EEI Member Company Military Installation
Project Examples

Arizona Public Service and the U.S. Marine Corps

APS partners with MCAS Yuma to provide reliable, backup power

The U.S. Marine Corps (USMC) partnered with Arizona Public Service (APS) on a rate-based 25-megawatt (MW) microgrid at Marine Corps Air Station (MCAS) Yuma. The microgrid provides reliable, backup power that enhances energy resiliency and security for MCAS Yuma and other APS customers.

Partnership at a Glance

- APS owns, operates and maintains the rate-based microgrid at MCAS Yuma, allowing the USMC to focus on its core warfighting priorities while the microgrid ensures there are no interruptions to the installations mission.
- In exchange for using the USMC’s land to house the microgrid, APS provides in-kind services, including enough back-up power to cover 100 percent of the base’s energy requirements in the event of external grid disruptions.
- The microgrid can provide power to the MCAS Yuma installation within 30 seconds of an outage, ensuring key mission priorities are not disrupted.
- During normal operating conditions, the microgrid also provides APS customers with grid stabilization. In the event of a grid frequency disturbance, the microgrid will switch on automatically.
- Since being deployed in late 2016, the microgrid has been energized more than 144 times for frequency response grid stabilization.
- MCAS Yuma’s microgrid provides value to all APS customers. Energy can be drawn from the microgrid during times of peak energy use which provides local customers with reliable power when energy demand is highest. Additionally, this microgrid can also avoid the expense of building additional infrastructure to meet customer peak demands.
- The facility is monitored 24/7 and the APS-designed microgrid controller constantly monitors the commercial grid and forecasts both outages and frequency events.