



NEWS RELEASE

# Energy Vault Begins Construction of the Largest Green Hydrogen Long Duration Energy Storage System in the U.S.

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Hybrid Green Hydrogen plus Battery energy storage system will be capable of powering approximately 2,000 electric customers within PG&E's Calistoga microgrid for up to 48 hours (293 MWh of carbon-free energy)

Project supported by a 10.5-year tolling agreement; Commercial operation expected by the end of Q2 2024, solidifying Energy Vault's global leadership role in green hydrogen and gravity-based technologies for long duration energy storage

WESTLAKE VILLAGE, Calif.--(BUSINESS WIRE)-- Energy Vault Holdings, Inc. (NYSE: NRGV) ("Energy Vault" or the "Company"), a leader in sustainable grid-scale energy storage solutions, today announced construction start of its **previously announced** deployment of a utility-scale green hydrogen plus battery ultra-long duration energy storage system (BH-ESS) with 293 megawatt-hours (MWh) of dispatchable carbon-free energy.

Rendering of the Calistoga Resiliency Center, a first-of-a-kind hybrid energy storage system coupling lithium-ion batteries with hydrogen fuel cells. (Photo: Business Wire)

Construction of the BH-ESS, which is being developed for Pacific Gas and Electric Company

(PG&E) on less than one acre of land in the Northern California City of Calistoga, is expected to be completed by the end of Q2 2024. Upon completion, the BH-ESS, dubbed the Calistoga Resiliency Center, will be the first-of-its-kind and the largest utility-scale green hydrogen energy storage project in the United States. The battery portion of the system will be used to support grid forming and black start capabilities. The system will be prepared to power downtown Calistoga and the surrounding area for up to 48 hours during potential Public Safety Power Shutoffs (PSPS), which occur when the powerlines serving the surrounding area must be turned off for safety due to high wildfire risk. PG&E's proposal for the

system was approved by the California Public Utilities Commission (CPUC) in April 2023.

Energy Vault's BH-ESS will replace the traditional mobile diesel generators currently used to energize PG&E's Calistoga microgrid during PSPS events in the area. The project represents a major advance in community-scale microgrid development and a significant step toward realizing the CPUC's vision of cleaner forms of microgrid generation.

"The timely start of construction is an important milestone in our partnership with PG&E to deliver this first of its kind microgrid solution. We greatly look forward to not only its delivery but most importantly to the sustainability benefits it will bring to the Calistoga community," said Marco Terruzzin, Chief Commercial and Product Officer, Energy Vault. "Our partnership with California's largest public utility is yet another example of the growing recognition that optimizing grid resiliency and economics toward achieving decarbonization goals requires innovation that leverages multiple technologies and a 'fit-for-purpose' customer-centric approach when designing energy storage solutions. The City of Calistoga and PG&E have been excellent partners for Energy Vault, and we are excited to bring this innovative project online in the coming months."

"Deploying cost-effective, next-generation energy supply and long-term storage technologies is essential to ensuring grid reliability and to achieving PG&E's goal of a net zero energy system by 2040," said Mike Delaney, Vice President, Utility Partnerships and Innovation. "PG&E is developing a portfolio of promising new forms of electricity generation and storage technologies, and identifying the right applications that will support the further proliferation of these technologies at the lowest capital cost and highest-impact locations."

The energy storage system will be owned, operated and maintained by Energy Vault while providing dispatchable power under a long-term tolling agreement with PG&E. The Company will leverage its **VaultOS™** Energy Management System to control, manage and optimize the BH-ESS operations. The system has been developed under the umbrella of Energy Vault's **H-VAULT™** suite of hybrid configurations leveraging green hydrogen and batteries, to ensure continuity and resilience during PSPS events. By coupling the ultra-long duration capabilities of fuel cells using green hydrogen, and the fast response capabilities of B-VAULT™ lithium-ion batteries, H-VAULT™ provides the clean, reliable, cost-effective back-up power that is critical to enable islanded microgrids during transmission outages.

Under the 10.5-year agreement, Energy Vault will provide "Distributed Generation-Enabled Microgrid Services" – a type of energy service that involves using grid-forming generation and storage resources, to provide energy, fault current contribution and to regulate voltage and frequency within the utility's established parameters to enable the islanding of the Calistoga microgrid during PSPS outages. The solution is designed to operate during PSPS events, serving all the load within a safe-to-energize area in the City of Calistoga, including critical facilities such as fire and police stations, and shared services in the downtown and surrounding area.

## 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 EVx™ 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](http://www.energyvault.com) for more information.

## 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. 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 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 bookings and backlogs 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 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 Quarterly Report on Form 10-Q for the quarter ended September 30, 2023, and in our Annual Report on Form 10-K for the year ended December 31, 2022, 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](http://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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