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Recent Achievements of IRE's LEU Conversion Project

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ABSTRACT

IRE is actively participating to the reduction of proliferation risks through its commitment to convert radioisotope production lines to the use of LEU targets. Important milestones which confirm the good progress of the project have been recently achieved.

IRE is pursuing the LEU target qualification in various European research reactors to ensure a reliable worldwide supply of medical isotopes. The results of post irradiation examinations and efforts to obtain the LEU transport license are presented.

Major modifications to the entire production chain, from the processing conditions to the production environment, have been achieved to accommodate the new target specifications. Now the LEU conversion program is leaving progressively the development phase to start the practical demonstration of the production operations in the new environment. Process testing with the new safety components as well as Xe-133 recovery for medical use and environmental footprint reduction in cooperation with CTBTO are discussed.