



NANO Nuclear Energy Announces Investment, Strategic Collaboration and Future Fuel Purchasing Agreement with LIS Technologies Inc., the Only U.S.-Origin and Patented Laser-Based Uranium Enrichment Company

November 6, 2024

\$2 Million Investment and Strategic Collaboration Seeks to Advance LIST's U.S. Origin and Patented Laser Uranium Enrichment Technology

New York, N.Y., Nov. 06, 2024 (GLOBE NEWSWIRE) -- NANO Nuclear Energy Inc. (NASDAQ: NNE) ("NANO Nuclear" or "the Company"), a leading vertically integrated advanced nuclear energy and technology company developing portable clean nuclear energy solutions, today announced a collaboration with LIS Technologies Inc. ("LIST"), a privately-held emerging company believed to be the only U.S.-origin based developer of a patented advanced laser technology to enrich uranium.

The collaboration intends to reinvigorate the United States' domestic uranium enrichment and fuel fabrication capabilities and includes:

- A \$2 million investment by NANO Nuclear into LIST's recently closed, oversubscribed \$11.88 million seed round financing; and
- Execution of a strategic agreement between NANO and LIST under which (i) the parties will collaborate on advancing LIST's cutting-edge enrichment technology as it continues its development and moves towards the regulatory licensing process and (ii) LIST will ultimately provide NANO Nuclear with quantities of uranium hexafluoride (UF₆) fuel for use in NANO Nuclear's advanced portable microreactors in development and for future sale by NANO Nuclear and LIST to third parties.

As part of the agreement, NANO Nuclear will develop supportive capabilities, including deconversion and fuel fabrication facilities, that will enable LIST's enriched UF₆ to become part of an integrated fuel manufacturing process that delivers fuel to both NANO Nuclear's microreactor systems in development and the wider nuclear energy industry. The parties intend that LIST will provide NANO Nuclear with enriched UF₆ at no cost to be fabricated and sold to customers, with LIST to receive compensation as part of a profit-sharing arrangement to be agreed to between the companies in the future.

NANO Nuclear believes that LIST's technology has the potential to be fully developed, licensed and capable of producing commercial quantities of Low Enriched Uranium (LEU) and High-Assay LEU (HALEU) fuel within ten years.

NANO Nuclear's investment in LIST signals NANO Nuclear's belief in LIST's proprietary laser-based enrichment process. Originally invented by Dr. Jeff Eerkens, who is considered the founding father of laser enrichment, partially funded by Cameco Corp. in the early 1990s, with positive historic developmental results and technology which demonstrates an ability to enrichment uranium, NANO believes that LIST has the potential to manufacture the fuel which the resurgent U.S. nuclear industry desperately needs to power the new generation of advanced Small Modular Reactors (SMRs) and micro nuclear reactors, including NANO Nuclear's proprietary power systems.

LIST's technology utilizes infrared lasers to selectively excite and separate desired isotope molecules. This innovative technology has significant potential to provide services across the nuclear energy industry, including the manufacturing of LEU for existing civilian nuclear power plants and HALEU essential for the next generation of SMRs and microreactors, including NANO Nuclear's portable 'ZEUS' and 'ODIN' microreactors in development.

LIST's technology can also potentially be utilized to produce stable isotopes for medical and scientific research and has applications in quantum computing manufacturing for semiconductor technologies. The LIST proprietary laser-based process is energy-efficient and can be deployed with relatively favorable capital and operational costs. A United States Patent and Trademark Office-issued patent safeguards LIST's process.

"This strategic collaboration with LIST is another important milestone for NANO Nuclear as we believe it provides us with a competitive edge over other advanced reactor companies in the U.S.," **said Jay Yu, Founder and Chairman of NANO Nuclear Energy.** "The technology being developed by LIST has the potential to reshape the United States' uranium enrichment capabilities and pave the way for the next generation of advanced nuclear reactors to be a carbon-neutral and efficient solution to its growing energy demands. We are excited to support the advancement of this innovative, cost-effective and the only U.S.-origin, patented technology to help usher in a new era for the nuclear energy industry."

In addition to providing the necessary deconversion and fuel fabrication facilities required to turn LIST's enriched UF₆ into a fully integrated fuel supply chain capable of receiving UF₆ from a conversion facility and outputting fabricated fuel for reactor systems, NANO Nuclear will collaborate with LIST on joint research and development initiatives. LIST will also act as NANO Nuclear's preferred supplier of enriched UF₆ in future fuel purchasing agreements.

"NANO Nuclear is a leading innovator in the U.S. advanced nuclear energy sector, and its support of our proprietary U.S.-origin, patented technology marks a significant step toward a more efficient and secure domestic fuel supply chain," **said Christo Liebenberg, Chief Executive Officer of LIS Technologies Inc.** "NANO Nuclear's backing in our oversubscribed financing round is allowing us to rapidly advance along a carefully planned growth strategy to potentially becoming the first true, scalable and commercialized laser uranium enrichment company in the world. LIST believes in building back the U.S. nuclear infrastructure and we look forward to rapidly advancing our technology. Furthermore, we believe this strategic collaboration creates a substantial advantage for both companies and the broader U.S. market, positioning us to capitalize on a novel opportunity."



Figure 1 - NANO Nuclear Energy Inc. Announces Investment into and Strategic Collaboration with LIS Technologies Inc. to Advance the Only U.S.-Origin and Patented Uranium Laser-Enrichment Technology and Regenerate the United States' Nuclear Fuel Supply Chain.

Many next-generation SMRs and microreactors (defined as reactors generating less than 20 megawatts of power) are designed to utilize HALEU fuel. Though demand for HALEU in the United States is projected by the Nuclear Energy Institute (N.E.I) to exceed 3,000 metric tons by 2035, the current supply of HALEU in the U.S. is limited.

"We are delighted to announce this significant step towards securing a sustainable supply of advanced fuel for our next-generation nuclear reactors," said **James Walker, Chief Executive Officer and Head of Reactor Development of NANO Nuclear Energy**. "This agreement is a strategic cornerstone ensuring that our on-demand, portable microreactors in development will have a reliable and consistent fuel supply, while enabling business opportunities to supply the whole nuclear energy marketplace with fuel. Moreover, this strategic collaboration will enable both companies to further develop, refine and optimize strategies to meet regulatory guidelines and bring products to market in a timely fashion. We are proud to play an active role in bringing LIST's technology forward at a time when the country needs it most."

NANO Nuclear and LIST are related parties through certain common ownership and commonality of certain officers and directors. The transaction between NANO Nuclear and LIST was reviewed and approved by NANO Nuclear's independent directors who have no role with LIST.

About LIS Technologies Inc.

LIS Technologies Inc. (LIST) is a USA based, proprietary developer of a patented advanced laser technology, making use of infrared lasers to selectively excite the molecules of desired isotopes to separate them from other isotopes. The **Laser Isotope Separation Technology (L.I.S.T)** has a huge range of applications, including being the only USA-origin (and patented) laser uranium enrichment company, and several major advantages over traditional methods such as gas diffusion, centrifuges, and prior art laser enrichment. The LIST proprietary laser-based process is more energy-efficient and has the potential to be deployed with relatively favorable capital and operational costs. L.I.S.T is optimized for LEU (Low Enriched Uranium) for existing civilian nuclear power plants, High-Assay LEU (HALEU) for the next generation of Small Modular Reactors (SMR) and Microreactors, the production of stable isotopes for medical and scientific research, and applications in quantum computing manufacturing for semiconductor technologies. LIST employs a world class nuclear technical team working alongside leading nuclear entrepreneurs and industry professionals, possessing strong relationships with government and private nuclear industries.

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.

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 further information, please contact:

Email: IR@NANONuclearEnergy.com
Business Tel: (212) 634-9206

PLEASE FOLLOW OUR SOCIAL MEDIA PAGES HERE:
NANO Nuclear Energy [LINKEDIN](#)
NANO Nuclear Energy [YOUTUBE](#)

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 mean statements related to future events, which may impact our expected future business and financial performance, and often contain words such as "seek," "expects," "anticipates," "intends," "plans," "believes," "potential," "will," "should," "could," "would" or "may" and other words of similar meaning. In this news release, forward-looking statements include those relating to LIST, the potential applications of and development timelines for LIST's technology and the potential benefits to NANO Nuclear of its investment in and collaboration with LIST. 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, some of which may be beyond our control. Readers are cautioned that actual results may differ materially and adversely from the results implied in forward-looking statements. 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 for both NANO Nuclear and LIST, (ii) risks for both NANO Nuclear and LIST related the development of new or advanced nuclear 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 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 of the factors that could cause actual results to differ from those discussed in any forward-looking statement, and the Company therefore encourages investors to review other factors that may affect future results in the Company's filings with the SEC, which are available for review at www.sec.gov and at <https://ir.nanonuclearenergy.com/financial-information/sec-filings>. Readers are cautioned not to place undue reliance on forward-looking statements, which apply only as of the date of this news release, and 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.



Figure 1 - NANO Nuclear Energy Inc. Announces Investment into and Strategic Collaboration with LIS Technologies Inc. to Advance the Only U.S.-Origin and Patented Uranium Laser-Enrichment Technology and Regenerate the United States' Nuclear Fuel Supply Chain.