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Ribbon cutting at North Carolina's largest fully operational swine waste-to-energy facility

Over 98% runtime and near maximum capacity output offers “proof of concept” for larger-scale swine waste-to-energy plants

Charlotte, NC (June 27, 2014) – The official ribbon cutting ceremony took place today at the Storms Hog Power (SHP) facility at the Storms Hog Farm near Bladenboro, North Carolina. The 600 kW facility is North Carolina's largest swine waste-to-energy system operating at full capacity.

The concept for the project evolved from a grant for four swine farm renewable energy pilot projects administered by the NC Department of Energy, applied for in May of 2010 by Sam Ravenel, co-founder of Withers & Ravenel consulting engineers, and Dr. Garth Boyd, Senior Partner of The Prasino Group.

Dr. Boyd formed AgPower Partners LLC (APP) with energy and real estate developer, Jeffrey R. Smerko, to develop the Storms project. APP enlisted the services of key industry leaders DVO, Inc. for its patented Two-Stage Mixed Plug Flow™ anaerobic digester, Martin Machinery/GenTec for its biogas engine/generator turn-key services, Barnhill Contracting Company for construction management and expertise, and CohnReznick LLP for tax credit advisory and transaction structuring services. CohnReznick LLP also provided audit and advisory services for a \$1.5M US Treasury Grant and sourced over \$1m in state tax credits.

APP was able to facilitate construction and term debt financing through Cape Fear Farm Credit for the project owner and operator, William R. Storms, who is also the farm owner and operator.

The 600 kW plant has been in near constant operation since it came on line October 4, 2013, and has sustained peak or near peak output for the past 90 days.

Jeff Smerko, managing principal of AgPower Partners said, “Dr. Boyd and I put a great team together, but without the vision, conviction and financial commitment of Mr. Storms

and the hard work and dedication of his sons-in-law Matthew Long and Don Britt, we would not be standing here today witness to this revolution in the industry. It was a privilege working with and becoming friends with his entire family. Hopefully others will embrace this concept as proven, scalable, and economical.”

Mr. Smerko continued, “What is really amazing is what you don’t see or actually, smell. Spending the better part of the past two and a half years down here, I thought that I had just grown accustomed to it. But that’s not it. The odor now is virtually gone.”

“Anaerobic digestion presents many benefits far beyond power generation,” said Steve Dvorak, owner and founder of DVO, Inc. “For progressive hog farmers like Mr. Storms, it’s also about being a good steward of the land. Our digesters reduce greenhouse gas emissions from stored and land-distributed farm wastes by roughly 90%. Pathogens in farm waste, including e-coli and salmonella, are reduced so much that they are almost undetectable, and our new nutrient recovery technologies allow for the practical removal of additional phosphorus and ammonia nitrogen. We’re excited to have been a part of this project and look forward to helping more farmers like Billy and their communities benefit from anaerobic digestion.”

Jon Gross, Charlotte-based partner at CohnReznick LLP, commented “The North Carolina Senate Bill 3, mandating that utilities have swine generated electricity as a small part of their total portfolio, enabled farmers like Mr. Storms to try something that would have been untenable without the incentive. The team that developed Storms Hog Power has overcome bureaucratic and modeling challenges to make the project bankable. The end result is a model that makes sense, that works – and that can be repeated. We figured it out.”

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STORMS HOG POWER - Background

Storms Hog Power anaerobic digester and renewable energy generating system, in tandem with an enhanced animal waste extraction and collection system that uses scrapers instead of flush water to remove manure from the houses, greatly reduces the negative environmental impacts of the current lagoon and spray field manure management systems, while profitably generating renewable energy and other valuable byproducts.

Manure collected daily from nearly 30,000 hogs, formerly treated in open air lagoons, mixed with off-site agricultural wastes which were previously either land applied or destined for a landfill, is biologically decomposed in an oxygen-free, 1.2 million gallon reinforced concrete vessel. The bacteria in the digester metabolically break down the organic waste streams and generate energy-rich biogas, while destroying nearly all of the pathogens and

odor. The biogas is combusted in an engine/generator, sending enough clean renewable electricity to the local utility to offset the electricity consumption of nearly 300 average size homes in the area.

North Carolina Electric Membership Corporation purchases all of the electricity under a long-term contract. This revenue, combined with tipping fees for processing the off-site agricultural waste, the sale of the carbon credits and Renewable Energy Certificates, and the sale of other valuable byproducts, support the sustained operation and maintenance of the facility.

The Two-Stage Mixed Plug Flow™ anaerobic digester was developed and patented by DVO, Inc. The fully remote-controlled engine, generator and switch gear were provided by Martin Machinery Inc. and its sister company GenTec LLC. The site layout, building and feedstock delivery systems were designed by Withers & Ravenel, Inc., with Barnhill Contracting Company providing construction management and contract administration. AgPower Partners LLC oversaw the entire project, procuring all construction, financing, power off-taker, utility interconnection and renewable energy attribute contracts.

Project Development Team:

Project Developer: AgPower Partners LLC

AgPower Partners LLC was formed for the development of this project and to promote agriculture waste-to-energy projects in North Carolina. (jeff.smerko@agpowerpartners.com)

Biofuel Technology Provider: DVO, Inc.

Since 2001, DVO Inc.'s anaerobic digesters have transformed organic waste streams into power and other useful byproducts at the highest levels of efficiency and reliability in the industry. www.dvoinc.net

Engine/Generator Provider: Martin Machinery, Inc./Gen-Tec LLC

Martin Machinery has built and supported operating biogas projects since 1983. Independent sister company Gen-Tec LLC was formed to build customized paralleling gear. (mmartin@martinmachinery.com)

Biogas Conditioning Provider: Energy Cube LLC

Energy Cube biological scrubbers require minimal ongoing cost and maintenance. Energy Cube can also supply other types of scrubbers, including iron sponge types. www.energycubellc.com

Project Engineer: Withers & Ravenel, Inc.

Withers & Ravenel is a full-service civil and environmental consulting engineering firm offering a broad range of quality professional services. Our staff is dedicated to providing innovative and cost-effective engineering solutions. www.withersravenel.com

Transaction Structuring /Tax Credit Advisor: CohnReznick LLP

As the 10th largest accounting, tax, and advisory firm in the United States, CohnReznick helps its renewable energy clients effectively navigate multifaceted business and financial issues. www.cohnreznick.com

Offtaker Utility: NCEMC

North Carolina's electric cooperatives provide reliable, safe and affordable energy and related services to more than 950,000 households and businesses from the Blue Ridge Mountains to the Outer Banks. www.ncemcs.com

Construction Management: Barnhill Contracting

At Barnhill Contracting Company, we understand that our reputation is built one project at a time. More than 70% of our business comes from repeat clients and we understand the importance of maintaining their trust. www.barnhillcontracting.com