



NANO Nuclear and University of Illinois Urbana-Champaign Sign Landmark Agreement to Build the First KRONOS MMR™ Research Reactor

April 2, 2025

Site Selected and Preparatory Work to Begin for Construction Permit Application as NANO Nuclear Accelerates Toward Microreactor Deployment

NEW YORK, NY, April 02, 2025 (GLOBE NEWSWIRE) -- NANO Nuclear Energy Inc. (NASDAQ: NNE) (“NANO Nuclear” or “the Company”), a leading advanced nuclear energy and technology company focused on developing clean energy solutions, is pleased to announce the signing of a strategic collaboration with the University of Illinois Urbana-Champaign (U. of I.) to construct the first research KRONOS micro modular reactor (MMR) on the university’s campus.

The agreement formally establishes U. of I. as a partner in the licensing, siting, public engagement, and research operation of the KRONOS MMR, while also identifying the university campus as the permanent site for the reactor as a research and demonstration installation. This milestone marks the beginning of site-specific development for NANO Nuclear’s advanced KRONOS MMR technology and represents a defining moment in NANO Nuclear’s path to commercialization of the KRONOS MMR Energy System.

“This is the milestone we’ve been working so diligently towards, transforming design into reality,” **said Jay Yu, Founder and Chairman of NANO Nuclear Energy.** “With a site now selected and a world-class university as our partner, we are positioned to be among the first companies to deliver advanced reactor systems within the United States. This isn’t just a research reactor, it’s a proving ground for the future of safe, portable, and resilient nuclear energy. Moreover, this agreement will serve as a foundation for our long-term reactor strategy. Every milestone from this point forward brings us closer to delivering the next generation of nuclear energy to communities, campuses, and industries across the world.”



UNIVERSITY OF
ILLINOIS
URBANA - CHAMPAIGN



KRONOS
MMR™

Figure 1 - NANO Nuclear Energy Inc. Signs Strategic Collaboration with the University of Illinois at Urbana-Champaign for the KRONOS MMR

Following initial arrangements, NANO Nuclear will begin the process of geological characterization, including subsurface investigations, to support preparation of a Construction Permit Application (CPA) for submission to the U.S. Nuclear Regulatory Commission (NRC). This preparatory work is essential to understanding the environmental parameters of the site, including critical inputs to safety analysis, to ensure the utmost reliability and safety of the facility, and support NANO Nuclear’s Preliminary Safety Analysis Report (PSAR) and Environmental Report (ER).

“The start of geotechnical investigations represents our first physical action toward constructing the KRONOS MMR,” **said James Walker, Chief Executive Officer of NANO Nuclear.** “This is a powerful signal to the industry, to investors, and to regulators: NANO Nuclear is building. We are not theorizing. We are much beyond conceptualizing. We are moving toward construction, and this is only the first step.”



Figure 2 – Rendering of NANO Nuclear's KRONOS MMR™ Energy System at the University of Illinois.

Through this strategic collaboration, U. of I. and NANO Nuclear will work together throughout the regulatory licensing process, plant design implementation, public and stakeholder engagement, and workforce development. The collaboration builds on the university's prior experience and engagement with nuclear regulators, while introducing an advanced and simplified reactor system to lead the next generation of clean energy deployment.

"The KRONOS MMR project can not only be a national first, it can be a first for academia, enabling students, researchers, regulators, and the public to learn directly from a real-world microreactor development effort," said **Illinois Grainger Engineering Professor Caleb Brooks, Principal Investigator for the University of Illinois**. "This system can be the most advanced nuclear research platform on any U.S. campus, with the potential to enable a new paradigm of nuclear power through education, research, and at scale demonstration."

As part of the agreement, U. of I. will lead the regulatory engagement with the NRC as well as public engagement, support licensing activities including the PSAR and Environmental Report, and play a key role in site layout, constructability assessment, and future operator training programs. NANO Nuclear will oversee plant design, construction, system integration, and commercial pathway development.

"This agreement brings NANO Nuclear to the forefront of advanced reactors deployment in the United States," said **Dr. Florent Heidet, Chief Technology Officer and Head of Reactor Development of NANO Nuclear**. "This construction project is where KRONOS' engineering meets execution and demand. It will set a precedent for all future university-led nuclear technology reactor projects."

The KRONOS MMR Energy System, NANO Nuclear's flagship micro modular reactor, is designed to redefine what's possible in nuclear energy and features:

- Truly modular, containerized construction.
- Highest in class safety margins, creating an inherently safe reactor.
- Rapid & flexible deployment capabilities for remote and secure applications.
- Seamless integration with local grids, renewable grids and process heat systems.

The KRONOS MMR Energy System leverages proven, state-of-the-art technology solutions, and combines them into a product that is not reliant on new breakthroughs or lengthy and costly research programs.

This announcement reflects NANO Nuclear's transition from design to deployment, initiating the first physical project work in the Company's history. As preparations begin for regulatory licensing and construction activities, NANO Nuclear remains focused on delivering clean, safe, scalable energy through its advanced nuclear technologies.

About The Grainger College of Engineering

The Grainger College of Engineering at the University of Illinois Urbana-Champaign is one of the world's top-ranked engineering institutions, and a globally recognized leader in engineering education, research and public engagement. With a diverse, tight-knit community of faculty, students and alumni, Grainger Engineering sets the standard for excellence in engineering, driving innovation in the economy and bringing revolutionary ideas to the world. Through robust research and discovery, our faculty, staff, students and alumni are changing our world and making advances once only dreamed about, including the MRI, LED, ILIAC, Mosaic, YouTube, flexible electronics, electric machinery, miniature batteries, imaging the black hole and flight on Mars. The world's brightest minds from The Grainger College of Engineering tackle today's toughest challenges. And they are building a better, cooler, safer tomorrow.

Visit <https://grainger.illinois.edu> for more information.

About NANO Nuclear Energy, Inc.

NANO Nuclear Energy Inc. (NASDAQ: NNE) is an advanced technology-driven nuclear energy company seeking to become a commercially focused, diversified, and vertically integrated company across five business lines: (i) cutting edge portable and other microreactor technologies, (ii) nuclear fuel fabrication, (iii) nuclear fuel transportation, (iv) nuclear applications for space and (v) nuclear industry consulting services. NANO Nuclear believes it is the first portable nuclear microreactor company to be listed publicly in the U.S.

Led by a world-class nuclear engineering team, NANO Nuclear's reactor products in development include patented **KRONOS MMR™ Energy System**, a stationary high-temperature gas-cooled reactor that is in construction permit pre-application engagement U.S. Nuclear Regulatory Commission (NRC) in collaboration with University of Illinois Urbana-Champaign (U. of I.), **"ZEUS"**, a solid core battery reactor, and **"ODIN"**, a low-pressure coolant reactor, and the space focused, portable **LOKI MMR™**, each representing advanced developments in clean energy solutions that are portable, on-demand capable, advanced nuclear microreactors.

Advanced Fuel Transportation Inc. (AFT), a NANO Nuclear subsidiary, is led by former executives from the largest transportation company in the world aiming to build a North American transportation company that will provide commercial quantities of HALEU fuel to small modular reactors, microreactor companies, national laboratories, military, and DOE programs. Through NANO Nuclear, AFT is the exclusive licensee of a patented high-capacity HALEU fuel transportation basket developed by three major U.S. national nuclear laboratories and funded by the Department of Energy. Assuming development and commercialization, AFT is expected to form part of the only vertically integrated nuclear fuel business of its kind in North America.

HALEU Energy Fuel Inc. (HEF), a NANO Nuclear subsidiary, is focusing on the future development of a domestic source for a High-Assay, Low-Enriched Uranium (HALEU) fuel fabrication pipeline for NANO Nuclear's own microreactors as well as the broader advanced nuclear reactor industry.

NANO Nuclear Space Inc. (NNS), a NANO Nuclear subsidiary, is exploring the potential commercial applications of NANO Nuclear's developing micronuclear reactor technology in space. NNS is focusing on applications such as the **LOKI MMR™** system and other power systems for extraterrestrial projects and human sustaining environments, and potentially propulsion technology for long haul space missions. NNS' initial focus will be on cis-lunar applications, referring to uses in the space region extending from Earth to the area surrounding the Moon's surface.

For more corporate information please visit: <https://NanoNuclearEnergy.com/>

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Cautionary Note Regarding Forward Looking Statements

This news release and statements of NANO Nuclear's management in connection with this news release contain or may contain "forward-looking statements" within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, and the Private Securities Litigation Reform Act of 1995. In this context, forward-looking statements mean statements related to future events, which may impact our expected future business and financial performance, and often contain words such as "expects", "anticipates", "intends", "plans", "believes", "potential", "will", "should", "could", "would" or "may" and other words of similar meaning. In this press release, forward-looking statements include, among others, statements regarding the anticipated benefits to NANO Nuclear of its agreement with U. of I., as well as NANO Nuclear's development plans, each as described herein. These forward-looking statements are based on information available to us as of the date of this news release and represent management's current views and assumptions. Forward-looking statements are not guarantees of future performance, events or results and involve significant known and unknown risks, uncertainties and other factors, which may be beyond our control. For NANO Nuclear, particular risks and uncertainties that could cause our actual future results to differ materially from those expressed in our forward-looking statements include but are not limited to the following: (i) risks related to our U.S. Department of Energy ("DOE") or related state nuclear fuel licensing submissions, (ii) risks related the development of new or advanced technology and the acquisition of complimentary technology or businesses, including difficulties with design and testing, cost overruns, regulatory delays, integration issues and the development of competitive technology, (iii) our ability to obtain contracts and funding to be able to continue operations, (iv) risks related to uncertainty regarding our ability to technologically develop and commercially deploy a competitive advanced nuclear reactor or other technology in the timelines we anticipate, if ever, (v) risks related to the impact of government regulation and policies including by the DOE and the U.S. Nuclear Regulatory Commission, including those associated with the recently enacted ADVANCE Act, and (vi) similar risks and uncertainties associated with the operating an early stage business a highly regulated and rapidly evolving industry. Readers are cautioned not to place undue reliance on these forward-looking statements, which apply only as of the date of this news release. These factors may not constitute all factors that could cause actual results to differ from those discussed in any forward-looking statement, and NANO Nuclear therefore encourages investors to review other factors that may affect future results in its filings with the SEC, which are available for review at www.sec.gov and at <https://ir.nanonuclearenergy.com/financial-information/sec-filings>. Accordingly, forward-looking statements should not be relied upon as a predictor of actual results. We do not undertake to update our forward-looking statements to reflect events or circumstances that may arise after the date of this news release, except as required by law.

Attachment

- [NANO Nuclear Energy Inc.](#)



Source: NANO Nuclear Energy Inc.

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Rendering of NANO Nuclear's KRONOS MMR™ Energy System at the University of Illinois