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## COMPARISONS OF NEUTRON CROSS SECTIONS AND ISOTOPIC COMPOSITION CALCULATIONS FOR FISSION PRODUCT EVALUATIONS

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The neutron absorption cross sections for 18 fission products evaluated within the framework of the KAERI (Korea Atomic Energy Research Institute)-BNL (Brookhaven National Laboratory) international collaboration have been compared with the ENDF/B-VI release 7. Also, the influence of the new evaluations on isotopic composition calculations of the fission products has been estimated through the OECD/NEA burnup credit criticality benchmarks (Phase 1B) and the LWR/Pu recycling benchmarks. These calculations were performed by WIMSD-5B with the 69 group libraries prepared from three evaluated nuclear data libraries: ENDF/B-VI.7, ENDF/B-VI.8 including new evaluations in resonance region covering thermal region (the first stage evaluations finished in 2000), and ENDF/B-VII expected including those in upper resonance region up to 20 MeV (the second stage evaluations finished in 2003). For Xe-131, the composition calculated with ENDF/B-VI.8 shows maximum difference of 4.78% compared to ENDF/B-VI.7. However, the isotopic compositions of all fission products calculated with ENDF/B-VII expected shows no differences compared to ENDF/B-VI.7 for the thermal reactor benchmark cases.