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Hyper-responsive load management system for hyperscalers: MARA and TAE Power Solutions partner for first-of-its-kind grid efficiency platform

Advanced power management system will meet accelerating energy needs of data centers and cryptocurrency mining operations with real-time optimization, reduced peak loads and fast frequency response

Fort Lauderdale, FL, June 25, 2025 (GLOBE NEWSWIRE) -- MARA (NASDAQ: MARA), a leading digital energy and infrastructure company, and TAE Power Solutions, a company commercializing proprietary power management systems derived from fusion energy research, today announced a strategic collaboration to jointly develop a high-frequency, real-time responsive load management system that can be modularly deployed up to GW scales, to meet the energy demand of hyperscale data centers, digital asset compute and other power-intensive industrial operations.

High-Performance Computing (HPC) requires an ultra-responsive energy resource because of unpredictable loads that can spike or drop in a microsecond. This rapid variability in energy use puts stress on data center equipment and the local utility grid.

To mitigate the consequences of load volatility, MARA will leverage TAE Power Solutions' proprietary power management technology to deliver a 10MW clean energy storage network that provides first-of-its-kind microsecond-responsive, controllable load balancing.

The TAE Power Solutions platform is part of an innovative power supply system originally developed for parent company TAE Technologies' (TAE) fusion energy research. Today, TAE Power Solutions' power storage and delivery systems are integral to TAE's fusion progress, along with TAE's advanced particle beam technology and cutting-edge machine learning tools co-developed with support from Google.

At the core of the strategic collaboration will be the TAE Power Solutions D-Series BESS, a flexible and robust platform developed for large commercial and industrial (C&I) and utility-scale applications, designed to operate as a grid-responsive energy module that can be easily integrated into new or existing facilities.

TAE Power Solutions' system uses advanced hardware, real-time control and machine learning–driven algorithms to continuously monitor and balance battery temperature, State of Charge (SOC) and State of Health (SOH) on a microsecond time scale. This high-speed feedback unlocks precision load balancing and fast frequency response, which are essential for maintaining power stability and grid efficiency.

“Meeting the demands of today’s compute infrastructure isn’t just about adding more energy, it’s about making better use of the power we have,” said Fred Thiel, CEO of MARA. “In MARA’s flexible data centers, unused, underutilized or otherwise stranded energy resources are tapped to secure the world’s preeminent blockchain ledger, converting clean energy that would otherwise go to waste into economic value. By collaborating with TAE Power Solutions, we’ll have the ability to respond in real-time to operational demands, reducing the impact of volatile HPC loads and reinforcing resiliency within high-tier data centers."

“As more advanced technologies like AI and HPC become part of daily life, it’s essential that the power systems supporting them can keep up with demand without burdening local electrical grids,” said Kedar Munipella, CEO of TAE Power Solutions. “Our platform is built to deliver reliable, real-time power without putting added strain or cost on utilities or their customers. Together with MARA, we’re enabling the next generation of digital infrastructure to grow in a way that’s not only scalable, but also resilient and responsible.”

The first prototypes are scheduled for deployment by late summer of this year, with larger scale commercialization expected to start in early 2026.

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About MARA

MARA (NASDAQ:**MARA**) deploys digital energy technologies to advance the world's energy systems. Harnessing the power of compute, MARA transforms excess energy into digital capital, balancing the grid and accelerating the deployment of critical infrastructure. Building on its expertise to redefine the future of energy, MARA develops technologies that reduce the energy demands of high-performance computing applications, from AI to the edge. Learn more at **www.mara.com**

About TAE Power Solutions

TAE Power Solutions sees a future fueled by good, clean power. The company’s revolutionary technologies were originally developed to bridge the gap between the amount of power needed to run a TAE fusion research reactor and what was supplied by the local power grid. That innovation has unlocked a complete clean energy ecosystem, including more affordable and efficient storage, ultrafast charging capabilities, electric vehicle powertrains, peak shaving, buffering and second life of batteries. Learn more at **www.power-solutions.tae.com**

MARA™

Source: MARA Holdings, Inc.