



## THE MAIN DIRECTIONS AND CONTENT OF WORK ON MANUFACTURE OF PELLET MOX FUEL FOR PWR

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The main directions of pellet MOX - fuel manufacture for PWR with using experimental equipment of SSC RF RIAR are presented. Technological installations for manufacturing pellet MOX-fuel are placed into 15 glove boxes and allow carrying out operations with 15 kg of U and 2 kg of Pu simultaneously. The chain of glove boxes is equipped with 3 pressing installations to produce about 20 kg of pellet/per a shift. There are presented the basic realizable parameters of MOX-fuel pellets fabrication. Manufacture technology foresees the fabrication of regular configuration pellets for PWR reactor fuel pins. The parameters of the pellet, made of mixed uranium-plutonium fuel at the fabrication stage meet completely the requirements to those for pellets, made from oxide fuel. There is considered the scope of the program on in-pile testings with the allowance for the requirements on licensing MOX-fuel for PWR. The main theme of the work on licensing includes irradiation of research fuel pins in MIR-reactor both under steady-state and emergency operations, and the following material science investigations in shielded cells of RIAR as well in order to get the information, which is necessary for the calculated parameters of MOX-fuel pins of PWR (VVER-1000) reactor to confirmed.