



Delivering Power to the U.S. Army

Sandhills Utility Services was formed by four neighboring electric cooperatives to run the electric power system for Fort Bragg, Pope Air Force Base and Camp Mackall

By Catherine O'Dell, Photography by Don McKenzie

When the U.S. military needed a partner to keep the electric power flowing to the world's largest Army installation at Fort Bragg, they put their trust in a system set up by four North Carolina electric cooperatives. It was a decision that has added even more pride to Fort Bragg.

Sandhills Utility Services, LLC, formed in 1997 by four neighboring cooperatives, today operates a distribution system that has nearly doubled in size and capability since it began work here 10 years ago. And the system is poised to take on more as Fort Bragg and its affiliated bases and community grow in the coming years.

The four cooperatives that formed Sandhills Utility Services (SUS) in 1997 are Central EMC in Sanford, Lumbee River EMC in Red Springs, Pee Dee EMC in Wadesboro and South River EMC in Dunn. Fort Bragg was the first U.S. military installation to begin the

process of transferring utility services to the private sector. Jeff Brown, the CEO of Sandhills since 2007 who began work here as engineering manager in 2004, has seen the cooperative way of doing business succeed at the military base.

"Sandhills Utility Services is a valuable investment for the cooperatives," says Brown. "We have been able to work with the Army to enhance our services. We offer the military the flexibility of a small company, a single location, on-site decision making and local command and control. More importantly, we never forget that we have one customer—the Army."

Only a handful of cooperatives had previously pursued contracts on military installations prior to the Fort Bragg deal. Today there are 21 cooperatives providing electric service to 20 military installations in 14 states.

A massive job

Fort Bragg is located on over 250 square miles in Cumberland, Hoke, Harnett and Moore counties and the city of Fayetteville. Its population of about 30,000 makes Fort Bragg the largest Army installation in the world. Fort Bragg has all the amenities of a typical mid-sized city including over 20 million square feet of office space, numerous shopping centers, restaurants, banks, medical and dental clinics, a major medical center, schools, churches and recreational facilities.

When SUS began work on Fort Bragg, the system had 665 miles of distribution lines, 9,595 poles, four substations, 2,259 transformers and a capacity of 100 megawatts (mw). Today, SUS maintains 1,050 miles of distribution (all new construction is underground), 11,992 utility poles, five substations (three additional substations are under construction or planned), 3,836 transformers, 105 generators, 26 miles of fiber-optic line and has a capacity of 175 mw.

Orchestrating electric distribution services in this fast-paced environment is not for a novice. Jeff Brown is a former Army officer with over 15 years management experience in engineering, operations, transmission and distribution services at Progress Energy and two years with Edison Electric Institute.

“Keeping a firm footing on the growth and the timing of it is a real challenge,” Brown says. “This job requires a lot of coordination. With the volume of work it is complicated to get projects completed. I spend a lot of time gathering key information in order to mobilize our resources effectively.”

As for any electric utility—if not more so—the system at Fort Bragg requires a dependable, experienced workforce. SUS has 32 full-time employees and 12 to 18 permanent and contract line crews in the field at any given time.

“In the first few years we depended

heavily on contract crews,” says Brown. “The need for consistency of projects spawned the need to grow our engineering department. We have been lucky to be able to hire people with a tremendous amount of project development experience.”

SUS started operations working out of a temporary construction trailer

Once the nation's base realignment is complete, the Fort Bragg area population could grow by over 40,000 military personnel, civilian employees, contractors, support personnel and family members.

then built a 5,000-square-foot facility. A 13,000-square-foot addition is nearing completion.

In addition to the operations and maintenance of the electric distribution system, SUS has recently transitioned to owning, maintaining, repairing and replacing the installation's generators—some as large as 1.5 to 2 mw. Additionally, they are tackling all of the metering, as well as the inventory, repair and replacement of all sports field lighting. By October the SUS contract will be expanded to the adjacent Pope Air Force Base

generators, green ramp lights, sports field lights, meters and beacon lights.

Providing electric service for facilities on a military base in a state of continuous readiness means a lot of extra equipment.

“Most buildings are loop-fed so that they have a second source of power in the event of an outage,” Jeff Brown stresses. He adds, “We have SCADA (Supervisory Control and Data Acquisition) fully deployed on all of our equipment, including generators. And the entire system is GIS mapped—all gen-

erators and street lighting are mapped to the appropriate building.”

Also like other utilities—and certainly more so—SUS repairs, updates and replaces infrastructure as needed. “Providing electric service on a military installation is different than any other utility,” Brown says. “Equipment tends to get destroyed during training exercises and that is just part of it.”

A massive expansion

In 2003, SUS introduced a 50-year operations and maintenance contract to provide existing and future electric



A construction crew installs concrete light bases.



Locating underground facilities before digging.

distribution on Fort Bragg, Pope Air Force Base and Camp Mackall in nearby Richmond and Scotland counties. The plan came just in time. By 2005, Fort Bragg had been chosen as the new home for the U.S. Army Forces Command (FORSCOM) and the U.S. Army Reserve Command (USARC). These units, among others, are expected to relocate here from Fort McPherson, Ga., by October 2011. Once the realignment is complete, the area population could grow by over 40,000 military personnel, civilian employees, contractors, support personnel and family members.

FORSCOM is responsible for 750,000 active and reserve soldiers nationwide. USARC is responsible for the command and control of all the nation's Army Reserve forces, and it provides the logistical, operational and functional supervision to ensure wartime preparedness of all Army Reserve units.

The military is expected to spend \$1.3 billion on construction projects on Fort Bragg by 2013, while additional privatized military housing is estimated at \$336 million, according to the Comprehensive Regional Growth Plan prepared by the BRAC (Base Realignment and Closure) Regional Task Force, which represents the surrounding counties and municipalities.

Not only has there been a flurry of construction projects to prepare

the sprawling 18-building FORSCOM/USARC complex featuring a 700,000-square-foot headquarters building, but SUS has come to expect certain unforeseen construction projects as well.


"Construction of the FORSCOM headquarters is a huge project, but we have also seen a lot of growth from other (military) contractors needing buildings on post to support FORSCOM," Brown

says. There have been calls for new barracks, dining facilities, health clinics, offices, motor pool and maintenance structures and family housing units.

All across Fort Bragg, the traditional white clapboard-sided bay-style WWII era barracks are being replaced by multi-story brick and stucco barracks containing suites to accommodate four to eight soldiers each. Approximately 2,700 soldiers relocating to Fort Bragg will be living in military housing.

Recently, Fort Bragg launched a new housing venture along with Picerne Military Housing to set a new standard of living for military families. Linden Oaks is built on 1,100 acres

off NC Hwy. 87 in Harnett County. Once complete, the controlled-access subdivision will ultimately have 1,262 homes for junior enlisted and senior non-commissioned officers, as well as company and field grade officers. Linden Oaks has Fort Bragg fire and police protection, a child development center, two recreational centers with community pools, two elementary and one middle school, and a dog park.

Like its cooperative partners, SUS is committed to its surrounding community. SUS holds an annual golf tournament to benefit the schools on post. Proceeds are split among all Fort Bragg schools and given to their PTAs and guidance departments. Brown admits he was inspired by the North Carolina cooperatives' Bright Ideas teacher grant program and decided that Sandhills Utility Services also is suited to help the children of our nation's warriors. 

Catherine O'Dell is manager of member and public affairs at South River EMC, Dunn.

Sandhills Utility Services
www.sandhillutility.com

BRAC Regional Task Force
www.bracrftf.com

Fort Bragg
www.bragg.army.mil



Reviewing plans for substation upgrades are (from left) Sandhills Utility Services engineering manager David Keith, CEO Jeffery Brown, and operations manager David Austin.