



NEWS RELEASE

Energy Vault and NuCube Energy Form Strategic Partnership to Power AI Data Centers with Nuclear Microreactors, Offering Flexible Baseload, Energy Storage and Grid Services Capabilities

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Strategic partnership to expedite NuCube’s NuSun™ microreactor, coupled with Energy Vault material science and storage solutions, for rollout at high-energy demand locations, including data centers

This flexible baseload solution will serve the U.S. data center market estimated to consume 500 TWh in 2028, equivalent to 60GW of power generation needs

WESTLAKE VILLAGE, Calif. & IDAHO FALLS, Idaho--(BUSINESS WIRE)-- Energy Vault Holdings Inc. (NYSE: NRGV) (“Energy Vault” or the “Company”), a leader in sustainable, grid-scale energy storage solutions, today announced a strategic partnership with NuCube Energy, Inc. (NuCube), a breakthrough nuclear technology company, to accelerate the delivery of NuCube’s NuSun platform. NuSun is a dedicated deployment of NuCube technology to meet large energy use sites such as data centers. The joint technical development effort will focus on the integration of the NuSun platform with Energy Vault’s VaultOS™ Energy Management System (EMS) and B-VAULT™ Battery Energy Storage System (BESS) to enable rapid deployment of carbon-free, safe and cost-effective baseload generation with the operational flexibility required by data centers and large energy users.

Through this collaboration, Energy Vault and NuCube will seek to accelerate the deployment of the NuSun platform integrated with VaultOS software controls, grid services and accompanying energy storage systems (ESS) by the end of 2028/beginning of 2029. Energy Vault will leverage expertise in advanced material science technologies from its gravity



storage research and development to expedite the development of shielding and containment systems utilized by NuSun. This involves using specialized composite admixtures to enhance safety while streamlining production for large-scale deployment.

As part of the strategic partnership, Energy Vault will design, engineer, and deploy customized software capability within its VaultOS software suite to enable joint control of NuSun and Energy Vault's proprietary B-VAULT BESS product. This will enable battery storage of excess energy generated during periods of lower demand and dispatch of stored energy during peak demand helping to ensure AI data centers can operate 24/7 without any power or business disruption. The integration of the NuSun hardware stack into Energy Vault's VaultOS software platform will also unlock multi-unit project deployments and enable dynamic load-following capabilities across multiple reactor units, improving responsiveness and efficiency for diverse energy demands.

NuSun, the result of more than 100 years of combined nuclear industry experience, is an extremely safe, advanced nuclear microreactor that combines cutting edge technology like TRISO fuel and heat pipes for the production of heat and a proprietary heat to electricity conversion system that drastically reduces the number of components. This combination of technologies eliminates most moving parts, creating a walk away safe nuclear reactor that provides large energy users, such as data centers, with zero-carbon power and continuous operation for many years without refueling. Several modules will be assembled to match data center power needs, allowing for streamlined permitting and scalable deployment. This flexible baseload solution will serve the U.S. data center market estimated to consume **500 TWh by 2028**.

The NuSun platform will be fully enclosed within a stainless-steel containment vessel and readily transportable. NuCube's design adopts innovative proprietary technology that will maximize the fuel utilization overcoming some of the limitations of very compact nuclear designs. The safety characteristics are such that the expected emergency zone planning (EZP) of the reactor will be limited to the building itself. To shorten the licensing timeline, NuCube's design uses materials and fuel which have been characterized and, in some instances, already approved by the Nuclear Regulatory Commission, such as TRISO fuel in order to help reduce the risks associated with licensing and deployment.

"The NuSun™ platform will offer a cost competitive carbon free solution to address the growing needs of power driven by the exponential growth of data centers," commented Cristian Rabiti, Co-Founder and Chief Executive Officer, NuCube Energy. "Its design simplicity is the key to achieving low cost and a high degree of safety. By coupling the NuSun platform with Energy Vault's digital and hardware platform, we expect to be able to improve the operational flexibility and efficiency of NuSun for single and multi-unit configurations, ensuring that AI data centers can easily incorporate NuSun in their power procurement operations and manage fluctuations in demand to operate continuously. This ability combined with the modularity and scalability of NuSun could represent the missing link for establishing a highly resilient, dependable and secure energy supply that is deployable anywhere that the market needs."

“As the demand for AI data centers continues to surge, ensuring a reliable and uninterrupted power supply – and, necessarily, storage – has become paramount,” said Marco Terruzzin, Chief Commercial and Product Officer, Energy Vault. “By integrating microreactors with Energy Vault’s unique approach to energy storage, we can ensure that AI data centers have access to carbon free electricity and operate seamlessly. Through this important strategic partnership, Energy Vault and NuCube aim to bring NuSun to market as the safest and most cost-effective dispatchable carbon-free solution for the growing data center market.”

About Energy Vault

Energy Vault® develops and deploys utility-scale energy storage solutions designed to transform the world's approach to sustainable energy storage. The Company's comprehensive offerings include proprietary gravity-based storage, battery storage, and green hydrogen energy storage technologies. Each storage solution is supported by the Company's hardware technology-agnostic energy management system software and integration platform. Unique to the industry, Energy Vault's innovative technology portfolio delivers customized short-and-long-duration energy storage solutions to help utilities, independent power producers, and large industrial energy users significantly reduce levelized energy costs while maintaining power reliability. Utilizing eco-friendly materials with the ability to integrate waste materials for beneficial reuse, Energy Vault's G-Vault™ gravity-based energy storage technology is facilitating the shift to a circular economy while accelerating the global clean energy transition for its customers. Please visit www.energyvault.com for more information.

About NuCube

NuCube is an innovative technology company designing a revolutionary nuclear fission reactor capable of producing electricity via high temperature heat. The company's technology is capable of servicing both the electrical and the high temperature industrial heat markets and has been designed with an elegant modular microreactor to be exceptionally safe, simple, and economical. NuCube offers nuclear technology that will produce the highest temperature heat for industrial customers and provide cost competitive electricity.

For more information on NuCube, please visit <http://www.nucube.energy>.

Forward-Looking Statements

This press release includes forward-looking statements that reflect the Company's current views with respect to, among other things, the Company's operations and financial performance, including the proposed partnership. Forward-looking statements include information concerning possible or assumed future results of operations, including descriptions of our business plan and strategies. These statements often include words such as “anticipate,” “expect,” “suggest,” “plan,” “believe,” “intend,” “project,” “forecast,” “estimates,” “targets,” “projections,” “should,” “could,” “would,” “may,” “might,” “will”

and other similar expressions. We base these forward-looking statements or projections on our current expectations, plans, and assumptions, which we have made in light of our experience in our industry, as well as our perceptions of historical trends, current conditions, expected future developments and other factors we believe are appropriate under the circumstances at the time. These forward-looking statements are based on our beliefs, assumptions, and expectations of future performance, taking into account the information currently available to us. These forward-looking statements are only predictions based upon our current expectations and projections about future events. These forward-looking statements involve significant risks and uncertainties that could cause our actual results, level of activity, performance or achievements to differ materially from the results, level of activity, performance or achievements expressed or implied by the forward-looking statements, including the failure to execute definitive agreements, changes in our strategy, expansion plans, customer opportunities, future operations, future financial position, estimated revenues and losses, projected costs, prospects and plans; the uncertainty of our awards, bookings and backlogs and developed pipeline equating to future revenue; the lack of assurance that non-binding letters of intent and other indication of interest can result in binding orders or sales; the timing of permits; the possibility of our products to be or alleged to be defective or experience other failures; the implementation, market acceptance and success of our business model and growth strategy; our ability to develop and maintain our brand and reputation; developments and projections relating to our business, our competitors, and industry; the ability of our suppliers to deliver necessary components or raw materials for construction of our energy storage systems in a timely manner; the impact of health epidemics, on our business and the actions we may take in response thereto; our expectations regarding our ability to obtain and maintain intellectual property protection and not infringe on the rights of others; expectations regarding the time during which we will be an emerging growth company under the JOBS Act; our future capital requirements and sources and uses of cash; the international nature of our operations and the impact of war or other hostilities on our business and global markets; our ability to obtain funding for our operations and future growth; our business, expansion plans and opportunities and other important factors discussed under the caption "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2023 filed with the SEC on March 12, 2024, as such factors may be updated from time to time in its other filings with the SEC, accessible on the SEC's website at www.sec.gov. New risks emerge from time to time, and it is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. Any forward-looking statement made by us in this press release speaks only as of the date of this press release and is expressly qualified in its entirety by the cautionary statements included in this press release. We undertake no obligation to publicly update or review any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by any applicable laws. You should not place undue reliance on our forward-looking statements.

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