

**Press Release****News Media Contact:** Tim Jackson (208) 526-8484**For Immediate Release:** Oct 31, 2018**DOE invites public comment on Draft Environmental Assessment for the use of DOE-owned High Assay Low-Enriched Uranium Stored at INL**

The U.S. Department of Energy (DOE) invites the public to review and comment on a draft environmental assessment for a proposal to fabricate fuel at Idaho National Laboratory's Materials and Fuels Complex (MFC) and/or the Idaho Nuclear Technology and Engineering Center (INTEC) to support efforts by U.S. companies to develop and deploy new reactor technologies.

Under requirements of an Environmental Impact Statement performed in 2000, DOE uses an electrorefiner at MFC to refine and down-blend spent fuel that contains highly-enriched uranium material generated decades ago in the Experimental Breeder Reactor-II (EBR-II). This produces high-assay low-enriched uranium (HALEU) that is currently stored at the INL. DOE proposes expanding capabilities at MFC and INTEC to convert this metallic HALEU into fuel for research and development purposes. HALEU contains a higher enrichment (by percentage) of uranium-235 -- a fissile isotope in nuclear fuel that produces energy -- than fuel used in the current fleet of U.S. power reactors. Conventional light water reactors (LWRs) use low-enriched uranium (LEU) fuel, (3 to 5 percent uranium-235) while HALEU contains between 5 and 20 percent.

Currently, there are no commercial facilities in the U.S. immediately capable of producing HALEU, and several advanced reactor designers have expressed interest in using HALEU fuel with their designs to achieve higher efficiencies and longer core lifetimes.

"There are several U.S. companies pursuing advanced reactor designs that would use fuel enriched with higher levels of uranium-235, and need a source so they can conduct the research and development needed to bring these new technologies to market," DOE Deputy Assistant Secretary for Nuclear Technology Research and Development John Herczeg said. "Being able to provide a source of this fuel would support this research and development and aligns with the Office of Nuclear Energy's mission to advance nuclear power as a resource capable of meeting the nation's energy, environmental and national security needs."

The draft environmental assessment prepared in accordance with the National Environmental Policy Act is posted for public review at: [Draft Environmental Assessment for the Use of DOE-Owned High Assay Low-Enriched Uranium Stored at INL\(DOE/EA-2087\)](#).

The federal government proposes fabricating approximately 10 metric tons of HALEU nuclear reactor fuel, to support near-term research, development and demonstration needs of private-sector developers and government agencies, including advanced reactor developers. The preferred action identified in the Environmental Assessment calls for establishing the capability at INL to fabricate HALEU ceramic and metallic fuels from the HALEU produced through the electrometallurgical treatment system currently operating at INL, and by using other small quantities of HALEU stored at INL. Most of the HALEU to be used for fuel fabrication results from the processing and treatment of used fuel from the now-decommissioned EBR-II reactor.

The 30-day public comment period on the draft environmental assessment will conclude on November 30, 2018. Comments can be submitted by mail to David Herrin, 1955 Fremont Ave., 83415-1222 or by email to haleu@id.doe.gov. Paper copies of the document are available on request.