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Mr. David Henderson
U.S. Department of Energy
Office of Nuclear Energy
Mailstop NE-52
19901 Germantown Rd.
Germantown, MD 20874-1290

Reference: Excess Uranium Management: Effects of DOE Transfers of Excess Uranium on Domestic Uranium Mining, Conversion, and Enrichment Industries; Request for Public Comment.

Subject: Comments from Nuclear Fuel Services, Inc.

Dear Mr. Henderson:

Nuclear Fuel Services, Inc. (NFS) appreciates the opportunity to provide a downblending supplier perspective on the U.S. Department of Energy's (DOE) proposed Secretarial Determination for the management of its excess Low Enriched Uranium (LEU) inventories.

NFS is a long time subcontractor to the DOE's contractors for downblending. Located in Erwin, Tennessee, NFS is the only domestic commercial facility capable of downblending Highly Enriched Uranium (HEU) to LEU. We have worked with DOE focused on defense nuclear nonproliferation for over ten years. NFS also produces specialty nuclear materials for the U.S. Navy's nuclear fleet.

We are providing comments on the Notice originally published in the Federal Register on March 18, 2015. NFS would like to emphasize several points regarding the HEU downblending program and the related DOE transfers of LEU.

The HEU downblending program at NFS exists not to produce LEU but to reduce the nation's stockpile of HEU. Through downblending, the National Nuclear Security Administration (NNSA) Defense Nuclear Nonproliferation program has effectively disposed of over 120 metric tons (MT) of surplus and

excess HEU, substantially reducing holdings of nuclear weapons capable materials throughout the DOE complex and the world.

While meeting the non-proliferation objectives of NNSA, downblending HEU produces government-owned LEU that has value in the marketplace; a portion of the LEU is bartered by DOE as payment for downblending services. DOE could choose to retain title to all of this LEU, or a larger portion, and pursue appropriations for all or a portion of the cost of HEU downblending. However, choosing not to barter would result in DOE not realizing the significant economic value in the LEU derived from downblending. The authorized uranium transfers for downblending comprised less than 25% of total Departmental uranium transfers under the 2014 Secretarial Determination (a maximum of 650 MTU for downblending out of a total of 2705 MTU). Continued annual uranium transfers of the quantities authorized by the 2014 Secretarial Determination account for 5% of the accessible world uranium requirements from 2015-2024.1 The DOE uranium transferred for HEU downblending therefore accounts for about 1% of the accessible world uranium requirements. Given the relative low volume of material put into the market for nonproliferation downblending, DOE should consider continuing to realize the value of the LEU derived from downblending by authorizing the barter for downblending in the next Secretarial Determination. Alternately, NFS believes DOE is authorized to provide an exemption to non-proliferation downblending as a national security purpose based upon USEC Privatization Act 42 USC 2297 (h) -10 (e)(2).

Without HEU downblending funded either by barter of excess government uranium or appropriations, the country would lose a valuable nonproliferation program. Reconstituting the downblending program would require significant investments in time and money. The current benefits to NNSA nonproliferation and defense programs would be lost. In addition, cessation of downblending would cause an increase in costs to the Department of Defense (DoD) and related DOE programs at a time when several defense spending discussions are on-going and have an impact to NFS activities.

NFS commends DOE for soliciting industry input to their Excess Uranium Management Plan and the forthcoming Secretarial Determination. In addition to the market-related factors to be considered, the Department should also

<sup>&</sup>lt;sup>1</sup> Energy Resources International, Inc., Analysis of the Potential Effects on the Domestic Uranium Mining, Conversion, and Enrichment Industries of the Introduction of DOE Excess Uranium Inventory During CY 2015 through 2024, p. 40 (February 2015). In this report, "Scenario 1" as defined by DOE and ERI continues transfers at the 2014 Secretarial Determination quantities (2705 MTU total per year) through 2019 and then at 650 MTU per year for 2020-2024.

consider the potential impact to meeting Government objectives for nonproliferation and defense. The potential increased cost to Government defense programs should be considered, and the potential loss of the only current nonproliferation effort in the country should be a substantial factor in the Department's deliberations.

Sincerely,

John Alan Jones

Counsel

Nuclear Fuel Services, Inc.