ICF Hybrid Burner Using Tritium-Lean Targets GEORGE MILEY, XIAOLING YANG, SUNG-JIN KIM, University of Illinois, HEINRICH HORA, U of New South Wales, Australia — A near-term ICF driven actinide burner has gained much interest. However, the D-T ICF approach with tritium breeding gives a low support ratio. We propose here using fast ignition of tritium-lean targets to obtain a higher fraction of useful neutrons by reducing tritium-breeding requirements while lowering neutron-induced material damage [1]. This approach appears feasible as simulations show fast ignited tritium-lean targets use only a modest added input-energy over DT targets [2, 3]. Further, discovery of the “block ignition” concept is even more encouraging [3]. Thus we suggest the added time to go directly to tritium lean ICF burners (vs. D-T) is minimal. The presentation reviews physics and technology issues for development of a competitive actinide burner.