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MOLYBDENUM-99 PRODUCTION TECHNOLOGY DEVELOPMENT**

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**Post Irradiation Examination on LEU Dispersion Target Developed by
KAERI**

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ABSTRACT (12 PT, BOLD, ALL CAPS)

KAERI has been developing an LEU dispersion target for its supply to the new Kijang research reactor, which aims to produce Mo-99 in Korea. This May, an irradiation test of the half-cycle for the LEU dispersion target developed and fabricated by KAERI was conducted at HANARO during 10.3 EFPD to verify its soundness and safety. Maximum heat flux of the irradiated target was 187.9 W/cm^2 at 0.5 EFPD and its peak burn-up was 11.6% U^{235} . After one month cooling, a non-destructive PIE on the LEU dispersion target was conducted to produce data that will be used to obtain production permission from our regulatory body. Visual inspection, X-ray, gamma spectroscopy, plate thickness measurement and oxide layer thickness measurement were conducted for non-destructive PIE and its result will be presented in this paper.