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## **Initial and Transition Cycle Development for KALIMER Uranium Fueled Core**

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### **Abstract**

*An economic and safe equilibrium Uranium metallic fuelled core having been established, strategic loading schemes for initial and transition cycles to early reach target equilibrium cycles are suggested for U-U and U-Pu transition cycles. An iterative method to find initial core enrichment splits is developed. With non-uniform feed enrichments at the initial core adopted, this iterative method shows KALIMER can reach Uranium equilibrium cycles just after 4 reloads, keeping feed enrichment unchanged from cycle 2. Recycling of self-generated Pu is not sufficient to make KALIMER a pure Pu equilibrium core even after 56 reloads.*