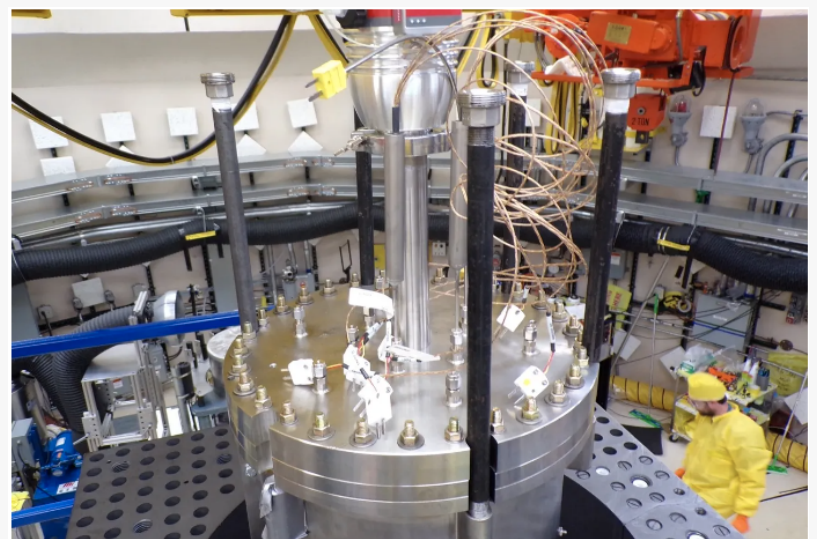


Los Alamos National Laboratory's ZiaCore Microreactor Achieves Criticality, Advancing America's Energy Future

Successful demonstration validates reactor design and a fuel strategy using commercially available LEU today and HALEU as domestic production expands

RIO RANCHO, NEW MEXICO, NM, UNITED STATES, August 3, 2026 /EINPresswire.com/ -- The [New Mexico Nuclear Alliance](#) (NMNA) today congratulated [Los Alamos National Laboratory](#) (LANL) and Christopher Stanek, Director of Nuclear Energy Programs, on the successful zero-power criticality demonstration of the ZiaCore™ microreactor. The achievement marks a major milestone in advanced reactor development and reinforces New Mexico's leadership in next-generation nuclear technology.



Los Alamos National Laboratory's ZiaCore microreactor achieved zero-power criticality, validating the reactor design and marking a major milestone in advanced nuclear technology.

Over four weeks in April and May 2026, the ZiaCore system achieved high-temperature, zero-power criticality at the National Criticality Experiments Research Center (NCERC). A defining benchmark in reactor development, the demonstration validated the underlying reactor physics of the ZiaCore design, confirming that the reactor performs as intended. The accomplishment places ZiaCore among a growing group of advanced microreactor technologies developed by national laboratories and private industry to successfully achieve criticality.

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ZiaCore demonstrates the innovation, collaboration, and fuel flexibility America needs to strengthen its nuclear future.”

*Scott Lopez, Founder & CEO,
New Mexico Nuclear Alliance*

As demand grows for reliable, affordable, resilient, carbon-

free energy to support national security, artificial intelligence, data centers, advanced

manufacturing, critical infrastructure, and remote communities, advanced microreactors are expected to play an increasingly important role in America's energy future.

One of ZiaCore's distinguishing advantages is its fuel flexibility. While many advanced reactor designs depend exclusively on high-assay low-enriched uranium (HALEU), ZiaCore is designed to operate using commercially available low-enriched uranium (LEU) while maintaining the ability to transition to HALEU as domestic production expands. At a time when limited HALEU availability remains one of the industry's greatest deployment challenges, that capability could help accelerate commercialization while strengthening long-term fuel security.

"Congratulations to Christopher Stanek and the outstanding scientists, engineers, technicians, and researchers at Los Alamos National Laboratory on reaching this remarkable milestone," said Scott Lopez, Founder and Chief Executive Officer of the New Mexico Nuclear Alliance.

"ZiaCore represents exactly the kind of innovation America needs to strengthen its energy security and technological leadership. Its ability to operate on commercially available LEU today while remaining compatible with HALEU as domestic production expands provides a strategic advantage as the nation works to deploy advanced reactors and strengthen its domestic nuclear fuel supply."

Lopez said the achievement also demonstrates New Mexico's unique role in advancing every stage of America's nuclear enterprise. "From uranium production and fuel development to reactor research, national security, nuclear medicine, transportation, waste management, environmental stewardship, commercialization, financing, workforce development, and



NEW MEXICO NUCLEAR ALLIANCE

New Mexico Nuclear Alliance (NMNA), advancing New Mexico's cradle-to-grave nuclear ecosystem.



LOS ALAMOS
NUCLEAR
FORUM

On August 25, 2026, the inaugural Los Alamos Nuclear Forum will convene leaders from government, national laboratories, industry, finance, and academia to advance America's nuclear future.

recognizing the contributions of uranium workers, downwind communities, and Tribal nations through programs such as RECA, New Mexico is home to one of the nation's most complete cradle-to-grave nuclear ecosystems."

"Innovation succeeds through collaboration. Our national laboratories, universities, Tribal communities, private industry, utilities, entrepreneurs, investors, environmentalists, regulators and policymakers are working together to build a stronger, more secure energy future while honoring the people and communities whose contributions helped build America's nuclear enterprise."

The ZiaCore milestone comes just weeks before many of the nation's leading nuclear organizations gather at the inaugural [Los Alamos Nuclear Forum](#) on August 25, 2026. Hosted by the New Mexico Nuclear Alliance, the Forum will feature Christopher Stanek as the opening keynote speaker and moderator of the Advanced Reactor Deployment discussion.

Leaders from the U.S. Department of Energy, the Nuclear Energy Institute (NEI), Los Alamos National Laboratory, Sandia National Laboratories, the Waste Isolation Pilot Plant (WIPP), advanced reactor developers, uranium producers, fuel cycle companies, utilities, investors, entrepreneurs, universities, Tribal communities, and New Mexico policymakers will participate in discussions examining advanced reactor deployment, domestic fuel security, artificial intelligence and data center energy demand, financing and investment, workforce development, waste management, long-term stewardship, and the New Mexico Nuclear Innovation Showcase.

Participating organizations include Antares Industries, the CLEAN Energy Association of New Mexico, DISA USA, Eden Radioisotopes, Geosyntec Consultants, Grants Energy, Kit Carson Electric Cooperative, Laramide Resources, Los Alamos County, the National Museum of Nuclear Science & History, the New Mexico Renewable Energy Transmission Authority, New Mexico Tech, NewSpace Nexus, Oklo, the Regional Development Corporation, Space Nuclear Corporation, UNM-Los Alamos, Verdera Energy, Waste Control Specialists, Westinghouse, and many other organizations helping shape America's advanced nuclear future.

"America's nuclear future depends on more than advanced reactors," Lopez said. "It requires strengthening the entire nuclear ecosystem, from uranium production and fuel development to research, commercialization, financing, deployment, and long-term stewardship. Achievements like ZiaCore demonstrate why collaboration among our national laboratories, government, industry, investors, and communities is essential to maintaining America's leadership in advanced nuclear technology."

"The Los Alamos Nuclear Forum was created to bring those leaders together. There is no more fitting place than Los Alamos, the birthplace of the Atomic Age, to discuss the next generation of nuclear innovation. By convening organizations from across the nuclear fuel cycle, we can accelerate the partnerships, investments, and technologies needed to build a future that is reliable, affordable, resilient, and secure."

Dedicated to the Manhattan Project Generation

The inaugural Los Alamos Nuclear Forum is dedicated to the Manhattan Project Generation: the scientists, engineers, military personnel, technicians, construction workers, support staff, and the families of Northern New Mexico whose vision, sacrifice, and service established Los Alamos and Northern New Mexico as the birthplace of the Atomic Age.

As we celebrate breakthroughs such as ZiaCore, we honor the pioneers whose work laid the foundation for today's innovations while inspiring the next generation advancing nuclear science, national security, clean energy, nuclear medicine, and responsible stewardship.

Media Invitation

Members of the news media are invited to attend the inaugural Los Alamos Nuclear Forum on Tuesday, August 25, 2026, in Los Alamos, New Mexico. Registration, media credentials and the full agenda are available at LosAlamosNuclearForum.com.

About the New Mexico Nuclear Alliance

The New Mexico Nuclear Alliance (NMNA) is a 501(c)(6) nonprofit industry association dedicated to advancing New Mexico's cradle-to-grave nuclear ecosystem through collaboration among industry, government, national laboratories, Tribal communities, universities, utilities, environmentalists, regulators, investors, entrepreneurs, and policymakers.

NMNA works to strengthen America's nuclear future by supporting responsible nuclear innovation, domestic fuel security, advanced reactor deployment, workforce development, environmental stewardship, economic development, and national security. Through initiatives such as the Los Alamos Nuclear Forum, the Alliance is bringing together the leaders, technologies, capital, and partnerships shaping America's nuclear future.

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