NANO Nuclear Signs CRADA with Idaho National Laboratory to Support Its Advanced Nuclear Reactor Development

September 4, 2025

New York, NY, Sept. 04, 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 proud to announce its execution of a Cooperative Research and Development Agreement (CRADA) with Idaho National Laboratory (INL), under the auspices of the U.S. Department of Energy (DOE).

This ten-year agreement marks a major milestone in NANO Nuclear's mission to build, test, gain regulatory approval for, and ultimately commercialize its advanced nuclear microreactors in development, notably its stationary **KRONOS MMR** ™ and portable **LOKI MMR** ™ systems. The CRADA will enable NANO Nuclear to leverage INL's world-class capabilities and expertise through the National Reactor Innovation Center to accelerate reactor development, from reactor design and materials qualification to siting, regulatory licensing, deployment, and decommissioning.

Figure 1 - NANO Nuclear Signs CRADA with U.S. Department of Energy and Idaho National Laboratory to Support Its Advanced Nuclear Reactor Development.

INL is well-known for its world-class facilities, nuclear engineering expertise, and modeling and simulation capabilities, which NANO Nuclear expects to utilize to refine and validate its microreactor designs and technologies.

"This CRADA supports the continued upwards progress of NANO Nuclear," **said James Walker, Chief Executive Officer of NANO Nuclear.** "The support and collaboration of the U.S. Department of Energy and Idaho National Laboratory heralds the next phase of our technical maturity as we work towards achieving the key steps necessary for commercial readiness. With INL's unmatched facilities and expertise, we are even better positioned to demonstrate and deploy the next generation of micro nuclear technology across the U.S. and globally."

The benefits of the CRADA to NANO Nuclear are expected to include:

- **Advanced Reactor Demonstration**: Comprehensive lifecycle support for microreactor testing and deployment at INL.
- **Materials Science and Irradiation Testing**: Access to state-of-the-art testing environments and examination capabilities for fuel, components, and reactor materials.
- **Regulatory and Licensing Support**: Assistance with U.S. Nuclear Regulatory Commission and Department of Energy regulatory pathways and safety case development.
- **Commercialization Enablement**: Siting, engineering, quality assurance and quality control support, and eventual reactor operation and decommissioning services.

NANO Nuclear's microreactor technologies are being developed to meet the growing demand for resilient, modular, and clean energy solutions across

defense, government, space, AI datacenters and commercial applications.

"With INL having led the technology development for high-temperature gas-cooled reactor for the last several decades and having a remarkable wealth of expertise, this new agreement will help us to deliver simple, safe, and reliable small stationary and portable nuclear microreactors in the coming years," **said Florent Heidet, Ph.D., Chief Technology Officer at NANO Nuclear.**

About Idaho National Laboratory
Battelle Energy Alliance manages INL for the U.S. Department of Energy's Office of Nuclear Energy. INL is the nation's center for nuclear energy research and development, and also performs research in each of DOE's strategic goal areas: energy, national security, science and the environment. For more information, visit www.inl.gov. Follow us on social media: Facebook, Instagram, LinkedIn and X.

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 its lead project, the 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 the space focused, portable **LOKI MMR ™**, each representing advanced developments in clean energy solutions that are modular, 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 those regarding the anticipated benefits of the Company's new CRADA as well as the Company's development, regulatory and commercial plans as described herein. 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 enacted ADVANCE Act and the May 23, 2025 presidential executive orders seeking to support nuclear energy, 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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Source: NANO Nuclear Energy Inc.