

Dummy fuel loading begins at unit 1 of Rooppur NPP

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Dummy Fuel Assemblies (DFA) loading into the reactor pressure vessel at unit 1 of Rooppur Nuclear Power Plant began on September 17, 2024. 163 DFAs and 115 Control and Protection System Absorber Rods (CPSAR) will be loaded within the next two weeks. Real nuclear fuel loading will begin after all the reactor parameters are met with the help of dummy assemblies. Specialists of Atomstroyexport, Atomtechenergo, and Rosenergoatom are performing the job.

A dummy fuel assembly (DFA) fully imitates the design of standard fuel assemblies in terms of dimensions, weight, and materials, but without nuclear fuel. DFAs are designed to model the geometry of the reactor core and to confirm the hydraulic parameters of the reactor plant during circulation flushing and reactor cold and hot tests, which are essential to confirm its reliable and safe operation. DFAs are also necessary to master handling operations using the refueling machine.



“Being the major technological corporation in Russia, Rosatom is demonstrating its competencies and vast experience in creating the conditions for developing new industries in its partner countries, every day. Construction of Rooppur NPP is ongoing, the start-up and adjustment works at unit-1 are in full swing. With the power plant start-up, Bangladesh will get its much-needed electricity for further development of the country”, noted Alexey Deriy, ASEVice President for Projects in Bangladesh.



Denis Muzlov, Director of Atomtechenergo Branch in Bangladesh informed, “Work on the DFA loading is being performed 24/7. Loading of one DFA into the reactor, using the refueling machine in automatic mode, takes 25 minutes on average. After the DFA loading, we will start preparing the reactor for subsequent circulation flushing and cold and hot tests.”

Rooppur NPP is being implemented with technical and financial assistance from Russia. It will host two power units with a total capacity of 2,400 MW. Russian VVER-1200 reactors have been chosen for the project. This is an evolutionary Generation III+ design reactor that fully complies with all the international safety requirements. Rosatom Engineering Division is the general designer and general contractor of the project.