

**ON THE MODELING OF BENDING PERTURBATIONS OF MELT JETS  
UNDER REACTOR VESSEL WATER POOL  
DURING SEVERE ACCIDENT AT NPP**

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The given paper presents the modeling results of the bending melt jet perturbations in a coolant pool and disintegration of the jets on drops. It was shown that among the problems requiring studies for the improvement of the passive protection systems against severe accidents at NPP there are disintegration of the thin jets due to bending instability and the jet penetration length into volatile coolant pool. These problems belong to the initial stage of the severe accident in containment by the corium melt jet spreading under reactor vessel water pool. Successful solution of these problems predetermines the effectiveness of the passive protection system against severe accidents at NPP.

*Keywords:* jet, melt, pool, bending perturbations, model.