Abstract Submitted for the OSF07 Meeting of The American Physical Society

Status of a test of induced depletion of <sup>108m</sup>Ag using bremsstrahlung at Youngstown State University's X-ray Effects Laboratory<sup>1</sup> TREVOR BALINT, GEOFFREY TREES, MATTHEW RAGAN, NATHAN CALDWELL, STEPHEN SMYCZYNSKI, SEAN LUDT, STEPHANIE MCCANN, Youngstown State University, ROBERT GURNEY, University of Surrey, MARC LITZ, GEORGE MERKEL, Army Research Laboratory, NINO PEREIRA, Ecopulse, Inc., MIKE HELBA, HILL ROBERTS, ManTech SRS Technologies, Inc., JOE SCHUMER, Naval Research Laboratory, SARKIS KARAMIAN, Joint Institute for Nuclear Research (Dubna), JAMES CARROLL, Youngstown State University — It has been suggested that long-lived nuclear isomers could provide energy storage for applications. Utilizing an isomer in an application would require some means by which to induce a premature energy release due to a depletion of the number of nuclei in the isomeric state within a sample. An experiment is in development as part of Youngstown State University's Isomer Physics Project to test if an induced depletion of the 418 year isomer of  $^{108}$ Ag can be caused by bremsstrahlung at YSU's X-ray Effects Laboratory (XEL). This talk will discuss the aims, design and status of the experiment.

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