

Fort Benning Ready to Generate Renewable Electricity from Landfill Gas

Southern Research begins year-long, in-field demonstration of new technology developed by FlexEnergy Inc.

DURHAM, N. C. - Southern Research Institute today announced they have completed the installation of the Flex Powerstation™ FP250 at the Fort Benning First Division Road Landfill in Georgia and will begin evaluating a technology that generates electricity using low-quality landfill gas.

Funded by the U.S. Department of Defense's (DoD) Environmental Security Technology Certification Program (ESTCP), this novel technology implementation at Fort Benning is part of DoD's ongoing effort to provide solutions that meet its high-priority environmental and energy goals. The successful installation of the Flex Powerstation™ marks a pivotal point in the program's goal of validating innovative technologies and encouraging their adoption throughout DoD.

When fully operational, the Flex Powerstation™-developed by FlexEnergy Inc.-will convert landfill gas into enough renewable electricity to power the equivalent of 250 homes, reducing both the Army's carbon footprint and bottom line. This waste-to-energy solution delivers on the growing promise of renewable energy's integration into the power grid. The system incorporates a proven microturbine generator technology with a pressurized thermal oxidizer to produce electricity from fuels as low as five percent methane.

"We support more than 130,000 soldiers and civilians living, working and training in this community," said Vernon Duck, Fort Benning's Energy Manager. "We will use the clean electricity generated onsite to power our internal operations and help reach the DoD's energy independence, renewable energy, and sustainability goals.

"The Flex Powerstation™ finished initial operational tests on Aug. 19, producing more than 11,000 kWh of renewable energy during the test. After completing a final set of operational and landfill integration tests over the next two weeks, the system will generate renewable electricity full time. Southern Research will then independently collect and analyze cost and performance data of the system over a one-year demonstration period. This independent validation will help overcome barriers typically associated with deployment of innovative technologies, allowing potential DoD and other users clear information on the impacts of the technology.

"Our work with ESTCP will provide the military with another validated tool in their toolbox for meeting DoD's aggressive renewable energy, energy security, and environmental goals," said Tim Hansen, Program Manager for Southern Research. "By using FlexEnergy's unique technology to generate electricity from previously unusable methane gas, a new potential renewable energy source is made available, and an environmental headache-venting and flaring of gas-is potentially eliminated."

About Southern Research

Southern Research is a not-for-profit 501(c)(3) scientific research organization that conducts advanced engineering research in materials, systems development, environment and energy, and preclinical drug discovery and development. Southern Research has more than 550 scientific and engineering staff that support clients and partners in the pharmaceutical, biotechnology, defense, aerospace, environmental and energy industries. Headquartered in Birmingham, Ala., Southern Research has facilities in Wilsonville, Ala., Frederick, Md., and Durham, NC and offices in Huntsville, Ala., New Orleans, La., and Washington, DC.

About ESTCP

ESTCP is the U.S. Dept. of Defense's environmental technology demonstration and validation program. The Program was established in 1995 to promote the transfer of innovative technologies that have successfully established proof of concept to field or production use. ESTCP demonstrations collect cost and performance data to overcome the barriers to employ an innovative technology because of concerns regarding technical or programmatic risk, the so-called "Valley of Death." The Program's goal is to identify and demonstrate the most promising innovative and cost-effective technologies and methods that address DoD's high-priority environmental requirements. For more information, visit www.estcp.org.