



Centrus Energy and Clean Core Thorium Energy Advance Work to Develop Next-Generation Fuel for Existing and New Reactors

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BETHESDA, Md. and CHICAGO, Dec. 14, 2021 /PRNewswire/ -- Centrus Energy Corp (NYSE-American: LEU) President and CEO Daniel B. Poneman today congratulated Clean Core Thorium Energy and Texas A&M on successfully fabricating the first sample pellets of a next-generation nuclear fuel called ANEEL (Advanced Nuclear Energy for Enriched Life). Centrus and Clean Core have been working together under a memorandum of understanding (MOU) signed earlier this year to promote Clean Core's advanced nuclear fuel, which will combine thorium with High-Assay, Low-Enriched Uranium (HALEU) produced by Centrus.



Based on more than 15 years of research and design, the new HALEU-Thorium ANEEL fuel is suitable for new and existing CANDU and other Pressurized Heavy Water Reactors (PHWRs). ANEEL can reduce the amount of waste produced in CANDUs/PHWRs by more than 80 percent, minimizing waste management costs and safety concerns, while offering nonproliferation benefits.

According to the World Nuclear Association, there are 48 CANDUs/PHWRs in operation worldwide, with a combined electric generating capacity of 24 million kilowatts. The largest fleet of such reactors is in Canada, where 19 CANDU PHWRs with a capacity of nearly 14 million kilowatts supply 15 percent of the country's electricity. Since these reactors currently operate on unenriched natural uranium, they would potentially represent a new market for Centrus as well as Clean Core Thorium Energy.

"Producing the first ANEEL test pellets is an important step forward in the development of this new, advanced nuclear fuel," said Daniel B. Poneman, President and CEO of Centrus Energy. "With a large fleet of PHWR reactors already operating in Canada and elsewhere, ANEEL could both accelerate and expand early demand for HALEU in the next few years. We value our partnership with Clean Core to support the commercialization of ANEEL and look forward to the opportunity to become their long-term HALEU supplier."

"Working with Centrus Energy to promote our ANEEL advanced nuclear fuel will help bring clean, reliable power within reach for emerging countries that need it. Our innovative technology using thorium and HALEU offers tremendous cost savings, safety, and nonproliferation benefits for CANDU/PHWR-type nuclear power plants," said Mehul Shah, CEO of Clean Core Thorium Energy.

Clean Core plans to test and qualify ANEEL fuel at the Idaho National Laboratory (INL) next year and expects to commercialize the fuel by late 2024. Texas A&M University's Nuclear Engineering and Science Center successfully fabricated the ANEEL fuel samples under quality requirements and supervision of INL.

Under the MOU signed earlier this year, Clean Core and Centrus are collaborating to promote the use of ANEEL advanced nuclear fuel in CANDU reactors around the world, together with other PHWRs. While the initial test pellets being fabricated by Texas A&M are using a small quantity of HALEU supplied by INL, Clean Core Thorium Energy plans to use HALEU from Centrus for commercial-scale production of ANEEL fuel.

Under a three-year contract signed with the U.S. Department of Energy in 2019, Centrus is constructing the first NRC-licensed HALEU production line in Piketon, Ohio. Centrus has met every contract milestone to date and is continuing its work under the contract.

About Centrus Energy

Centrus Energy is a trusted supplier of nuclear fuel and services for the nuclear power industry. Centrus provides value to its utility customers through the reliability and diversity of its supply sources – helping them meet the growing need for clean, affordable, carbon-free electricity. Since 1998, the Company has provided its utility customers with more than 1,750 reactor years of fuel, which is equivalent to 7 billion tons of coal. With world-class technical and engineering capabilities, Centrus is also advancing the

next generation of centrifuge technologies so that America can restore its domestic uranium enrichment capability in the future. Find out more at www.centrusenergy.com.

About Clean Core Thorium Energy

Clean Core Thorium Energy (CCTE) is a nuclear fuel innovation company promoting thorium driven power. CCTE's patent-pending, advanced nuclear fuel technology, ANEEL, comprised of thorium and high assay low-enriched uranium (HALEU), is capable of safely and cost-effectively powering existing PHWR/CANDU reactors for the nuclear power sector globally. ANEEL fuel is a revolutionary solution to nuclear energy's safety, waste, and proliferation concerns. CCTE entered the nuclear sector to provide clean, safe, and abundant power where and when it's needed the most, offering a ready solution for our world's growing power demand. Learn more at <https://cleancore.energy/>.

Forward Looking Statements:

This press release may contain statements that constitute forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934. Forward-looking statements by their nature address matters that are, to different degrees, uncertain. Accordingly, forward-looking statements should not be relied upon as a predictor of actual results. Readers are urged to carefully review and consider this press release and Centrus Energy Corp.'s other filings with the Securities and Exchange Commission, including our Annual Report on Form 10-K for the year ended December 31, 2020. We do not undertake to update our forward-looking statements to reflect events or circumstances that may arise after the date of this press release, except as required by law.

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