POWER PROFILE

Customer: Navy Federal Credit Union

Location: Pensacola, Florida

Customer Business Issue: Business continuity

Solution: 3516 diesel generator sets (11)

Cat[®] Dealer: Thompson Power Systems



Navy Federal Credit Union serves active duty military personnel, veterans, Department of Defense contractors and their families.



As a member-owned, not-for-profit credit union, Navy Federal Credit Union's mission is to always put members first while providing a full range of financial products and services tailored to military personnel.

POWER NEED

Located in the western Florida Panhandle, Pensacola is sometimes referred to as the cradle of naval aviation.

Naval Air Station Pensacola (NASP) was the first naval air station commissioned by the U.S. Navy in 1914. Tens of thousands of naval aviators have received their training there, including John H. Glenn, USMC, who became the first American to orbit the earth in 1962, and Neil Armstrong, who became the first man to set foot on the moon in 1969.

The Navy's Flight Demonstration Squadron, the Blue Angels, is stationed there, as is the National Museum of Naval Aviation.

With its strong military legacy, it's only natural that the world's largest credit union serving members of the armed forces would establish a major presence in Pensacola. With a 347-acre campus on the northwest side of Pensacola, Navy Federal Credit Union is the largest employer in Escambia County, with approximately 8,200 employees.

Navy Federal Credit Union serves active duty military personnel, veterans, Department of Defense contractors and their families. With \$97 billion in assets, over 8.23 million members worldwide, and more than 18,000 employees, Navy Federal has three main campuses in Pensacola, Fla., Vienna, Va., and Winchester, Va., and serves members at more than 340 branch offices.

A published report last November said Navy Federal is on track to reach the 10,000-employee mark in Pensacola by late 2022 or early 2023. The jobs range from someone starting their first job in collections, to more skilled roles in information technology or executive leadership.

"There's a little bit of something for everyone here," said Bill Pearson, manager of public affairs for Navy Federal in Pensacola. "It's almost like a small city. So, we have needs for a variety of different roles. So, whether you are a skilled craftsmen or a trades person that is an electrician or a plumber, we have roles here for those positions as well." In addition to its burgeoning workforce, Navy Federal's Pensacola campus is also undergoing a massive expansion. The project includes two new office buildings connected by a smaller building that offers amenities. A new six-story office building has opened, with a second six-story building expected to open later this year. Once completed, the two-buildings will double the current capacity of the Nine Mile Road campus.

Navy Federal's campus will exceed \$1 billion in capital investment in 2020, according to the FloridaWest Economic Development Alliance.

"Navy Federal Credit Union has been a transformational project, not just for Escambia County but for the entire state of Florida," said Scott Luth, CEO of FloridaWest, in a published report in the Pensacola News Journal.

"We see Navy Federal's impact in our area in the amount of payroll (that's) spent in our community, by raising the bar in our community by being recognized as a Forbes' 'Best Place to Work' and by the number of volunteers hours donated by their employees to organizations throughout our community."

Last year, for the second year in a row, Navy Federal was recognized by KPMG for delivering the best customer experience, taking the top spot over 295 brands across 10 business sectors.

"Our mission is to serve as our members' trusted financial partner for all of life's important decisions," said Mary McDuffie, president/CEO of Navy Federal. "Our entire team is committed to meeting our members' needs, and we are always looking for new ways to make the member experience even better."

As a member-owned, not-for-profit credit union, Navy Federal Credit Union's mission is to always put members first while providing a full range of financial products and services tailored to military personnel. Navy Federal offers extra-low auto rates, loan discounts, and other products and resources to lighten the load of not only active duty military members, but all veterans.

New employees at Navy Federal attend an orientation that includes a military experience module to create awareness and empathy for situations faced by their members.

POWER PROFILE

Customer: Navy Federal Credit Union

Due to the nature of its membership, which includes actively deployed military personnel in every time zone, Navy Federal maintains 24x7 operations at its three contact centers in Virginia and Pensacola—which is the credit union's largest contact center—as well as round-the-clock online services.

"The men and women stationed overseas don't have ready access to the same type of financial services as they would here at home, so we have to stay up for them," says Tim McClendon, electrical services supervisor for Navy Federal in Pensacola.

SOLUTION

The entire Pensacola campus is backed up by 11 Cat® 3516 diesel generator sets that are housed in two separate buildings. Four gensets are located at the first plant that was commissioned in 2006, while the remaining seven were installed at the newer power plant beginning in 2015 (three of those generators were added in 2018). Combined, the two power plants are capable of producing 26 MW—more than enough to power the entire campus.

"One reason we have so many generating units in the new plant is so we can run the entire campus from it," McClendon says. "Navy Federal is big on redundancy, and having two power plants means we can transfer power from one to the next when preventive maintenance is done on the generator sets, or if there is some other issue."

Navy Federal's Pensacola campus includes just under 2.5 million square feet of buildings. Each Cat power plant (CEP 1 and CEP 2) has the capability of supplying power to the entire campus, including the lights for the parking lots.

Two main utility feeds are routed down Highway 90 to two substations at the Pensacola campus. The utility, Gulf Power, has a transfer scheme so that if power fails at one substation, it automatically transfers to the other and maintains power to the entire campus, McClendon says.

"The feed from Gulf Power comes in and hits the Cat ISO Switchgear," McClendon says. "If the generators come on, we don't know the difference between that and the utility for as fast as the power transfers over. The way we know that is we get a lot of email notifications when those generators come on." While utility outages are rare, there have been several occasions where power was lost due to thunderstorms or a car striking a utility pole.

"If we know that more bad weather is coming, then we will manually start the generator sets and let them stay on," McClendon says, adding that approach has been utilized about four times over the last 10 years. "Most of the time, we let the generators start automatically, but every now and then we make the decision to step in."

The longest consecutive period where the generators supplied power to the campus was when the second substation was added, and the gensets ran for a day and a half.

RESULTS

"Based on my experience, the Cat gensets crank fast, and they are very reliable," McClendon says. "We have had very few issues with them."

The gensets are tested every month by Navy Federal facilities staff. A load bank test is performed one month for 45 minutes under full load, and on alternating months the load is transferred to the campus, which runs on generator power for 30 minutes.

To stay current, McClendon will send two people from his staff every year for two and a half days of switchgear training at the Cat Switchgear facility in Alpharetta, Ga.

"The Cat ISO Switchgear has been pretty much bulletproof—it has been great," McClendon adds. "We upgraded all the PLCs (program logic controllers) and the HMI screens."

Quarterly and annual maintenance is performed by technicians from local Cat dealer Thompson Power Systems.

"Our original technician, Baron Breelin, was the generator guru—he handled everything for us, including commissioning," McClendon says. "And our service rep, Cluis Howell, is very helpful with anything we need.

"All of the Thompson guys have been really good," McClendon adds. "Every now and then if we have a little glitch, they are very responsive. They get back to us right away and get out here pretty quick. They've done a real standup up job for us."



The entire Pensacola campus is backed up by 11 Cat[®] 3516 diesel generator sets that are housed in two separate buildings.

LEXE1679-00 February 2020

© 2020 Caterpillar. All Rights Reserved. CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Yellow", the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

