

July 18<sup>th</sup>, 2023 U.S. Department of Energy Washington, DC 20585

**Subject:** Comment on the Notice of Intent to Prepare an Environmental Impact Statement for High-Assay Low-Enriched Uranium (HALEU) Availability Program Activities. Document ID DOE\_FRDOC\_0001-4677 (88 FR 36573).

Dear U.S. Department of Energy Staff:

The Nuclear Innovation Alliance (NIA) is a non-profit "think-and-do" tank working to enable advanced nuclear energy as a solution to mitigate climate change. Through policy analysis, research, outreach, and education, NIA is catalyzing the next era of nuclear energy. We focus on federal policy and regulatory reform to support advanced reactor development and deployment while meeting national environmental and energy security goals. Achieving the environmental benefits that advanced reactors promise is a core goal of NIA and we recognize that it is critical to establish domestic supplies of High-Assay Low-Enriched Uranium (HALEU) to help lower the costs and increase the probability of achieving global climate goals.

Since Russia's invasion of Ukraine in 2022, the United States' overreliance on the Russian state-owned enterprise, TENEX, for the supply of HALEU has become an urgent challenge. It is imperative that the United States establish a domestic HALEU supply chain to ensure fuel availability for advanced reactors.<sup>1</sup>

NIA supports DOE's efforts to increase the production of HALEU domestically and reduce our reliance on imported HALEU. Through well defined policy, the United States can build the domestic infrastructure necessary to become a major supplier of HALEU. Increasing the domestic supply of HALEU will benefit national power grid supply, reliability, and environmental sustainability.

## Recommendation 1: Establish a sense of urgency throughout the entire EIS process, including the publication of the draft EIS.

NIA emphasizes the crucial importance of DOE's efforts to catalyze domestic HALEU production in expanding the fleet of advanced reactors in the United States. This expansion is vital to achieve national climate objectives, enhance energy grid reliability, and reduce dependence on foreign HALEU supplies. Consequently, NIA urges DOE to undertake and publish the draft Environmental Impact Statement (EIS) expeditiously.

<sup>&</sup>lt;sup>1</sup> Catalyzing a Domestic Commercial Market for High-Assay, Low-Enriched Uranium (HALEU)

If the process of drafting the EIS experiences delays, it could result in subsequent setbacks, such as the inability to provide necessary fuel to power current advanced reactors demonstrations and hinder the deployment of future advanced reactors in the United States. Preventing the deployment of clean and reliable advanced nuclear energy could have massive negative environmental impacts. It is important that DOE thoroughly assess the environmental impacts of establishing a HALEU availability program, but it must ensure that the entire EIS process, including the publication of a draft EIS, is performed in a timely manner.

In general, an EIS process that unduly delays the development of domestic HALEU supply exposes the country to heightened economic and political vulnerabilities as we continue to rely on the Russian stateowned enterprise TENEX and can introduce negative environmental impacts by preventing the deployment of clean generation capacity.

## Recommendation 2: Ensure multiple agencies do not perform duplicative environmental reviews.

In efforts to increase the speed at which the draft of the EIS is published, DOE should avoid performing duplicative environmental reviews. Several agencies, such as the U.S. Nuclear Regulatory Commission (NRC), U.S. Environmental Protection Agency (EPA), and local state authorities, must conduct evaluations pertaining to safety, transportation, environmental, and other regulations for the efficient and safe operation of a HALEU fuel production facility. Significant overlaps between these evaluations performed by the DOE, NRC, and EPA can lead to project delays.

Outlining the current reviews conducted by entities such as the NRC and EPA to approve the operation of a HALEU fuel production facility will shed light on the responsibilities each agency holds and any overlaps.

## NRC:

The licensing of fuels and material facilities conducted by the NRC encompasses safety and environmental reviews of any project to ensure the public is protected. NRC is responsible for conducting environmental reviews and issuing Environmental Impact Statements (EIS) and Environmental Assessments (EA) for Federal actions under its civilian use of nuclear materials jurisdiction. As the primary authority in charge of granting licenses for reactors, NRC is responsible for assessing the environmental consequences of these actions. Additionally, the NRC collaborates with various State and Federal agencies, who assist in fulfilling this role, recognizing the NRC's jurisdiction over reactor licensing determinations.

Reviews conducted by the NRC include but are not limited to the following: safety assessment of the site, safety assessment of the facility, design criteria, design and performance of structures, systems and components, plans for the applicant's operations, quality assurance program, technical qualifications of the applicant, plans for coping with emergencies, waste management evaluation, and identification of potential hazards to the structures, systems, and components of the project.

## EPA:

The Environmental Protection Agency (EPA) is responsible for conducting environmental reviews established under the National Environmental Policy Act (NEPA) and during the issuance of National Pollutant Discharge Elimination System (NPDES) permits.

Under the Clean Water Act<sup>2</sup>, EPA implements NPDES. EPA either reviews operations of a NPDES permit application itself or delegates that function to states that have obtained EPA approval to issue permits. Similarly, under the Clean Air Act, EPA issues air emissions permits, or delegates that authority to states.

Both the EPA and DOE conduct NEPA reviews. The review conducted under NEPA encompasses three levels of analysis including Categorical Exclusion determination (CATEX), Environmental Assessment/Finding of No Significant Impact (EA/FONSI), and the Environmental Impact Statement (EIS). While NEPA reviews are crucial to ensure projects and programs are carefully examined for their environmental impact prior to operation, having two agencies conduct duplicative reviews is redundant.

DOE should promote effective communication and coordination among DOE, EPA, and the NRC, to identify opportunities to reduce parallel reviews of the same topics for the HALEU availability program. This streamlined approach to drafting the EIS is crucial in order to deliver timely and important policies that facilitate the domestic commercialization of HALEU.

NIA would like to thank DOE for the opportunity to comment on this request for information. If you have any questions, please contact us at ecothron@nuclearinnovationalliance.org.

Sincerely,

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<sup>&</sup>lt;sup>2</sup> EPA, Clean Water Act (CWA) Compliance Monitoring