NANO Nuclear Energy and CURIO Solutions to Collaborate on Advanced Nuclear Fuel Recycling for its Portable Microreactor Technologies

July 1, 2024

The companies have agreed to a framework to optimize nuclear fuel recycling for NANO Nuclear's advanced portable micro-reactors utilizing Curio's NuCycle technology

New York, N.Y., July 01, 2024 (GLOBE NEWSWIRE) -- NANO Nuclear Energy Inc. (NASDAQ: NNE) ("NANO Nuclear"), a vertically integrated advanced nuclear energy and technology company developing portable clean nuclear energy solutions, today announced that it has signed a Memorandum of Understanding (MOU) to collaborate with Curio Solutions to optimize Curio's nuclear fuel recycling capabilities for NANO Nuclear's next-generation portable nuclear microreactors in development.

This MOU marks another achievement in NANO Nuclear's commitment to explore and assemble complimentary advanced technologies to further enable the development of its **'ZEUS'** and **'ODIN'** microreactors.

Based in Washington, D.C., Curio Solutions is a leading advanced nuclear recycling technology developer and pioneer of the **NuCycle** process. Utilizing chemistries that increase operational modularity, capacity, and economic viability, NuCycle (which has received funding from the U.S. government) offers a recycling opportunity to dramatically reducing nuclear waste.

Figure 1 - NANO Nuclear Energy Inc. Collaborates with Curio to Optimize the Nuclear Fuel Recycling Capabilities of its Advanced Portable Microreactors.

The companies will now collaborate for one year and seek to optimize NANO Nuclear's fuel designs for enhanced recyclability and seek to implement cutting edge recycling methods utilizing the NuCycle process. The collaboration will also explore opportunities to integrate recycled fuel into NANO Nuclear's advanced microreactor designs. The MOU is preliminary, but if the collaboration evolves as expected, the companies would ultimately seek enter into more formal definitive documentation.

"Our collaboration with Nano Nuclear exemplifies our commitment to working across the entire spectrum of the nuclear industry," **said Edward McGinnis, CEO of Curio.** "NANO Nuclear's innovative approach to reactor design aligns perfectly with our vision for a sustainable nuclear future. We are excited to work with NANO Nuclear on creating tomorrow's nuclear energy solutions."

The first advanced portable nuclear microreactor company to publicly list in the U.S., NANO Nuclear has worked diligently to develop its portable microreactor solutions. The 'ZEUS' advanced portable microreactor is designed to generate between 1 and 2 megawatts of clean electricity, without relying on fluid coolant, improving safety and reliability. NANO Nuclear's 'ODIN' is a clean energy, portable nuclear microreactor and is set to benefit greatly from NANO Nuclear's recent acquisition of innovative annular linear induction pump (ALIP) technology, enhancing its passive decay heat removal capabilities using natural circulation.



Figure 2 - NANO Nuclear Energy Inc. Advanced Portable Nuclear Microreactor 'ZEUS.' Rendition

"We are very proud to be a part of the accelerating momentum in the global nuclear energy renaissance," **said Jay Yu, Executive Chairman and President of NANO Nuclear Energy.** "It's truly exciting to collaborate with other disruptive advanced nuclear technology companies like Curio as we lead the charge to revitalize the industry and reshape the energy landscape. The opportunity to utilize Curio's expertise in nuclear fuel recycling and optimize our reactors to be cleaner, more efficient and safer is a significant boon to NANO Nuclear. This collaboration also further demonstrates our ability to identify and seek to incorporate other innovative technologies into our microreactor technologies. We are eager to see where this collaboration leads, and we will continue our mission to assemble and capitalize on the best cutting-edge nuclear technology."



Figure 3 - NANO Nuclear Energy Inc. Advanced Portable Nuclear Microreactor 'ODIN.' Rendition

"At NANO Nuclear we're not just developing microreactors; we're reimagining the future of energy," **said James Walker, Chief Executive Officer, and Head of Reactor Development of NANO Nuclear Energy.** "Our advanced portable nuclear microreactors represent a paradigm shift in how we think about nuclear power – making it more accessible, adaptable and aligned with the world's evolving energy needs. By collaborating with Curio, we are pushing the boundaries of nuclear energy technology and seeking to take our vision a step further by optimizing our advanced microreactor designs for recycling, creating the potential for a truly sustainable nuclear fuel cycle. Our portable microreactors are designed to be game changers in terms of portability and efficiency, and now, with Curio's recycling expertise, we're addressing the full lifecycle of nuclear fuel. This holistic approach is what sets NANO Nuclear apart in the industry."

About Curio

Curio Solutions is at the forefront of nuclear technology innovation, specializing in advanced nuclear recycling solutions. With its revolutionary NuCycle® process, Curio is dedicated to closing the nuclear fuel cycle, dramatically reducing nuclear waste, and unleashing the full potential of nuclear energy for a cleaner, more sustainable future.

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 mean statements (including statements related to NANO Nuclear's collaboration with Curio and the anticipated results and benefits of such collaboration) 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. 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, 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") 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 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; and similar risks and uncertainties associated with the business of a start-up business operating a highly regulated industry and (v) risks related to preliminary technology collaborations such as the one with Curio described herein. These factors may not constitute all factors that could cause actual results to differ from those discussed in any forward-looking statement. Readers are cautioned not to place undue reliance on these forward-looking statements, which apply only as of the date of this news release. 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

NANO Nuclear Energy Inc. Collaborates with Curio to Optimize the Nuclear Fuel Recycling Capabilities of its Advanced Portable Microreactors.

Source: NANO Nuclear Energy Inc.