



NANO Nuclear Energy Announces Second Fiscal Quarter and Recent Operational Highlights and Provides Corporate Outlook

May 16, 2025

New York, N.Y., May 16, 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, today announced its second fiscal quarter ended March 31, 2025 and more recent operational highlights and provided an outlook on its expectations and goals for 2025 and beyond.

"We started 2025 with a view to build on a successful 2024, and have done just that, pursuing and executing on our objectives efficiently," said Jay Yu, Founder, Chairman and President of NANO Nuclear. "The acquisition of the rebranded, high technology readiness level stationary KRONOS MMR™ and portable LOKI MMR™ microreactors, which were finalized at the start of the year, has put us in a leading position in the microreactor race in U.S. We have solidified our relationship and working agreements with the University of Illinois Urbana-Champaign (UIUC) for the KRONOS MMR and are now working to construct the first research microreactor on campus grounds in the U.S. We are confident our efforts at UIUC will lead to eventual commercialization of many KRONOS MMRs being constructed throughout many industries across the world. The U.S. Nuclear Regulatory Commission (NRC) approved the Fuel Qualification Methodology Topical Report for the KRONOS MMR, which is a major milestone for the commercial microreactor sector in general and crucial for the eventual construction of the microreactor system on campus grounds. In the coming months, we expect to begin the process of geological characterization, including subsurface investigations, which will lead to our construction permit applications and other future project milestones."

"In addition, NANO Nuclear has amassed dozens of domestic and international patents through our KRONOS and LOKI acquisition. We are also further expanding our current intellectual property protections with over a dozen new patent applications surrounding our microreactor portfolio, and supplementary technologies like our ALIP pump system," continued Mr. Yu. "This year has also seen us commit to a new, multimillion dollar demonstration facility in Westchester County, New York, where the development of non-nuclear components, including commercializing the ALIP technology, will take place. Furthermore, our team has grown, and we have attracted many full-time engineers, regulatory and licensing experts, led by a world class Chief Technical Officer and Head of Reactor Development, Dr. Florent Heidet. This positive start to the year positions us well to achieve further milestones during the rest of 2025 and lays a solid foundation for achieving our longer term demonstration, regulatory licensing and commercialization goals."

2025 Operational Highlights

Financial Achievements

Operating Activities

- **\$5.6 million used in operating activities** during the six months ended March 31, 2025, reflecting NANO Nuclear's ongoing scale-up in operations and research and development.

Investing Activities

- **\$12.7 million used in investing activities** during the six months ended March 31, 2025, which includes \$9.1 million for the acquisition of the KRONOS and LOKI assets and \$3.6 million for investment in property and equipment primarily related to the build out of NANO Nuclear's new demonstration facility in Westchester, New York, which is now operational.

Financing Activities

- **\$108.4 million raised** during the six months ended March 31, 2025. NANO Nuclear had cash and cash equivalents of **\$118.6 million as of March 31, 2025**, up from \$28.5 million on September 30, 2024. These cash resources demonstrate not only strong investor support, but also an efficient use of investor capital to advance the Company's business goals since its May 2024 initial public offering. The Company also has the liquidity to drive further value going forward.

Selected for Inclusion into MSCI USA Index

- Selected to be included in the MSCI USA Index, **effective as of February 28, 2025, following the February index review by MSCI Inc.** The MSCI USA Index is designed to measure the performance of the large and mid-cap segments of the U.S. market. With 576 constituents, the

index covers approximately 85% of the free float-adjusted market capitalization in the US.

"We have been focused while executing on our capital and technology development roadmap while putting in place cost controls and maintaining a solid financial foundation. With a strong balance sheet and strong investor support, we are well-positioned to advance our initiatives for the remainder of this year and beyond" concluded Mr. Yu.

Technological Advancements

Acquisition of Tech Ready Patented Energy Systems

- NANO Nuclear closed the acquisition of select nuclear energy technology assets on January 10, 2025, including the patented **KRONOS MMR Energy System** and **LOKI MMR reactor** from Ultra Safe Nuclear Corporation (USNC).
 - Acquisition immediately added one of the **highest technology readiness level advanced nuclear reactors** in development and significantly expanded NANO Nuclear's patent portfolio.
 - KRONOS has well-developed projects at UIUC and Chalk River, Ontario, where NANO Nuclear is seeking to be the **first company in the U.S. and in Canada** to build and license a microreactor intended for research and commercial use.
 - The **KRONOS MMR**™ is a stationary reactor system and designed to produce power up to 45 megawatts thermal (MWth) power.
 - The **LOKI MMR**™ is a compact portable nuclear reactor designed to provide between 1 MWth and 5 MWth of power.

Acquisition and Further Expansion of Intellectual Property Protections

- Series of **patents that were acquired from USNC** alongside its reactor technologies serve to strengthen NANO Nuclear's intellectual -property protections for its portfolio of modular nuclear technologies currently in development.
 - **Filed four** new separate utility patent applications with the United States Patent and Trademark Office (USPTO) related to NANO Nuclear's **Annular Linear Induction Pump (ALIP)** technology.
 - **Filed six additional** patents surrounding the components and designs of the ZEUS™ portable microreactor on March 27, 2025.

Fabrication and Assembly of Key Non-Nuclear Components

- Engaged **Thermal Engineering International (TEi)**, a Babcock Power Inc.® company, to carry forward the **design and fabrication** of several heat exchangers for its portable **ODIN™ nuclear microreactor** project.
 - TEi is a leading supplier of heat transfer technology to the electric power generation industry for over 100 years.
- **Assembled the first reactor core hardware** of its **ZEUS** microreactor for initial non-nuclear testing.

- The hardware consists of a half-scale (1:2) block, and the **initial testing phase** will evaluate its thermo-mechanical performance under expected prototypical ZEUS operating conditions.

Operational Growth

Addition of Key Personnel and Leaders

- **Darlene T. DeRemer** transitioned into a new corporate role with NANO Nuclear as its Executive Director of Corporate Finance, having previously served as the Chairwoman of NANO Nuclear's Executive Advisory Board for Institutional Finance. Ms. DeRemer is the Chair of the ARK Invest ETF Trust Board, co-founder of Grail Partners LLC. and has over 25 years of experience as a leading adviser in the financial services industry.
- **Florent Heidet, Ph.D.** joined NANO Nuclear as Chief Technology Officer and Head of Reactor Development. Dr. Heidet is a world-renowned expert on advanced nuclear reactor technologies, leveraging two decades of nuclear engineering and project management expertise. Dr. Heidet was previously the Head of Engineering at Ultra Safe Nuclear Corporation (USNC).
- **Andrew Steer, Ph.D.** joined NANO Nuclear's U.K.-based nuclear science and engineering partner Cambridge AtomWorks as NANO Nuclear's Head of Regulatory Engagement. Dr. Andrew Steer is a nuclear safety case and regulatory engagement expert with over 18 years of experience in the nuclear industry.
- **Brent Hamilton** was appointed as the Company's Director of Quality Assurance. Mr. Hamilton has over 26 years of quality control, quality engineering, and quality assurance experience, primarily in nuclear construction for commercial nuclear, Department of Energy projects, and nuclear fuel manufacturing.
- **James Leybourn** joined NANO Nuclear's U.K.-based nuclear science and engineering partner Cambridge AtomWorks. Mr. Leybourn is a Chartered Physicist with over 12 years' experience of Physics and Engineering within the U.K. nuclear industry.
- **Simon Boddington** joined NANO Nuclear's U.K.-based nuclear science and engineering partner Cambridge AtomWorks. Mr. Boddington is a reactor physicist with over 10 years of industry experience covering pressurized water reactors as well as thermal and fast spectrum molten salt reactor designs.
- **Radwan Nassim Kheroua** joined NANO Nuclear's U.K.-based nuclear science and engineering partner Cambridge AtomWorks. A Nuclear Systems Engineer, Mr. Kheroua previously served as a Research Engineer in Reactor Thermal-Hydraulic Modeling at Framatome.
- **Luke Godfrey** joined NANO Nuclear's U.K.-based nuclear science and engineering partner Cambridge AtomWorks. A Senior Nuclear Engineer, Mr. Godfrey previously served as Lead Thermohydraulic Engineer at Moltex, focusing on molten salt heat transfer, coupled reactor system modeling, and safety case development.
- **Jake Miles** joined NANO Nuclear's U.K.-based nuclear science and engineering partner Cambridge AtomWorks. A Nuclear Engineer, Mr. Miles earned a BSc in Physics from the

University of Leeds and later completed a Master's degree in Nuclear Energy at the University of Cambridge.

Recruitment Drive

- **Recruitment drive initiated** with a focus on Midwestern United States to expand engineering and project development teams in proximity to UIUC and the KRONOS reactor project.
 - Effort seeks to **support construction permit application activities** as well as eventual demonstration and construction activities.
 - NANO Nuclear is actively recruiting top talent across **a variety of critical disciplines**.

New York State Demonstration Facility

- Established a dedicated, multimillion dollar, **purpose-built demonstration facility** in Westchester County, New York.
 - Will house demonstrations of the operation and viability of several **non-nuclear parts** and components of NANO Nuclear's microreactors in development.
- Engaged aRobotics Company to oversee the **retrofit and build-out** of Westchester County demonstration facility.
 - **aRobotics has been recognized with multiple honors**, including the NATO DIANA Challenge, the NYC Department of Building Challenge, and active contracts with all major branches of the U.S. Military.
- Build-out and retrofitting of the Westchester Facility completed in early May.
 - Facility is now operational, with testing to commence shortly and continue throughout 2025, focusing on ZEUS components and the Company's patented ALIP technology.

Canadian Demonstration Reactor

- Reestablishing KRONOS MMR **demonstration reactor in Canada**.
 - Positions NANO Nuclear to advance its technology efficiently from construction and demonstration to regulatory licensing and, ultimately, commercialization **throughout North America**.

Partnerships, Collaborations and Government Awards

SBIR Phase 1 Application

- Announced backing for a **U.S. Department of Energy Small Business Innovation Research (SBIR) Phase I** proposal, submitted in partnership with the City University of New York–City College (CCNY) and Advanced Engineering Solutions LLC.
 - The SBIR Phase 1 proposal is "Investigation of Microreactor Cooling and Development of a Smart Alarming System for Reactor Pressure Vessel Surface Temperature Monitoring" – and aims to **develop advanced cooling techniques and monitoring systems for microreactor transport safety**.

- Signed a strategic collaboration with the UIUC to **construct the first research KRONOS MMR** on a major research university campus.
 - **Site has been selected** and preparatory work towards a Construction Permit application has been initiated. NANO Nuclear will begin the process of geological characterization, including subsurface investigations, to support preparation of a Construction Permit Application for submission to the 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 and Environmental Report.
 - Establishes UIUC as key collaborator in the licensing, siting, public engagement, and research operation of the KRONOS MMR™.

Nuclear Regulatory Commission Communication on KRONOS

- Pre-application work on the KRONOS MMR™ Energy System is progressing in cooperation with the UIUC following the NRC's update to the project's landing page (NRC Project No. 99902094), **formally naming NANO Nuclear as the reactor's designer**.
- The NRC issued its final Safety Evaluation (SE) approving the **Fuel Qualification Methodology Topical Report (FQM TR)** to be used for the KRONOS MMR™.

LIS Technologies and the Department of Energy Low Enriched Uranium IDIQ Award.

- Entered a collaboration to support LIS Technologies, **the only U.S. origin and patented laser enrichment company**, to address the fuel supply chain issues which could potentially affect the mass deployment of all advanced reactor systems for all nuclear reactor companies.
 - LIS Technologies was **one of six companies selected** to address the LEU supply chain, with NANO Nuclear as its principal subcontractor, responsible for addressing the conversion, mining, and milling requirements of the IDIQ award.

Shareholder Suit Dismissal

- A Clark County, Nevada judge has completely dismissed the shareholder lawsuit titled Latza v. Walker, et al., (Case No. A-24-900423-B). The judge **granted both dismissal requests** filed by the Company and by its officers and directors, ending the case in their favor.

Corporate Outlook

SBIR Projects

- The SBIR Phase III project surrounding NANO Nuclear's ALIP technology will **advance towards its conclusion**, with the Company's new Westchester demonstration facility expected to play a key role in its advancement.
- Company anticipates early indicators surrounding a separate SBIR Phase I project application filed in partnership with CCNY and Advanced Engineering Solutions LLC.

Advances in Demonstration Reactor Preparations

- NANO Nuclear anticipates further clarity on the advancement of its **KRONOS MMR** demonstration reactor plans in both the United States and Canada.
 - Next steps in the development of pre-construction permit application with UIUC **anticipated this year.**
 - NANO Nuclear is currently planning drilling work at the UIUC site intended for the construction of the KRONOS reactor system, to provide the Company with the geological characterization necessary to submit a 'Permit to Construct' application to the NRC. NANO Nuclear is aiming to be the **first microreactor company in the U.S. to file for this permit.**
 - NANO Nuclear intends to enter the licensing process under Canadian Nuclear Safety Commission (CNSC) oversight and has been in discussions with the Canadian Nuclear Laboratory (CNL) about the selected site for the project at Chalk River. NANO Nuclear is aiming to be the **first company to build a licensed microreactor in Canada** intended for commercial deployment.

Advances in Non-Nuclear Component Development

- NANO Nuclear anticipates the receipt of, and revision & eventual finalization of TEi designs for ODIN™ heat exchangers.
- Company intends to begin the testing phase of its 1:2 scale ZEUS™ reactor core hardware, which will evaluate its thermo-mechanical performance under expected prototypical operating conditions.
 - Testing is expected to continue through 2025.

Hiring Drive Expectations

- NANO Nuclear anticipates making substantial progress in its hiring initiative throughout 2025, in support of additional permit and licensing advances and eventual demonstration & construction activities in Midwestern USA.

"We've made meaningful progress across several key initiatives in the first half of the fiscal year and we're now focused on accelerating our efforts in the second half of fiscal 2025," said **James Walker, Chief Executive Officer of NANO Nuclear**. "We have grown our technical and regulatory teams as we begin testing non-nuclear components and pursue construction permits. We have acquired and are developing a robust portfolio of patents and other IP and are planning to expand it further as the year progresses. Our ambitions don't stop with just our reactors, we see enormous potential across the nuclear industry in areas such as nuclear transportation, fuel enrichment, and nuclear consulting services that we are actively developing to grow our business and resources. We have also made inroads in our discussions and coordination with regulatory and licensing bodies, which will play a crucial role in the near and long term. All in all, the last six months have put us on solid footing as we look to capitalize on upcoming opportunities throughout the remainder of the year."

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/>

For further NANO Nuclear information, please contact:

Email: IR@NANONuclearEnergy.com
Business Tel: (212) 634-9206

PLEASE FOLLOW OUR SOCIAL MEDIA PAGES HERE:

NANO Nuclear Energy [LINKEDIN](#)
NANO Nuclear Energy [YOUTUBE](#)
NANO Nuclear Energy [X PLATFORM](#)

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 those related to the Company's development, demonstration, licensing and commercial plans, goals and strategies. These and other 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 or non- U.S. nuclear fuel licensing submissions, (ii) risks related to 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 U.S. and non-U.S. government regulation, policies and licensing requirements, 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.



Source: NANO Nuclear Energy Inc.