Project Highlight U.S. Army I

U.S. Army Fort Liberty, NC

AMERESCO **Q**

Enhancing Resiliency & Readiness to Provide Continuous Power in Support of Training Mission at Fort Liberty

Technology Type:

Battery Energy Storage System | Boiler | Distributed
Energy Generation | Design-Build | Energy
Efficiency | Floating Solar PV | HVAC | Lighting
Upgrades | Microgrid | Renewable Energy | UESC

Credit: US Army photo by Sharilyn Wells Fort Liberty Garrison PAO

Floating Solar PV System

1.1 MW

UESC Design-Build Contract Value

\$36 Million

Battery Energy Storage System

2 MW / 2 MWh

First Year Utility Cost Savings

\$2+ Million



U.S. Army awarded Ameresco and Duke Energy a utility energy service contract (UESC) to implement power generation and facility efficiency improvements at Fort Liberty.

With one-tenth of the Army housed at Fort Liberty, including Special Operations, Airborne and Global Response Force forces, this energy partnership will deliver imperative energy security and improvements to the installation's utility infrastructure. This supports mission readiness by maintaining a continuous power supply at this critical installation.



Solution

Fort Liberty has the largest population of any military installation in the world with more than 50,000 active duty personnel. In partnership with Duke Energy, Ameresco will deploy a floating solar PV system on the Big Muddy Lake at Camp Mackall, a remote Special Forces training site at the base. Utilizing approximately two acres of water on the lake, this innovative floating solar array will enable power for this remote training site without a requirement for land use. The on-site battery energy storage system will provide seamless transition to on-site generation during utility provider outages.

- Renewable energy and on-site energy generation, including 1.1 MW floating solar PV system
- 2 MW / 2 MWh battery energy storage system
- Boiler, HVAC and Lighting system improvements
- Water conservation systems

This system will supplement power from the local grid and provide backup power during electric service outages. Under the \$36 million design-build contract, Duke secures third-party financing to fund construction, and the U.S. Army pays down the financing annually with the utility savings that the project generates over the term of the contract.



Benefits

The energy partnership between Duke Energy and Ameresco will deliver imperative energy security and improvements to the installation's utility infrastructure. This supports mission readiness by maintaining a continuous power supply at this critical installation. In addition to reducing facility energy consumption, the modernization of building systems is designed to reduce the number and frequency of equipment failures, freeing Army personnel to focus on mission-critical activities.



- Save over \$2 million in first year utility costs
- Reduce site energy use by 7%
- Reduce water use by 20%
- Increase energy resilience at mission critical Post



Founded in 2000, Ameresco, Inc. (NYSE:AMRC) is a leading cleantech integrator and renewable energy asset developer, owner and operator. Our comprehensive portfolio includes energy efficiency, infrastructure upgrades, asset sustainability and renewable energy solutions delivered to clients throughout North America and Europe.

Ameresco's team of energy experts can assist you in identifying the solution that fits your needs. For more information about Ameresco and our full-range of energy efficiency and renewable energy solutions, please call **1-866-AMERESCO** or visit **ameresco.com**.