NANO Nuclear Energy Forms NANO Nuclear Space to Explore Use of Advanced Portable Microreactors in Space Applications

September 23, 2024

Committed to exploring new markets, NANO Nuclear Energy is assessing the potential for deploying its advanced technologies in space applications

New York, N.Y., Sept. 23, 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 the launch of a new subsidiary, NANO Nuclear Space Inc. (NNS), to explore the potential commercial applications of the Company's developing micronuclear reactor technology in space.

NNS will utilize NANO Nuclear's world class scientific and engineering teams to examine the adaptation of NANO Nuclear technologies to contribute towards humanity's drive to expand beyond low earth orbit. NNS will focus on optimizing **"ZEUS", a solid core battery reactor, and "ODIN", a low-pressure coolant reactor**, for 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.

Innovative technologies, like the Annular Linear Induction Pump (ALIP) technology developed by Carlos O. Maidana, Ph.D., which was recently acquired by NANO Nuclear, will be leveraged to optimize cooling and heat transfer capabilities and address challenges in high-efficiency thermal fluid management in high temperature applications, including energy generation and even propulsion.

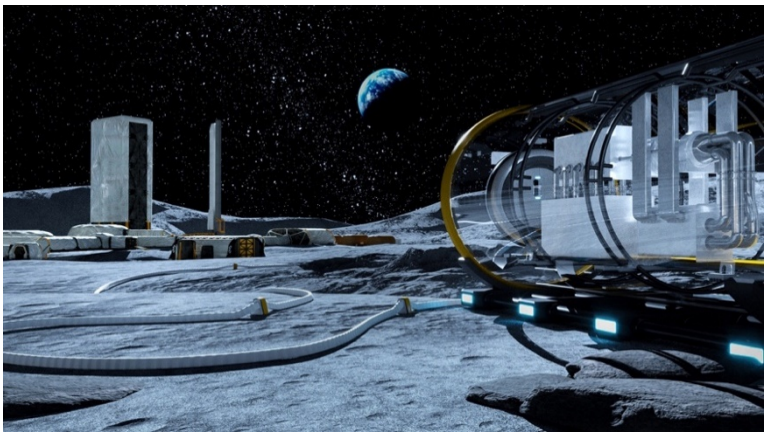


Figure 1 - Rendition of Proprietary NANO Nuclear Space Inc. 'ODIN' Microreactor Optimized for Cis-Lunar Operations

"NANO Nuclear was made to innovate. Our plans have always included space applications as a potential fit of our micronuclear reactor technologies. With the resources we have in hand, we are now able to launch NANO Nuclear Space to explore the many potential applications of our technology in the growing private commercial, as well as government sponsored, space industry," **said Jay Yu, Founder and Chairman of NANO Nuclear Energy.** "Space exploration has long been integral to our nation's history, driving the development of technologies that have profoundly impacted life both on Earth and beyond its atmosphere. The possibilities for future exploration are abundant, and our world-class technical team is committed to developing innovative solutions, all firmly grounded in safety. NNS also enables us to seek new partnerships and collaborations and potentially unlock novel funding opportunities for research and development that can revolutionize our core products."

Figure 2 - A NANO Nuclear Energy Inc. subsidiary, NANO Nuclear Space will adapt its advanced nuclear technologies for space applications.

With a focus on the vast commercial potential of space, NNS will pioneer systems designed to address the particular operational challenges of cis-lunar space while supporting sustainable human presence and unlocking space resources for economic development. By concentrating on cis-lunar space, the hub of commercial space activity, NNS aims to capitalize on opportunities from satellite services to in-orbit manufacturing and lunar resource extraction.

"Since the inception of NANO Nuclear, I have been determined to expand our vision to include cis-lunar space and explore beyond Earth's bounds," **said James Walker, Chief Executive Officer and Head of Reactor Development of NANO Nuclear Energy.** "Space exploration in the 20th century

was a catalyst for widespread technological progress and I am confident further activities in cis-lunar space will bring even more opportunities to improve daily life for people around the world. The diverse applications of microreactors in space, whether for habitation, exploration, or propulsion, present unprecedented opportunities for our exceptional technical team to drive innovation."

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 four business lines: (i) cutting edge portable microreactor technology, (ii) nuclear fuel fabrication, (iii) nuclear fuel transportation and (iv) 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.

For more corporate information please visit: https://NanoNuclearEnergy.com/

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Cautionary Note Regarding Forward Looking Statements

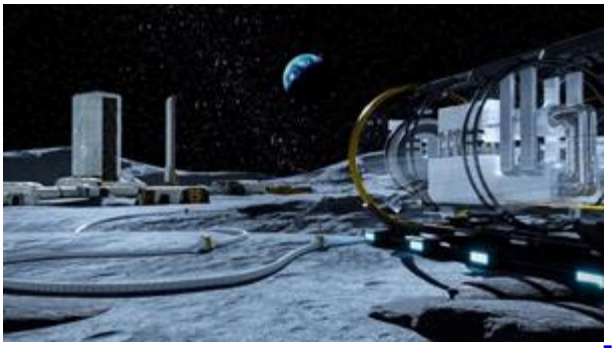
This news release and statements of NANO Nuclear's management in connection with this news release or related events contain or may contain "forward-looking statements" within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, and the Private Securities Litigation Reform Act of 1995. In this context, forward-looking statements (including statements regarding the future operations of NNS and the potential for applications of the Company's technology in space exploration) 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") nuclear fuel manufacturing submission and the development of new or advanced technology, including difficulties with design and testing, cost overruns, development of competitive technology, (ii) our ability to obtain contracts and funding to be able to continue operations, (iii) risks related to uncertainty regarding our ability to technologically develop and commercially deploy a competitive advanced nuclear reactor technology, (iv) 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 (v) similar risks and uncertainties associated with the business of a start-up business operating a highly regulated 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 the 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.



NANO Nuclear Energy Inc.



Rendition of Proprietary NANO Nuclear Space Inc. 'ODIN' Microreactor Optimized for Cis-Lunar Operations

Source: NANO Nuclear Energy Inc.