Lockheed Martin To Build First Long-Duration Energy Storage System For U.S. Army

GridStar® Flow to demonstrate military grid resilience and drive future solutions

Andover, Mass., June 14, 2022 – Lockheed Martin (NYSE: LMT) has been awarded a contract to build the first megawatt-scale, long-duration energy storage system for the U.S. Department of Defense (DoD). GridStar® Flow will be installed at Fort Carson, Colorado for the U.S. Army under the management of the U.S. Army Engineer Research and Development Center's (ERDC) Construction Engineering Research Laboratory (CERL).

GridStar Flow is an innovative redox flow battery designed for large-capacity storage applications that stores power generated from renewable energy sources and dispatches it to electric grids during peak demand or unanticipated electricity loss.

Lockheed Martin's first customer-sited production system is intended as a demonstration unit for the Army and ERDC-CERL. This system will be tested against protocols that simulate microgrid and renewable integration to ensure critical missions can continue in the event of a long-term power outage. It is expected to have a discharge duration of 10 hours.

"Electric grids are undergoing unprecedented change. Energy requirements are shifting as we consider renewable resources coupled with utility-scale, long-duration storage options," said Dr. Andrew J. Nelson, director, CERL. "Solutions to increase resiliency and self-sufficiency are crucial to economically and sustainably supporting DoD operations."

Insights gained from this pilot project could support the deployment of future long-duration storage across all DoD services and installations.

"We are committed to supporting the U.S. Army's climate strategy to foster modernization and readiness across the force, while seeking out solutions that offer a more secure, sustainable and cleaner future," said Tom Jarvi, Lockheed Martin GridStar Flow program director. "GridStar Flow is designed to meet emerging, long-duration energy storage needs and bolster the necessary grid resilience to combat 21st century security challenges."

Lockheed Martin, ERDC-CERL and the U.S Army plan to break ground on this GridStar Flow project in the fall.

About Lockheed Martin
Headquartered in Bethesda, Maryland, Lockheed Martin Corporation is a global security and aerospace company that employs approximately 114,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products, and services.

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