



## X-energy, U.S. Department of Defense to Advance Commercial Microreactor for National Security

August 14, 2025

**ROCKVILLE, MD, August 14, 2025** – X-energy Reactor Company, LLC (“X-energy” or the “Company”), today announced an agreement with the U.S. Department of Defense (“DOD”) Defense Innovation Unit (“DIU”) and the U.S. Department of the Air Force to advance the development of its commercial microreactor in alignment with President Trump’s executive order to deploy advanced nuclear technologies at DOD installations to support U.S. national security.

The agreement supports continued design and development for the X-energy XENITH microreactor under the Advanced Nuclear Power for Installations (“ANPI”) program, an initiative led by DIU in partnership with the Department of the Air Force. The program is designed to accelerate the deployment of next-generation microreactor technologies to provide resilient, secure power at military installations, and enables governmental sponsors like the Department of the Air Force to engage with X-energy under a flexible contracting mechanism that allows for faster development and deployment of commercial nuclear systems.

We’re seeing the full force of federal partnership mobilized to bring advanced nuclear to market, and the leadership of the Trump Administration has been phenomenal. X-energy is proud to be a leader, and a partner with this administration to support America’s energy leadership.

*[J. Clay Sell](#), CEO of X-energy*

The agreement aligns with President Trump’s Executive Order on Deploying Advanced Nuclear Reactor Technologies for National Security, issued in May 2025, which directs the Department of Defense to deploy an advanced reactor at a military installation before the end of the decade. As part of this effort, X-energy was selected to demonstrate commercial microreactors that can deliver resilient and secure energy to power critical defense infrastructure and remote microgrids.

XENITH, X-energy’s product, is a high-temperature gas-cooled microreactor first developed for DOD’s Project Pele, a mobile microreactor initiative led by the Strategic Capabilities Office. The design was selected to continue into an enhanced engineering phase, focused on achieving preliminary design maturity and initiating pre-licensing engagement with the U.S. Nuclear Regulatory Commission for both military and commercial applications.

In addition to XENITH, X-energy is advancing the deployment of its Xe-100 high-temperature gas-cooled reactor as a grid-scale energy solution for utilities, industrial customers, and hyperscalers. The Company is also constructing a first-in-the-nation advanced nuclear fuel fabrication facility to manufacture its proprietary TRISO-X fuel. Together, X-energy’s technology portfolio is designed to deliver scalable, secure, and reliable power to meet growing global energy demand.

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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](https://www.x-energy.com) or connect with us on [X](#) or [LinkedIn](#).