NANO Nuclear Energy Confirmed as Reactor Designer of KRONOS MMR by U.S. Nuclear Regulatory Commission

March 11, 2025

Pre-application engagement of the Kronos MMR continues through collaboration with the University of Illinois Urbana-Champaign

New York, N.Y., March 11, 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 that the U.S. Nuclear Regulatory Commission (NRC) has updated the University of Illinois Urbana-Champaign (U. of I.) project landing page (NRC Project No. 99902094) surrounding the **KRONOS MMR™ Energy System** pre-application engagement, officially designating NANO Nuclear as the reactor's designer.

In January 2025, NANO Nuclear acquired certain nuclear energy technology assets from Ultra Safe Nuclear Corporation and its subsidiaries, including the KRONOS MMR™ Energy System. At that time, NANO Nuclear signaled its intent to extend an existing collaboration for this project with U. of I. to demonstrate the system's technology readiness level. The adjustment to the university's regulatory docket reflects the ongoing progress of these efforts and underscores NANO Nuclear's commitment to guiding the KRONOS MMR ™ Energy System through demonstration and all applicable regulatory processes.

The proposed research reactor would utilize TRISO particle fuel, helium gas coolant, and graphite moderator. The reactor would be located on the university's Urbana campus and would have a molten salt secondary loop providing thermal integration with in-place infrastructure.

More information regarding the pre-application can be found on the NRC's website here: https://www.nrc.gov/reactors/new-reactors/advanced/who-were-working-with/pre-application-activities/university-of-illinois-at-urbana-champaign.html

"We're thrilled to work alongside U. of I. to advance our KRONOS MMR ™ Energy System to the next stage of development and appreciate the NRC's revision to the University's construction permit pre-application to reflect NANO Nuclear as the designer," **said Jay Yu, Founder and Chairman of NANO Nuclear Energy.** "This update marks a major milestone for NANO Nuclear, initiating our official licensing activities surrounding the KRONOS MMR™ with the NRC. Establishing this relationship is pivotal to the ongoing development of our suite of portable microreactor technologies, including ODIN, ZEUS and LOKI MMR™ currently in development."

Figure 1 - NANO Nuclear Energy Inc. Designated as Reactor Designer in the University of Illinois Urbana-Champaign's Construction Permit Pre-application.

"We anticipate that our collaboration with U. of I. will demonstrate to U.S. nuclear regulators that the KRONOS MMR™ meets the necessary standards to continue its progress through the licensing pathways," **said James Walker, Chief Executive Officer of NANO Nuclear Energy.** "The revision to Illinois' construction permit pre-application highlights our commitment to this technology and signals our intention to move our energy systems through the regulatory demonstration and licensing process and closer to commercialization, utilizing some of the most sophisticated and advanced facilities in the country."

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 (UIUC), "ZEUS", a solid core battery reactor,** and **"ODIN", a low-pressure coolant reactor**, **and 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 relate to the anticipated benefits of the Company's collaboration with UIUC and the anticipated future development, regulatory and commercial milestones for the KRONOS MMR ™ Energy System. 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 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.

Attachment

- NANO Nuclear Energy Inc.

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NANO Nuclear Energy Inc. Designated as Reactor Designer in the University of Illinois Urbana-Champaign's Construction Permit Pre-application.

Source: NANO Nuclear Energy Inc.