X-energy Begins Vertical Construction for First-in-the-Nation Advanced Nuclear Fuel Fabrication Facility

November 17, 2025

Oak Ridge, Tenn., November 17, 2025 – X-energy Reactor Company, LLC ("X-energy" or the "Company"), and its wholly-owned subsidiary, TRISO-X LLC ("TRISO-X"), today announced the beginning of above-ground building construction for its first-in-the-nation advanced nuclear fuel fabrication facility ("TX-1") in Oak Ridge, Tennessee.TX-1 is expected to be the first facility in the United States to exclusively manufacture fuel for advanced Small Modular Reactors ("SMRs"). It will be dedicated to fabricating X-energy's proprietary tristructural-isotropic ("TRISO") fuel for X-energy's first proposed deployment of the Xe-100 in partnership with the Dow, Inc. ("Dow") on the Texas Gulf Coast through the Advanced Reactor Demonstration Program, as well as subsequent deployments and customers.

> The start of vertical construction marks another significant milestone in bringing our bold vision for the future of nuclear energy to life. As TX-1 takes shape, it will stand as a symbol of our team's relentless dedication and determination to bring this transformative project forward in just a few years, not decades.
>
> *Joel Duling, President of TRISO-X*

Earlier this year, X-energy announced a $48.2 million award to Clark Construction Group for the completion of the core and shell of the 214,812 square foot facility. The commencement of building construction marks the transition from site development to full-scale facility construction. Construction on this next phase is expected to be completed mid-2026.

Once complete, TX-1 will be the first Category II Fuel Fabrication Facility licensed by the U.S. Nuclear Regulatory Commission ("NRC") and the first new fuel facility in over 50 years. With an estimated output of 5 metric tons of uranium ("MTU") or 700,000 TRISO pebbles per year, TX-1 will have the ability to provide enough fuel for up to 11 Xe-100 reactors. In parallel to the construction process, TRISO-X continues to engage closely with the NRC to support an efficient and thorough license application review and anticipates regulatory approval by May 2026.

To qualify TRISO-X pebble fuel for commercial use in the Xe-100, X-energy has begun confirmatory qualification testing of its TRISO-X fuel at Idaho National Laboratory's Advanced Test Reactor, in collaboration with the U.S. Department of Energy and the National Reactor Innovation Center. The 13-month program will evaluate fuel performance under a full range of power levels, temperatures, and burn-up conditions, the first commercially produced SMR fuel form to undergo testing of this rigor.

X-energy is advancing its initial proposed four-unit Xe-100 plant at Dow Inc.'s UCC Seadrift Operations manufacturing site on the Texas Gulf Coast. Once complete, the plant is expected to provide the site with safer, cleaner and more reliable power and industrial steam. X-energy is also advancing its second plant, the Cascade Advanced Energy Facility, with Energy Northwest in collaboration with Amazon. This project is part of a larger strategy with Amazon to bring more than five gigawatts of new power projects online by 2039, furthering X-energy's mission to provide scalable, secure, clean energy solutions that meet the growing demand for energy across the U.S. and around the world.

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About X-Energy Reactor Company, LLC

X-Energy Reactor Company, LLC, is a leading developer of advanced small modular nuclear reactors and fuel technology for clean energy generation that is redefining the nuclear energy industry through its development of safer and more efficient advanced small modular nuclear reactors and proprietary fuel to deliver reliable, zero-carbon and affordable energy to people around the world. X-energy's simplified, modular, and intrinsically safe SMR design expands applications and markets for deployment of nuclear technology and drives enhanced safety, lower cost and faster construction timelines when compared with other SMRs and conventional nuclear. For more information, visit X-energy.com or connect with us on X or LinkedIn.

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