

# NANO Nuclear Energy Inc. and U.S. Department of Energy (DOE) Idaho Operations Office Sign MOU to Site the Company's Microreactor Prototypes Within Idaho National Laboratory (INL) Facilities

# December 4, 2024

New York, N.Y, Dec. 04, 2024 (GLOBE NEWSWIRE) -- NANO Nuclear Energy Inc. (NASDAQ: NNE) ("NANO Nuclear" or "the Company"), a leading vertically integrated advanced nuclear technology company developing proprietary, portable, and clean energy solutions, is pleased to announce the signing of a Memorandum of Understanding (MOU) with the United States Department of Energy (DOE) Idaho Operations Office. The MOU sets a framework for the collaboration between NANO Nuclear and the DOE to evaluate the feasibility of siting, construction, commissioning, operation and decommissioning of the Company's 'ZEUS' and 'ODIN' experimental microreactors at the Idaho National Laboratory (INL), one of the foremost research sites for nuclear science and technology in the U.S.

Through this MOU, NANO Nuclear will work with the DOE and Battelle Energy Alliance, LLC, the current operator of INL, to progress the development, siting, and eventual testing of NANO Nuclear's innovative microreactor designs. The 'ZEUS' and 'ODIN' microreactors are designed to deliver clean, portable power solutions for remote and industrial applications, supporting the United States' energy security and climate objectives.



Figure 1 - NANO Nuclear Energy Inc. Signs Memorandum of Understanding with U.S. Department of Energy Idaho Operations Office to Evaluate Idaho National Laboratory Facilities for Potential Siting, Construction, and Operation of its Proprietary, Portable Microreactors.

#### **Collaborative Activities for Test Reactor Development**

The MOU outlines several core activities, such as site evaluations, support of Nuclear Regulatory Commission (NRC) licensing activities, and the development of operational and security plans, including hazardous material management. NANO Nuclear and the DOE will collaborate to assess the suitability of INL's infrastructure and secure appropriate land-use agreements for supporting the experimental reactors, focusing on site selection, feasibility studies, and thorough security and emergency planning. Each party will be responsible for its own costs, as specified in the MOU.

"Partnering with the DOE and Idaho National Laboratory on this initiative underscores our commitment to developing advanced nuclear technologies that meet the highest standards for safety and environmental stewardship," **said Jay Yu, Founder and Chairman of NANO Nuclear Energy.** "We are honored to collaborate with the DOE to realize our goal of delivering portable, clean energy solutions, particularly as the 'ZEUS' and 'ODIN' microreactors move closer to demonstration and eventual deployment."

## **Strengthening National Energy Resilience**

The MOU also includes provisions for regulatory coordination, communication strategies, and efforts to ensure environmental compliance under the National Environmental Policy Act (NEPA), with both parties committed to adhering to all applicable local, state, and federal laws.

"This partnership with DOE's Idaho Operations Office allows us to take multiple critical steps toward demonstrating the economic viability and real-world applications of NANO Nuclear's microreactor technology," said James Walker, Chief Executive Officer and Head of Reactor Development of Nano Nuclear Energy. "We look forward to working closely with the DOE and INL to explore new horizons in nuclear energy, bringing innovative power solutions to communities and industries that need them most."

The collaboration will leverage INL's existing expertise and infrastructure to support NANO Nuclear's mission to provide safe, reliable, and sustainable energy. The MOU will remain in effect for five years, with an option for renewal.

## 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 microreactor technology, (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 products in technical development are "ZEUS", a solid core battery reactor, and "ODIN", a low-pressure coolant reactor, 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 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

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### **Cautionary Note Regarding Forward Looking Statements**

This news release and statements of NANO Nuclear's in its collaborators' management in connection with this news release or related events 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 (including statements regarding NANO Nuclear's collaboration with U.S. Department of Energy (DOE) Idaho Operations Office and Idaho National Laboratory and the ability of the collaboration to achieve its desired results) 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. 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, including difficulties with design and testing, cost overruns, regulatory delays 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**

• Figure: 1



Figure: 1





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Source: NANO Nuclear Energy Inc.