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August 4, 2023

Mr. James Lovejoy DOE EIS Document Manager U.S. Department of Energy Idaho Operations Office 1955 Fremont Avenue, MS 1235 Idaho Falls. Idaho 83415

Dear Mr. Lovejoy:

On behalf of the American Nuclear Society (ANS), the professional society for those working in the field of nuclear technology, I am pleased to provide ANS feedback on the recent Notice of Intent (NOI) to Prepare an Environmental Impact Statement (EIS) for High-Assay Low-Enriched Uranium (HALEU) Availability Program Activities in Support of Commercial Production of HALEU Fuel. Volunteer members (see Attachment 1 for contributors) from industry and government reviewed the proposed actions and potential environmental issues for analysis in the NOI and developed the following recommendations for the EIS:

GENERAL:

- One of the stated objectives for this EIS is to *"To accelerate development of a sustainable commercial HALEU supply capability,"* yet when taken in concert with the Draft Requests for Proposals for the "Acquisition of High-Assay Low-Enriched Uranium," it is highly doubtful that this effort can meet the schedules and milestones necessary to support US demonstration reactor projects. If the underlying program for this EIS is fundamentally flawed, how then can the Secretarial Record of Decision have merit?
- The RFI establishes in "Potential Environmental Issues for Analysis" a series of potential impacts that must be considered, yet all are site specific. How can one evaluate "Potential impacts on cultural and historic resources" or prioritize "social equities and the constructive engagement with disadvantaged communities" without pre-determining and designating site(s)? This type of analysis is fundamental to the scope of a site-specific EIS that is required as part of NRC licensing of a facility. DOE should revise this scope to consider only generic and system-wide issues associated with HALEU, leaving sitespecific considerations to the NRC.

SPECIFIC:

- It is unclear why the EIS for HALEU Availability Program Activities includes the evaluation of existing capabilities such as uranium ore production and conversion. DOE should instead focus on those capabilities that need to be developed to enable HALEU fuel fabrication, such as enrichment, de-conversion, transportation, and fuel fabrication.
- DOE should leverage insights from existing EIS documents prepared for relevant facilities as a guide when preparing its EIS for HALEU Availability Program activities. For example, important insights could be leveraged from previous environmental reviews performed for enrichment at Centrus and URENCO, deconversion of UF₆ to uranium

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- oxide at the DUF₆ projects at Portsmouth and Paducah, and fuel fabrication at existing NRC Category I,II, and III uranium fuel fabrication facilities (e.g., Westinghouse, BWXT, Framatome, Global Nuclear Fuel, NFS). In addition, much of the EIS for the HEU Disposition Program can be referenced, as it addresses some of these actions.
- We believe that larger quantities of HALEU can be transported safely with newly designed canisters for larger quantities that meet NRC transportation requirements, as transportation of HALEU and high-enriched uranium in non-UF₆ forms is already done several times per year in small quantities. Thus, the scope of the transportation aspects of the EIS should focus on the impacts of transporting larger quantities of HALEU between facilities that are representative of expected demand.

Thank you in advance for allowing us to provide feedback on your NOI. Please do not hesitate to reach out if you need clarification on any feedback we have provided.

Respectfully,

Ken Peterson

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President American Nuclear Society

Craig H. Piercy

Executive Director and CEO American Nuclear Society

Attachment 1: List of ANS Member Contributors to Feedback

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- Sylvia Saltzstein, Sandia National Laboratories
- Douglas Ammerman, Sandia National Laboratories
- Morris Hassler, IB3 Global