

THE BREAKTHROUGH

Ms. Cheryl Moss Herman
U.S. Department of Energy
Office of Nuclear Energy
Mailstop B-409
19901 Germantown Rd.
Germantown, MD 20874-1290

Re: Excess Uranium Management: Effects of DOE Transfers of Excess Uranium on Domestic Uranium Mining, Conversion, and Enrichment Industries; Request for Information

Dear Ms. Herman,

Thank you for welcoming comments on the issue of how to manage excess highly enriched uranium.

The role of nuclear power will be critical going forward both for economic and environmental reasons. Advanced nuclear designs could play an important role in providing safe, cheap, and reliable low-carbon power. However, in our report “How to Make Nuclear Cheap” we surveyed many of these advanced designs under development in the US and highlighted the significant obstacles to their commercialization, one of which is the availability of highly enriched fuel.

We recommend that excess uranium be downblended to 19.75% and kept as a strategic reserve for the first demonstrations of these advanced reactor designs. The DOE has already begun several programs to help commercialize Gen IV designs, including the GAIN initiative. This strategic reserve of fuel could be another tool to support these innovative companies.

More importantly, the global market for LEU is saturated, with the price at an all-time low, downblending this excess uranium to 3-5% would only hurt the US industry. However, there is currently no market for the higher-enriched fuel needed by fast reactors. Many advanced reactor companies are looking at building their first demonstration plant overseas to take advantage of friendlier regulatory and industrial structures. This HEU strategic reserve could be used as an incentive for companies to license and build in the US.

Additionally, uranium enriched to 19.75% could be used for several reactors designed to produce medical isotopes, another crucial area where we might face shortages in the future. Making it easier for companies to build small reactors for medical isotope production in the US would be a great way to use this excess uranium to stimulate the US economy and protect Americans from the risk of disruption in medical treatments.

Sincerely,



Jessica Lovering
Director of Energy Policy