Fluence Validates Safety of Gridstack Pro 5000 in Benchmark-Setting Fire Safety Tests

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Large-scale testing by Fluence and CSA Group shows Gridstack Pro 5000 system, delivering up to 5.6 MWh in a 20-foot enclosure, surpassing current and emerging safety standards

ARLINGTON, Va., June 12, 2025 (GLOBE NEWSWIRE) -- Fluence Energy, Inc. ("Fluence") (NASDAQ: FLNC), a global market leader delivering intelligent energy storage, services, and asset optimization software, today announced the successful completion of one of the largest fire safety evaluations in the energy storage industry. In partnership with CSA Group, a leading product testing, inspection, and certification organization, Fluence rigorously tested its high-density Gridstack Pro 5000 Series system. The results of these tests demonstrate that the system not only meets but exceeds current and emerging safety standards.

Prior to the fire tests, Fluence conducted five days of explosion testing—two days of dispersion testing followed by three days of deflagration testing —continuing to lead the industry as one of the first companies to perform such a comprehensive explosion risk assessment. During dispersion testing, the system's active ventilation effectively exhausted gases as designed, in compliance with NFPA 69, demonstrating its ability to prevent flammable gas accumulation. During deflagration testing, all six deflagration panels deployed as intended, in accordance with NFPA 68, validating the effectiveness of Gridstack Pro 5000's passive safety features under extreme conditions.

Gridstack Pro 5000 is designed to deliver up to 5.6 MWh of energy within a 20-foot enclosure, making it one of the highest density solutions on the market today to undergo this level of testing. To validate its safety at this scale, the system underwent rigorous testing using fully charged batteries. The large-scale fire tests were conducted at Safe Laboratories in North Carolina under the observation of CSA Group. These tests far exceeded the requirements of the current UL 9540A standard and aligned with emerging safety standards, including the forthcoming NFPA 855 (2026).

Four enclosures containing live batteries were set up using minimum spacings, with the deflagration panels on the center enclosure opened. A fire was deliberately ignited in the center enclosure and allowed to fully develop without the use of fire suppression or firefighting intervention. The results confirmed that Gridstack Pro 5000 enclosures are designed to prevent propagation of battery fires under the conditions tested, even in tightly spaced layouts. No enclosure-to-enclosure propagation occurred, and surrounding battery cells remained within safe limits.

"We designed Gridstack Pro 5000 to push the boundaries of what is possible in energy storage density, and with that comes a responsibility to prove it can be done safely," said Peter Williams, Fluence SVP and Chief Product and Supply Chain Officer. "This testing goes far beyond what the industry currently requires and is not only a validation of our design, but a real-world demonstration of how next-generation systems must perform under worst-case scenarios."

To promote transparency and technical rigor, Fluence invited independent observers, including subject matter experts from organizations such as Hiller and members of standards development committees, to observe testing at Safe Labs.

"Fluence continues to show its commitment to fire safety by going above and beyond industry standards," said Paul Hayes, Hiller VP of Energy Infrastructure, Fire Protection Engineer. "The scale and extent of their testing demonstrate readiness to meet the requirements of the upcoming 2026 NFPA 855 safety standard ahead of publication. Gridstack Pro 5000's successful performance under multiple physical test scenarios confirms the system's safety architecture and Fluence's commitment to industry safety standards."

Throughout the fire tests, Fluence collected detailed gas sampling data to support plume analysis, emergency response training, and permitting guidance—complementing the company's broader safety initiatives, including specialized battery energy storage system training for first responders.

Since 2022, Fluence has advanced safety testing protocols and certification processes across the energy storage industry through deflagration and large-scale fire testing. The company collaborates with leading laboratories to incorporate advanced safety features into its systems, aiming to prevent, detect, and contain thermal events while maximizing energy capacity within increasingly compact footprints.

About Fluence

Fluence Energy, Inc. (Nasdaq: FLNC) is a global market leader delivering intelligent energy storage and optimization software for renewables and storage. The Company's solutions and operational services are helping to create a more resilient grid and unlock the full potential of renewable portfolios. With gigawatts of projects successfully contracted, deployed, and under management across nearly 50 markets, the Company is transforming the way we power our world for a more sustainable future.

For more information, visit our website, or follow us on LinkedIn or X. To stay up to date on the latest industry insights, sign up for Fluence's Full Potential Blog.

Cautionary Statement Regarding Forward-Looking Statements

The statements contained in this press release that are not historical facts are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, Section 21E of the Securities Exchange Act of 1934, as amended, and the Private Securities Litigation Reform Act of 1995. Such statements can be identified by the fact that they do not relate strictly to historical or current facts. When used in this press release, words such as "may," "possible," "will," "should," "expects," "plans," "anticipates," "could," "intends," "targets," "projects," "commits," "contemplates," "believes," "estimates," "predicts," "potential," or "continue," or the negative of these terms or other similar expressions and variations thereof and similar words and expressions are intended to identify such forward-looking statements, but the absence of these words does not mean that a statement is not forward-looking.

The forward-looking statements contained in this press release are based on our current expectations and beliefs concerning future developments, as well as a number of assumptions concerning future events, and their potential effects on our business. These forward-looking statements are not guarantees of performance, and there can be no assurance that future developments affecting our business will be those that we have anticipated. These forward-looking statements involve a number of risks, uncertainties (some of which are beyond our control), or other assumptions that may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements, which include, but are not limited to, factors set forth under Item 1A.“Risk Factors” in our Annual Report on Form 10-K for the fiscal year ended September 30, 2024, filed with the Securities and Exchange Commission (“SEC”) on November 29, 2024, and in other filings we make with the SEC from time to time. New risks and uncertainties emerge from time to time and it is not possible for us to predict all such risk factors, nor can we assess the effect of all such risk 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. Should one or more of these risks or uncertainties materialize, or should any of the assumptions prove incorrect, actual results may vary in material respects from those projected in these forward-looking statements. You are cautioned not to place undue reliance on any forward-looking statements made in this press release. Each forward-looking statement speaks only as of the date of the particular statement, and we undertake no obligation to publicly update or revise any forward-looking statements to reflect events or circumstances that occur, or which we become aware of, after the date hereof, except as otherwise may be required by law.

Media Contact

Shayla Ebsen, Director of Communications
Email: shayla.ebsen@fluenceenergy.com
Phone: +1 (605) 645-7486

Analyst Contact

Lexington May, Vice President of Investor Relations and Sustainability
Email: investorrelations@fluenceenergy.com
Phone: +1 (713) 909-5629