NANO Nuclear Energy Enters into Agreement to Acquire Ultra Safe Nuclear Corp.'s Patented Micro Modular Reactor MMR® and Pylon Space Reactors for $8.5 Million along with Worldwide Demonstration Partnerships

December 24, 2024

NANO Nuclear acquires Micro Modular Reactor (MMR®) and Pylon technologies, including all associated patents, through a Chapter 11 bankruptcy auction

New York, N.Y., Dec. 24, 2024 (GLOBE NEWSWIRE) -- NANO Nuclear Energy Inc. (NASDAQ: NNE) ("NANO Nuclear" or "the Company"), a leading advanced nuclear energy and technology company focused on developing portable, clean energy solutions, today announced that it has executed a definitive agreement to acquire select nuclear energy technology assets from Ultra Safe Nuclear Corporation and certain of its subsidiaries (collectively, "USNC").

The acquired assets include USNC's patented Micro Modular Reactor (MMR ®) system, along with all associated patents and other intellectual property rights, as well as its Pylon reactor technology and related intellectual property, and certain demonstration project partnerships related to the MMR system. The assets are being acquired for $8.5 million in cash through an auction process conducted pursuant to Section 363 of the U.S. Bankruptcy Code in connection with USNC's pending Chapter 11 bankruptcy proceedings. On December 18, 2024, the United States Bankruptcy Court for the District of Delaware, the Bankruptcy Court overseeing USNC's chapter 11 case, conducted a hearing and approved the transaction. The closing of the acquisition is expected to occur in the near future subject to satisfaction of customary closing conditions in a bankruptcy proceeding.

Figure 1 – Renditions of NANO Nuclear Energy's newly acquired technologies: Pylon for terrestrial (bottom) and space (top) applications and the Modular Modular Micro Reactor (MMR®) Energy System (right).

The MMR® Energy System is a zero-carbon nuclear power plant, integrating one or several standardized micro reactors with a heat storage unit and the adjacent plant for power conversion and utilization. The system, which is under development, could be used to provide carbon-free, high-quality process heat for co-located industrial applications, and for high-efficiency hydrogen production. The MMR Energy System compliments NANO Nuclear's own 'ZEUS' and "ODIN' microreactors in development. However, whereas 'ZEUS' and "ODIN' are being designed to be portable and produce 1 to 1.5 megawatts thermal ("MWth") of power, the MMR Energy System is stationary and designed to produce power up to 45 MWth, opening additional potential markets to NANO Nuclear. The MMR Energy System is being demonstrated at the Canadian Nuclear Laboratories with Ontario Power Generation and at the University of Illinois at Urbana-Champaign. It was also the first small modular reactor to enter the formal licensing review phase with the Canadian Nuclear Safety Commission.

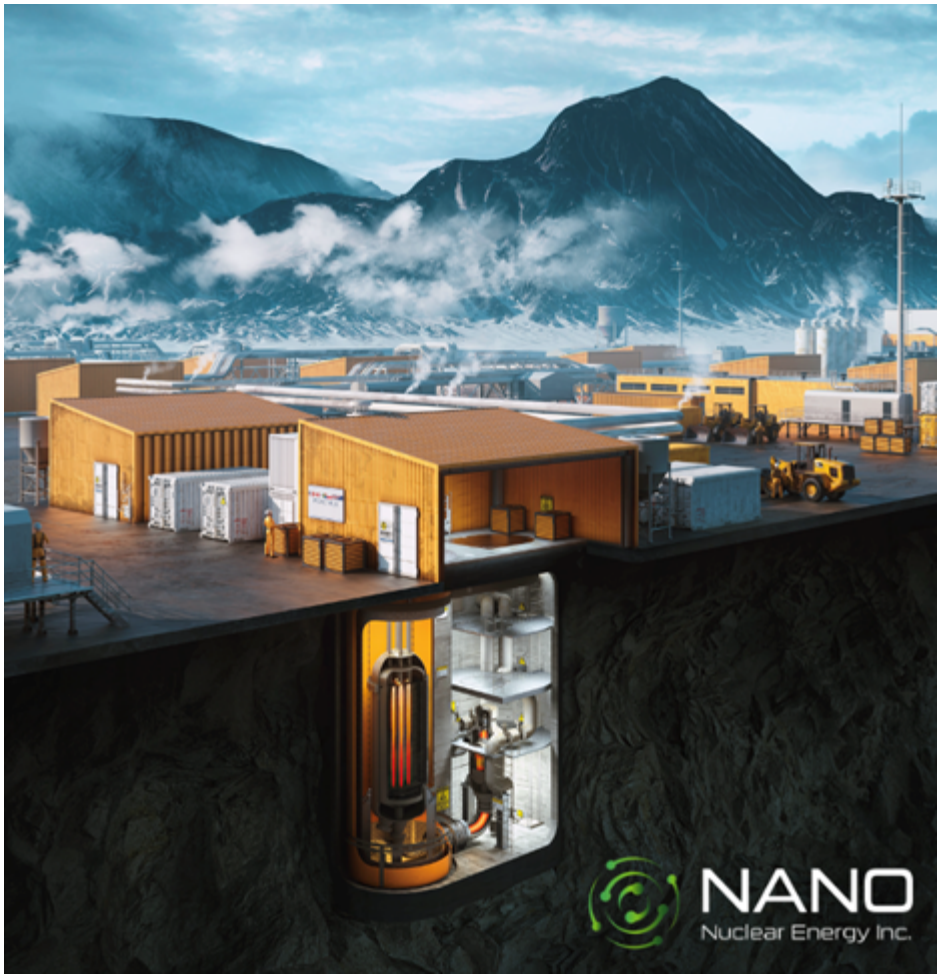

Figure 2 - Rendition of NANO Nuclear Energy's newly acquired Modular Micro Reactor (MMR®) Energy System.

The Pylon reactor is a compact nuclear reactor designed for versatility in application and deployment. It is designed to provide between 1 MWth and 5MWth of power and can be integrated with modular balance of plants tailored to specific applications including remote terrestrial, marine, and space deployments. The Pylon reactor is scheduled to be demonstrated at the Idaho National Laboratory's DOME facility by 2027, following USNC's selection for the National Reactor Innovation Center (NRIC) Front-End Engineering program.

Figure 3 - Rendition of NANO Nuclear Energy's newly acquired Pylon reactor in terrestrial applications.

The newly acquired technologies align closely with the intended uses for 'ZEUS' and 'ODIN,' which are designed for remote, industrial, infrastructural, maritime, and extra-terrestrial applications, including large-scale data and artificial intelligence centers and other energy-intensive operations, positioning NANO Nuclear to capitalize on growing financial investment and societal momentum driving advanced nuclear energy technologies on a global scale. NANO Nuclear will leverage its world-class technical team to analyze and optimize these technologies, key components, and intellectual property, before integrating them into its operational frameworks and ongoing innovation efforts.

Additionally, NANO Nuclear intends to build upon and strengthen the extensive industry relationships that USNC established during its operations. This includes ensuring continuity in licensing, regulatory, and grant-related efforts wherever feasible. The acquired technology will also enable NANO Nuclear to refine and better tailor its offerings within previously announced collaborations and partnerships, including ongoing initiatives.

"The acquisition of the MMR system and the Pylon reactor from USNC aligns perfectly with our mission to usher in the next generation of advanced nuclear energy technologies," **said Jay Yu, Founder and Chairman of NANO Nuclear Energy.** "By integrating these cutting-edge technologies, along with valuable intellectual property and established industry and academic connections, we are positioned to accelerate our development phase and bring innovative solutions to market more efficiently. This is a significant step forward in achieving our long-term goals and strengthening our leadership in the advanced nuclear energy sector."

Figure 4 - Rendition of NANO Nuclear Energy's newly acquired Pylon reactor in space applications.

"This acquisition marks a transformative event for our company and evidences our strategy of acquiring complimentary technologies that help to position us at the forefront of our industry," **said James Walker, Chief Executive Officer and Head of Reactor Development of NANO Nuclear Energy.** "The addition of MMR technology strengthens the technical foundation we have established through the design and development of our proprietary 'ZEUS' and 'ODIN' systems and enables us to scale our power solutions to meet the demands of larger, energy-intensive operations like data centers. Furthermore, the integration of the Pylon reactor technology enhances the versatility and robustness of our existing designs, as well as positioning us to deliver pioneering solutions for cis-lunar, orbital, and other space-based initiatives."

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/

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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 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 anticipated benefits to NANO Nuclear of the assets acquired from UNSC. 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

- Nuclear Energy Inc.

Source: NANO Nuclear Energy Inc.

Nuclear Energy Inc.

Renditions of NANO Nuclear Energy's newly acquired technologies