reactor is completely shut down, the nuclear power plant is still monitored, because it goes into the process of its decommissioning and complete decommissioning. Germany does it very professionally, it is a very organized and developed country and there is no danger as long as it is run that way. accounts “, concludes Lazarević.

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