



## Project Highlight

# Joint Forces Training Base Los Alamitos, CA

AMERESCO 

Microgrid Designed to Provide  
100% Backup Power for Army  
Base and Resiliency for Region

### Technology Type:

Microgrid Controls | Solar PV | Battery Energy  
Storage System (BESS) | Backup Generators

### Land Lease

100 acres

### Solar Generation Capacity

31.5 MW

### BESS Size

20 MW / 40 MWh

### Emergency Backup Generation

3 MW



### Summary

The energy resilience project deployed at Joint Forces Training Base (JFTB) Los Alamitos, CA included the development and construction of a microgrid designed to provide the military base with 100% backup power in emergencies to support the Army and California National Guard, and generate clean, renewable solar energy for the surrounding community during normal operations.



## Solution

The JFTB Los Alamitos microgrid is designed to provide solar-generated electricity and includes a BESS, microgrid controls, and backup generators. The asset comes with a lease of 100 acres of land from the U.S. Army, and the facility will be interconnected with Southern California Edison's power distribution system.

During normal grid conditions, the system exports energy to the grid through a contracted off-take power purchase agreement (PPA). In the event of a grid emergency, the system has the capability to supply 100% of the installation load when the local utility grid is unavailable.

- Microgrid controls
- 20 MW / 40 MWh BESS
- 31.5 MW solar
- 3 MW of backup generators (reciprocating engines)



**This is the first of its kind. We have other microgrids that supply [critical load] power to particular areas of bases ... but this is the first one that will supply power for a minimum of 14 days for the entire base.**

Rachel Jacobson  
Assistant Secretary of the Army  
Installations, Energy and Environment



## Benefits

The combination of distributed generation and energy storage systems playing a critical role in enhancing clean backup power while bolstering security for this military installation. This critical energy resilience project is designed to enable JFTB Los Alamitos to continue operating as southern California's emergency response hub during a natural or man-made disaster. The project is designed to increase energy resilience for JFTB and southern California by:

- Providing the military base with 100% backup power to support the Army and California National Guard
- Adding locally generated carbon-free renewable electricity to the grid – equivalent to powering a residential area of 5,000+ homes – and reducing dependence on fossil fuels
- Modernizing infrastructure to support continued large-scale emergency response operations



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**.