NANO Nuclear Energy Advances Development of Optimized HALEU Transportation System with Global Nuclear Logistics Leader GNS

March 16, 2026

Conceptual design milestone achieved for advanced, proprietary HALEU transport package supporting next-generation nuclear reactors

New York, N.Y., March 16, 2026 (GLOBE NEWSWIRE) -- NANO Nuclear Energy Inc. (NASDAQ: NNE) ("NANO Nuclear" or "the Company"), a leading advanced nuclear micro modular reactor (MMR) and technology company focused on developing clean energy solutions, today announced significant progress in its initiative to develop a proprietary, optimized transportation solution for High-Assay Low-Enriched Uranium (HALEU) fuel.

The project leverages NANO Nuclear's exclusively licensed nuclear fuel transportation basket design, developed with the technical support of **GNS Gesellschaft für Nuklear-Service mbH (GNS)**, one of the world's foremost specialists in the treatment, packaging, and transportation of radioactive materials. GNS is globally recognized for its expertise in transport and storage cask design, licensing, and manufacturing, as well as advanced technologies for nuclear waste processing and facility decommissioning.

NANO Nuclear is undertaking these efforts through its subsidiary, **Advanced Fuel Transportation, Inc.**, as part of its overall mission to develop commercially focused, vertically integrated capabilities across the nuclear energy supply chain, from parts of the front end fuel cycle, to transportation, to cutting edge microreactors like NANO Nuclear's **KRONOS MMR^{TM} Energy System** under development.

The progress announced today arises from a September 2024 agreement between NANO Nuclear and GNS to develop the HALEU transportation system solution. Together, the companies are advancing a robust, innovative, and regulatory-compliant HALEU transportation package, designed to support the rapidly growing demand for advanced nuclear fuels needed for next-generation reactor technologies.

Figure 1 – Rendering of NANO Nuclear's Basket and Cask Nuclear Fuel Transportation System Being Developed in Collaboration with GNS

Supporting the Emerging HALEU Fuel Economy

The HALEU transportation package currently under development is designed to support the transport of multiple advanced nuclear fuel types, including:

- Uranium oxide fuels
- TRISO particle fuels
- Uranium-zirconium hydride fuels
- Uranium mononitride fuels
- Molten salt reactor fuels

This broad compatibility ensures that the transportation system can serve the diverse fuel requirements of emerging microreactor, small modular reactor (SMR), and advanced reactor technologies.

NANO Nuclear holds the exclusive license from Battelle Energy Alliance, the not-for-profit operator of the Idaho National Laboratory, to develop the

proprietary nuclear fuel transportation basket and cask design which is at the core of the NANO Nuclear-GNS collaboration.

Key Engineering Milestones Achieved

Working in close collaboration with GNS, NANO Nuclear has completed several major early-stage engineering milestones for the project, including:

- Development of conceptual designs for two optimized fuel payload baskets capable of transporting HALEU materials in multiple fuel forms.
- Completing a preliminary design for the transport package overpack, which will house the payload baskets during shipment.
- Conducting initial regulatory and engineering analyses to evaluate the design's compliance with nuclear transportation regulations.

Importantly, this work was performed under a formal Nuclear Regulatory Commission (NRC) Quality Assurance program, ensuring that all engineering and design processes align with the rigorous safety and documentation standards required for nuclear transportation systems. Initial evaluations indicate that the package design is capable of meeting the certification requirements established under 10 CFR Part 71, the regulatory framework governing nuclear material transportation in the United States.

Advancing Toward NRC Certification

With these foundational design milestones completed, NANO Nuclear intends to continue advancing the fuel transport package through the next phases of development, including further engineering validation and regulatory engagement. NANO Nuclear plans to formally engage with the NRC to pursue certification of the transport package, an essential step toward enabling reliable commercial transportation of HALEU fuels across the United States.

Strengthening the Advanced Nuclear Supply Chain

Reliable transportation infrastructure for HALEU fuel is widely recognized as one of the most critical enablers of the next generation of nuclear energy technologies. As microreactors and advanced reactors move toward regulatory licensing and ultimate commercialization, the ability to safely transport advanced fuels will be essential to establishing a fully operational nuclear fuel supply chain.

By developing its own optimized HALEU transportation solution, NANO Nuclear aims to help remove a key logistical bottleneck facing the advanced nuclear sector while positioning NANO Nuclear as a significant contributor to the emerging HALEU ecosystem.

"HALEU fuel logistics will be one of the foundational pillars of the advanced nuclear industry," **said Jay Yu, Founder and Chairman of NANO Nuclear.** "Our collaboration with GNS has brought together world-class nuclear transportation expertise with NANO Nuclear's proprietary fuel basket technology. Achieving this early design milestone represents an important step toward building the infrastructure needed to support the deployment of advanced reactors across the United States and globally."

About GNS Gesellschaft für Nuklear-Service mbH

GNS Gesellschaft für Nuklear-Service mbH (GNS) is a leading German nuclear services company specializing in solutions for the treatment, packaging, and transportation of radioactive materials. The company is internationally recognized for the design, licensing, and manufacture of transport and storage casks, as well as technologies for nuclear waste management and decommissioning.

About NANO Nuclear Energy Inc.

NANO Nuclear Energy Inc. (NASDAQ: NNE) is a North American 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 with the 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 U.S. Department of Energy 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 micro nuclear 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", "explore," "aim," "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 NANO Nuclear's plans and aspirations for the nuclear fuel transportation technology described herein, as well as NANO Nuclear's vertical integration goals. 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. In addition, 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"), U.S. Nuclear Regulatory Commission ("NRC"), Canadian Nuclear Safety Commission ("CNSC") or related state or other U.S. or non-U.S nuclear licensing submissions, (ii) risks related the development of new or advanced technology and the acquisition of complementary 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 NRC, including those associated with the recently enacted ADVANCE Act and the May 23, 2025 Executive Orders seeking to streamline nuclear regulation, and (vi) similar risks and uncertainties associated with the operating a developing business a highly regulated, competitive and rapidly evolving industry, including that our plans may change and we may use our cash on hand faster or in different ways than anticipated as our business requires. 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.

Attachment

- NANO Nuclear Energy Inc.

NANO Nuclear Energy Inc.

Rendering of NANO Nuclear's Basket and Cask Nuclear Fuel Transportation System Being Developed in Collaboration with GNS

Source: NANO Nuclear Energy Inc.