



TRISO-X and Oak Ridge National Laboratory Extend Advanced Nuclear Fuel Research Partnership

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OAK RIDGE, Tenn., Aug. 11, 2026 (GLOBE NEWSWIRE) -- [TRISO-X, LLC](#) ("TRISO-X" or the "Company"), a leading manufacturer of advanced nuclear fuels and wholly-owned subsidiary of [X-Energy, Inc.](#) ("X-energy") (Nasdaq: XE), today announced the extension of its cooperative research and development relationship with the U.S. Department of Energy's Oak Ridge National Laboratory ("ORNL" or the "Lab"). The agreement entered into by the Company expands upon a strategic collaboration that has played a central role in advancing commercial-scale TRISO fuel development and manufacturing since 2016. The 30-month agreement builds on nearly a decade of joint research, technology transfer, and process development that has enabled TRISO-X to transition to advance fuel manufacturing at commercial scale.

"ORNL has been a critical partner in transforming years of TRISO fuel research into commercial manufacturing capability," said Joel Duling, President of TRISO-X. "For a decade, our team has relied upon the Lab's world-class capabilities and specialized facilities to solve complex technical challenges, mature manufacturing processes, and build the foundation for commercial fuel production. Extending this partnership ensures we continue advancing fuel technology that will strengthen America's nuclear fuel supply chain and support the deployment of next-generation reactors."

"ORNL's partnership with TRISO-X demonstrates how national laboratories help accelerate the transition of transformative technologies from research to commercial application," said ORNL Director Stephen Streiffer. "By combining ORNL's deep expertise in nuclear materials and fuel development with TRISO-X's manufacturing capabilities, we are advancing TRISO fuel production in ways that can support the next generation of nuclear energy."

The agreement allows the Company to continue operating its existing pilot facility onsite at the Lab where it focuses on driving the transition of TRISO fuel from laboratory success to global commercial reality. Combining ORNL's decades of foundational nuclear science with TRISO-X's advanced process and chemical engineering, the partnership is actively optimizing fuel fabrication to work to optimize fuel quality and yield, as well as improve characterization methods and processing streams. In addition, TRISO-X is exploring alternate fuel forms and innovative TRISO-based solutions for the broader small modular reactor, microreactor, and particle fuel markets in direct support of [U.S. national security priorities on domestic fuel capabilities](#) for U.S. and allied advanced reactors

Since establishing its pilot fuel fabrication facility at ORNL in 2016, TRISO-X has achieved a series of significant milestones, including receiving the first U.S. Nuclear Regulatory Commission Part 70 license issued for a high-assay low-enriched uranium fuel fabrication facility, beginning vertical construction of TX-1, the nation's first purpose-built commercial TRISO fuel fabrication facility, and producing the first commercially fabricated advanced nuclear fuel to undergo irradiation testing at Idaho National Laboratory's Advanced Test Reactor. Together, these milestones have helped establish the foundation for a resilient domestic supply chain for advanced nuclear fuel.

The partnership complements TRISO-X's growing commercial fuel campus in Oak Ridge, Tennessee, where it is also advancing plans to construct a dedicated research and development center, which recently received support from the State of Tennessee's Nuclear Energy Supply Chain Investment Fund established by Governor Bill Lee. When completed, the campus is expected to establish one of the world's largest commercial-scale nuclear fuel fabrication campuses.

About X-energy

X-energy is a leading designer of advanced small modular nuclear reactors ("SMR") and fuel technology developed to establish a new standard in clean, safe, reliable energy. X-energy's intrinsically safe Xe-100 high-temperature gas-cooled reactor and TRISO-X particle fuel expand applications for nuclear technology, with commercial projects across grid, industrial, and AI. Together, X-energy's technology drives enhanced safety, lower cost, faster construction timelines, and scalable deployment when compared with other SMRs and conventional nuclear. For more information, visit [X-energy.com](https://x-energy.com) or connect with us on X or LinkedIn.

Forward-Looking Statements

This press release contains forward-looking statements regarding our business, including our expectations with respect to the partnership with ORNL resulting in improvements to our fuel fabrication process and advancing our capabilities to efficiently manufacture at commercial-scale. These forward-looking statements are only predictions and may differ materially from actual results due to a variety of factors. You should not rely on our forward-looking statements as predictions of future events. More information about potential risks and uncertainties that could affect our business and financial results is more fully detailed under the caption "Risk Factors" in our Form 10-Q filed with the Securities and Exchange Commission, which is available on our Investor Relations website at <https://investors.x-energy.com/> and on the SEC website at www.sec.gov. In addition, please note that any forward-looking statements contained herein are based on assumptions that we believe to be reasonable as of this date. We undertake no obligation to update these statements as a result of new information or future events.

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