Market Segment: Utilities

POWER PROFILE

Customer: USS Midway Museum

Location: San Diego, California, USA

Customer Business Issue: Provide 24/7 source of temporary power to USS Midway Museum

Solution: One Cat® XQ750 generator set

Cat® Dealer: Hawthorne Cat

POWER NEED

The USS Midway, the longest-serving United States Navy aircraft carrier in the 20th century, was built in only 17 months. Despite the quick assembly, it missed World War II by one week when commissioned on December 10, 1945. At one point, the carrier was the largest ship in the world and the first in a three-ship class of large carriers that featured an armored flight deck and a powerful air group of 120 planes.

The Midway served for an unprecedented 47 years, playing key roles in the Cold War in 1946 up to its first combat deployment flying strikes against North Vietnam. In 1990, the Midway deployed to the Arabian Gulf in response to the Iraqi seizure of Kuwait and, in the ensuing Operation Desert Storm, served as the flagship for naval air forces.

While the Midway was in service, it had a full complement of more than 4,100 naval officers and crew members, and could reach a cruising speed of 33 knots (38 mph). The ship measures 1,001 feet – more than the length of three football fields.

Decommissioned in 1992, the ship is now a museum ship at the USS Midway Museum in the San Diego harbor. The Midway features more than 60 exhibits from boiler to bridge, including 29 restored aircraft on its flight deck.

SOLUTION

Requiring temporary power to keep all operations running 24/7 over an 11-day electrical upgrade period, engineers from the USS Midway contacted Hawthorne Cat to supply and deliver two rental generator sets that would supply uninterrupted power in case of a power outage.

Hawthorne Cat provided a Cat XQ750 rental generator set to power the entire ship along with a smaller 150 ekW generator set to run the ticket booth on shore and a handicap elevator while the ship was off the grid.

“We needed a temporary source of power not only during the day, but also during our evening events,” said Charles Gordon, chief engineer for the Midway. “So we called Hawthorne to help us because we knew from past experience that they had the capability to supply us with power that was available and dependable over a long period of time.”

As part of the electrical upgrade to the pier, the Midway had to disconnect from San Diego Gas & Electric while new switchgear and other components were installed. Hawthorne Cat rental power representative David Rodriguez and his team designed a process that assured a flawless transition to the generator power, while meeting all OSHA safety requirements.

“We had to bring the ship up to power very slowly to confirm that nothing was being burned,” said Rodriguez. “As you can imagine, trying to turn an entire ship on is pretty intense, so there was a lot of safety planning involved to ensure everything ran smoothly and safely.”

Hawthorne also provided the refueling service for the diesel generators, ensuring that no interruption of power occurred. “Hawthorne
provided a turnkey solution – they came in with a plan, we verified that plan, then they delivered and set up the generators and hooked them up to our connection points on the ship,” Gordon said.

RESULTS
With a power system designed to provide temporary electricity for an 11-day span, the USS Midway was able to upgrade its entire electrical infrastructure without having to close to the public for a single day. As a trusted solutions provider, Hawthorne also provided 25 ekW and 35 ekW rental generator sets to various parts of the ship at four other special events throughout the year.

“They are our go-to guys,” Gordon stated. “We are very satisfied with their professionalism and we will not hesitate to use them again should the need arise.”

For more information, please visit cat.com/powergeneration.