

Experimental Investigation of PSDRS

정지영*, 정경채, 김병호, 김태준, 최병해, 한도희, 박남국¹

Korea Atomic Energy Research Institute;

¹Chonnam National University

(jyjeong@kaeri.re.kr*)

Decay heat removal experiments were performed in the PSDRS (Passive Safety Decay heat Removal System) test facility. The test consists of steady states and transient states tests. Steady state test was carried out with a fixed heat source magnitude. When the heat loss by the air-cooling came to be equal to the heat generated from the simulated core, required parameters were measured. The transient state test is to simulate the PSDRS operation at reactor trip. Test was carried out with change of heat source magnitude. The reactor core simulated by 144 electrically heated rods. The calculated results are compared with experimental data.