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**Akkuyu NPP construction project (Türkiye) will be supplemented with automatic discharge water monitoring system**

*The system will provide real-time monitoring of all the main parameters of the cooling water to be discharged to the Mediterranean Sea*

**June 5, 2025, Büyükeceli, Mersin Province, Türkiye. – A decision has been made to equip the Akkuyu nuclear power plant construction project (being built by Rosatom State Corporation) with an automatic monitoring system of water to be discharged into the Mediterranean Sea after cooling the turbine condensers. This will allow for meeting the amended legislative requirements of the Republic of Türkiye and make the project even more eco-friendly.**

According to the decision made, the additional system will remotely monitor the purity and flow rate of the discharged water stream, suspended solids, dissolved oxygen, acid-base properties, chemical oxygen demand, temperature, conductivity, and other key indicators. The system will function at the plant site over the entire NPP operation lifecycle.

"The Akkuyu NPP project is being implemented in accordance with high environmental standards and principles of sustainable development. All environmental parameters are systematically monitored at the site and in the construction region of the nuclear power plant: conditions of the soil, air, flora, fauna and, of course, sea water. For us, this is not just a duty to comply with legal requirements but a part of the project's philosophy. All employees of the NPP will live with their families in this region, and each of them is aware of their personal responsibility for the environment. Prior to World Environment Day, it is especially important for us to emphasize the preservation of the ecological balance of the marine environment in the plant area at all stages of the Akkuyu NPP project," said Akkuyu Nuclear JSC Chief Executive Officer **Sergei Butckikh**.

**For reference:**

**Akkuyu NPP** is the first nuclear power plant being built in the Republic of Türkiye. The Akkuyu NPP project includes four power units equipped with Generation 3+ VVER reactors of Russian design.

The capacity of each power unit will be 1200 MW. Akkuyu NPP is the first project in the global nuclear industry being implemented according to the Build-Own-Operate model.

Russia is actively developing scientific cooperation with all interested countries. The implementation of major international projects also continues. Rosatom and its divisions take part in this work.

An important principle of operation of modern power units with VVER-1200 generation "3+" reactors is two-circuit steam generation, in which water does not mix in different circuits. This principle implies the closure and tightness of the primary circuit, in which the coolant (ultrapure desalinated water) circulates in a circle using pumps without leaving the Power Unit.

Wastewater from industrial, household and storm sewers will be treated at modern facilities and reused for cooling heat exchange equipment. This will significantly reduce the volume of seawater consumption and eliminate the risk of contaminated water entering the sea. The temperature and chemical composition of the treated waters will strictly comply with regulatory requirements. The measures taken at the project contribute to the rational use and effective management of water resources.

Akkuyu NPP cooling water systems are designed according to a direct-flow scheme with intake of cooling water from the sea, single circulation of water through heat exchange equipment and subsequent discharge into the water area. To meet the NPP needs, desalination plants are designed to procedure drinking and industrial water, as well as water for fire extinguishing systems.

Works aimed at integrating the system into the existing design of offshore hydraulic engineering structures of Akkuyu NPP started about three years ago, immediately after the relevant regulation of the Republic of Türkiye had been adopted. Currently the works have been successfully completed.

World Environment Day is celebrated annually on June 5th. The memorable date was established in 1972 at the Stockholm Conference on the Human Environment. Since then, the World Environment Day has been held under various topics dedicated to current environmental issues, from climate change to plastic pollution. The day is intended to remind society, governments and businesses of the importance of caring for the planet and the need for collective efforts to preserve natural resources.