U.S. DEPARTMENT OF ENERGY

Press Release

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U.S. DEPARTMENT OF ENERGY ANNOUNCES COST-SHARED AWARD FOR FIRST-EVER DOMESTIC PRODUCTION OF HALEU FOR ADVANCED NUCLEAR REACTORS

Demonstrations Led by American Centrifuge Operating, LLC Serve as Key Step in Securing Domestic High-Assay Low-Enriched Uranium for Advanced Reactors to Increase Nuclear Energy Deployment

WASHINGTON, D.C. — The U.S. Department of Energy (DOE) today announced an approximately $150 million cost-shared award with American Centrifuge Operating, LLC of Bethesda, Maryland, a subsidiary of Centrus Energy Corp, to demonstrate the nation's ability to produce high-assay low-enriched uranium (HALEU)—a crucial material needed to develop and deploy advanced reactors in the United States. HALEU is required by most U.S. advanced reactors to achieve smaller designs, longer operating cycles, and increased efficiencies over current technologies. HALEU is not currently available at commercial scale from domestic suppliers, a situation that could significantly impact the development and deployment of U.S. advanced reactors. Advancing domestic capability to produce HALEU will set the stage for larger, commercial-scale HALEU production in the U.S. This will allow nuclear facilities to power even more homes and businesses with clean, affordable energy while playing a critical role in reaching President Biden's goal of 100% clean electricity by 2035 and spurring economic opportunity for underserved and disadvantaged communities through his Justice40 Initiative.

"Reducing our reliance on adversarial nations for HALEU fuel and building up our domestic supply chain will allow the U.S. to grow our advanced reactor fleet and provide Americans with more clean, affordable power," said **U.S. Secretary of Energy Jennifer M. Granholm**. "This demonstration shows DOE's commitment to working with industry partners to kickstart HALEU production at commercial scale to create more clean energy jobs and ensure the benefits of nuclear energy are accessible to all Americans."

Today's announcement advances recent investments to demonstrate a U.S. capability for HALEU production. Next steps include implementing President Biden's Inflation Reduction Act funding to support the actions authorized in the Energy Act of 2020 for production of HALEU. DOE projects that more than 40 metric tons of HALEU will be needed before the end of the decade, with additional amounts required each year, to deploy a new fleet of advanced reactors to support the Biden-Harris Administration's 100% clean electricity by 2035. Establishing a sustainable commercial HALEU production is essential to meeting our long-term objectives. The cascade demonstration program is intended to address near-term HALEU needs and will be used to support fuel qualification testing and DOE-supported advanced reactor demonstration projects.

The award includes a $30 million cost share during the first year to start up and operate 16 advanced centrifuges in a cascade at an enrichment facility in Piketon, Ohio. American Centrifuge Operating will complete the final steps of

centrifuge assembly and clear an operational readiness review to start up the demonstration cascade. They will meet the demonstration requirements by enriching uranium hexafluoride gas to produce 20 kilograms of 19.75% enriched HALEU by December 31, 2023. They will then continue production in 2024 at an annual production rate of 900 kilograms of HALEU per year, subject to appropriations, with additional options to produce more material under the contract in future years. Annual Congressional appropriations will inform the duration of the contract based on the availability of funding.

This latest award builds on DOE's three-year cascade demonstration program with American Centrifuge Operating, to manufacture and demonstrate the centrifuge enrichment cascade. The cascade was assembled at the Department's enrichment facility in Piketon, OH, which is currently the only U.S. plant licensed to produce HALEU. Centrus completed manufacture and most of the assembly but did not install the centrifuge rotors into the demonstration cascade while the Department conducted this competition.

DOE is pursuing multiple pathways to produce HALEU through its HALEU Availability Program authorized by the Energy Act of 2020 to meet this pressing need. Following the HALEU demonstration, the centrifuge technology used at the facility will be available for commercial deployment.

Learn more about HALEU and DOE's Office of Nuclear Energy.

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