



MARINE CORPS AIR STATION & ARIZONA PUBLIC SERVICE **MICROGRID**

A turnkey solution that meets today's needs
and plans ahead for the future

PowerSecure



ABOUT THE CUSTOMER

The Yuma Marine Corps Air Station (MCAS) supports aerial weapons training and serves as a base of operations for Marine Aviation Weapons and Tactics Squadron-1 and Third MAW units.

Arizona Public Service (APS) is Arizona's largest electric utility, serving 1.2 million customers in 11 counties.

THE PROBLEM

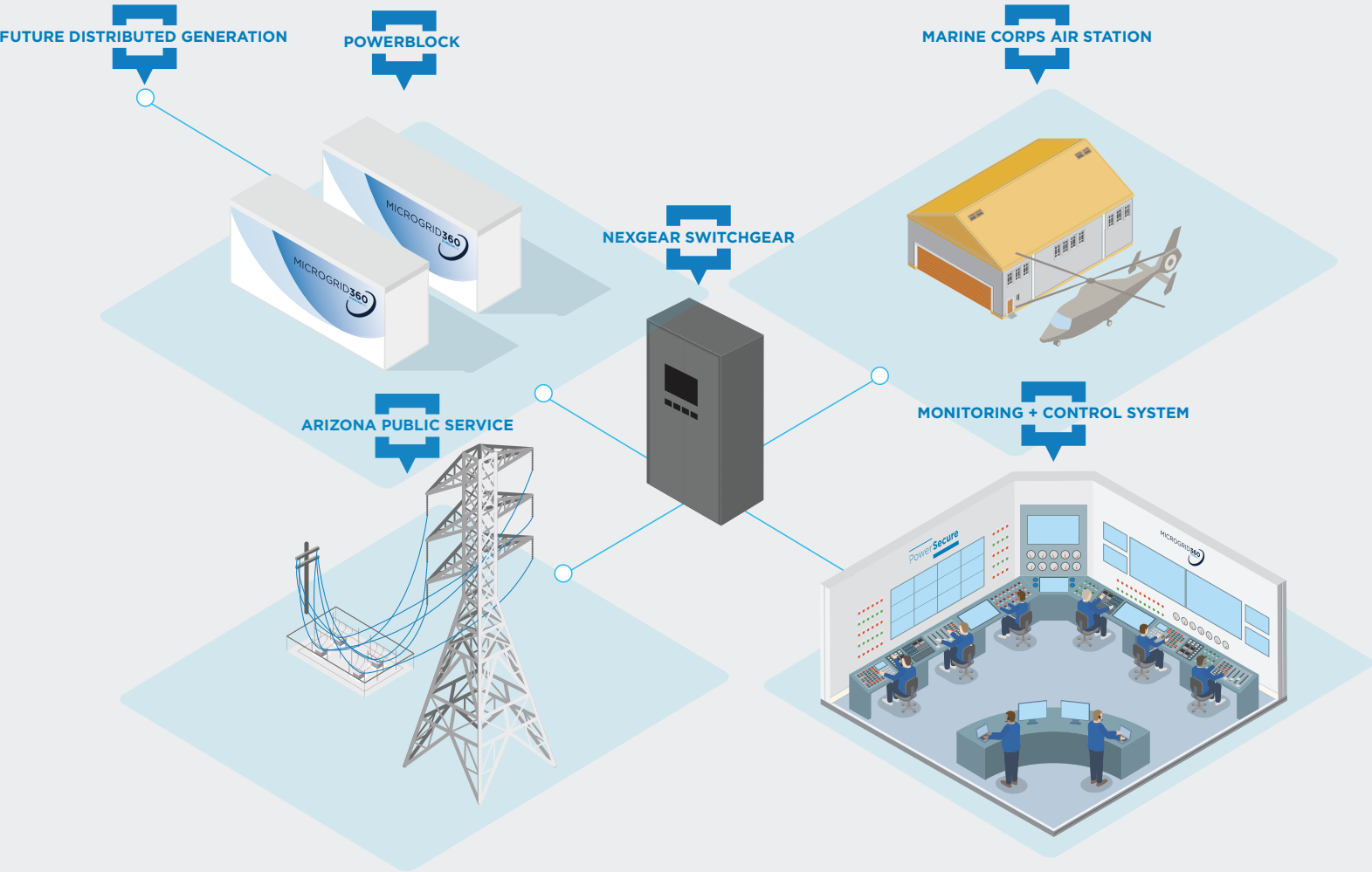
Power outages caused by external failures and renewable source ramping on the grid impact MCAS' ability to fulfill its mission, posing a threat to security.

In September 2011, a massive power outage affected nearly 7 million people in the region, prompting APS and MCAS to jointly pursue a microgrid solution.

THE SOLUTION

PowerSecure built a state-of-the-art microgrid with a Tier 4 Final diesel generator that provides 25 MW of power, autonomous frequency control and peak load management functionality.

The microgrid solution meets 100% of MCAS' standby power requirements, has the flexibility to add capacity as power needs grow and the ability to monitor and service the system 365/24/7.



BENEFITS TO APS AND MCAS

With PowerSecure's industry-leading reliability, PowerSecure's distributed generation solution provided:

- 1** Provides MCAS with 100% standby power and provides APS with Autonomous Frequency Control and Peak Load Management on a highly constrained portion of their distribution system
- 2** Created extraordinary value for MCAS and APS by capturing the true value of peaking power and CALISO stability from the energy markets
- 3** The financial benefits enabled APS to provide this system to MCAS at zero capex and zero change to annual operating costs

"Marines need to train and hone their skills on the base, and that can't be interrupted by natural disasters, attacks or anything that might cause the energy supply to this base to go down. This project is vital to our contribution to national security, and that's not an overstatement."

- Major General John Broadsmeadow,
commander of Marine Corps Installations Command