

GridStar[®] ENERGY STORAGE

GridStar[®] Lithium Energy Storage Supports Solar at Military Base

STRENGTHENING THE ARMY'S ENERGY RESILIENCE & REDUCING LONG-TERM ELECTRICITY COSTS



SYSTEM SIZE & TECHNOLOGY

2 MWh GridStar[®] Lithium energy storage system integrated with a 10 MW SunPower[®] Oasis[®] solar power plant system

APPLICATIONS

Solar-plus-storage

LOCATION

Redstone Arsenal, Huntsville, Alabama

SITE

U.S. Army Garrison supporting 39,000 personnel

PROJECT DEVELOPMENT, CONSTRUCTION & OPERATION

SunPower, a global provider of solar energy solutions

SYSTEM BENEFITS

- Enhanced energy security for mission-critical military base
- Reduced electricity costs and peak demand charges
- Compatible with planned future microgrid
- No upfront installation costs to site owner through Power Purchase Agreement (PPA)

PROJECT SUMMARY

Lockheed Martin delivered a 2 MWh GridStar[®] Lithium energy storage system to SunPower, a global solar energy developer, as part of a 10 MW solar-plus-storage plant built for the U.S. Army's Redstone Arsenal in Huntsville, Alabama.

Lockheed Martin's GridStar Lithium energy storage system integrates with SunPower's Oasis[®] solar power plant installation and intelligent control system—which guides the GridStar system to store energy at lower cost periods throughout the day and discharge energy during demand peaks. The project reduces Arsenal operating expenses by providing electricity at a lower rate to serve the site's 39,000 personnel.

“This project reinforces the Army's commitment to advancing adoption of reliable, cost-effective, home-grown renewable energy at Redstone Arsenal. We're continually looking for ways to grow our capability and reduce our cost to provide the nation with a more efficient defense.”

— COL. THOMAS HOLLIDAY,
GARRISON COMMANDER, REDSTONE ARSENAL¹

through a power purchase agreement (PPA), in which a third party funds the plant's construction, installation, and maintenance costs, and sells the electricity back to the property owner at competitive rates. The Redstone Arsenal project is the Army's first privately funded and economically viable source of energy generation and storage, and is expected to save \$80,000 per year, or \$1.5 million over the term of the PPA.

About GridStar Lithium

Lockheed Martin's GridStar Lithium turnkey energy storage systems are compact, easy to install, and scalable for 100 kW to multi-MW projects. Additionally, the systems have received the important product safety certification UL 9540.

Lockheed Martin Energy is a line of business that delivers comprehensive solutions across the energy industry to include energy storage, demand management solutions, microgrids, military energy solutions, nuclear systems and bioenergy generation. For additional information, visit our website: www.lockheedmartin.com/energy.

SunPower and the U.S. Army's Office of Energy Initiatives financed this solar-plus-storage project



¹ <http://newsroom.sunpower.com/2017-08-23-U-S-Army-Invests-in-1-Megawatt-Energy-Storage-System-to-Complement-10-Megawatt-SunPower-Solar-Power-Plant-at-Redstone-Arsenal>

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