



TRISO-X Receives First-Ever Part 70 HALEU Fuel Fabrication License

February 13, 2026

OAK RIDGE, Tenn. – February 13, 2026 – TRISO-X, LLC (“TRISO-X” or the “Company”), a subsidiary of X-energy Reactor Company, LLC (“X-energy”) today received a [Special Nuclear Material License under 10 CFR Part 70](#) (“Part 70”) from the [U.S. Nuclear Regulatory Commission \(“NRC”\)](#), [enabling TRISO-X to commercially manufacture fuel](#) using high-assay low-enriched uranium (“HALEU”) at its first two commercial facilities (“TX-1” and “TX-2”) under an initial 40-year license. NRC license approval formally establishes TX-1 and TX-2 as the first new fuel facilities licensed by the NRC in over 50 years, with TX-1 set to become the [first-ever Category II nuclear fuel facility](#) in the United States.

Upon completion of TX-1, the license enables commercial production of [TRISO-X fuel](#), a form of tri-structural isotropic (“TRISO”) fuel developed by X-energy and TRISO-X using proprietary methods. Commercial licensing follows nearly a decade of fuel development by the Company, beginning at Oak Ridge National Laboratory where it has operated a pilot facility since 2016 to adapt and refine established TRISO production processes for commercial-scale fabrication.

Regulatory approval brings us one step closer to a resilient, American fuel supply for next-generation nuclear technology, advancing our energy security by closing a longstanding gap in the U.S. nuclear fuel cycle. Achieving this first-of-its-kind license reflects the technical leadership and sustained diligence of the TRISO-X team, as well as a focused process with the NRC to complete the review three months ahead of schedule. We look forward to continuing our work to bring commercial-scale TRISO production to East Tennessee.

[Joel Duling](#), *President of TRISO-X*

Licensing under Part 70 authorizes TRISO-X to receive, possess, process, and transport HALEU material throughout the complete fuel manufacturing cycle, encompassing HALEU feedstock receipt through final fuel production and shipment to SMR project sites under rigorous federal safety and security requirements. This allows TRISO-X to operate as a commercial fuel supplier, with the authority to maintain continuous HALEU inventories and execute production campaigns sized to meet fleet deployment requirements.

The NRC’s licensing decision follows completion of a comprehensive Safety Evaluation Report and Final Environmental Impact Statement, both of which recommended approval. Part 70 approval validates TRISO-X’s safety basis for hazard identification and management across all aspects of HALEU fuel manufacturing, and that programmatic commitments for safety, safeguards, and security meet the requirements necessary to support safe commercial-scale operations.

Prior to receipt of special nuclear material and commencement of operations, the NRC will conduct a final inspection to confirm the facility is fully prepared for startup. This inspection will verify that equipment is ready for service, required safety systems and items relied on for safety are installed and functional, and that license-mandated programs and procedures are in place. It will also confirm that operating personnel are trained and qualified to safely begin operations.

X-energy and TRISO-X’s first fuel facility, TX-1, is currently under construction at the [Oak Ridge Horizon Center](#), and is part of X-energy’s participation in the [U.S. Department of Energy’s Advanced Reactor Demonstration Program](#). TX-2 is currently in the design phase, and would significantly scale TRISO fuel production capacity to support X-energy’s 11 GW commercial pipeline, equivalent to 144 Xe-100 small modular reactors as well as other SMR developers. Full-scale production at TX-1 and TX-2 is expected to establish a stable commercial source of TRISO fuel for the first time in U.S. history, directly supporting energy and national security priorities by helping to close a major gap in the current U.S. and allied nuclear fuel cycle.

About X-energy

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](#).