# I Power and Phase 3 Partner With Farmers For Environment

Business Wire , March 18, 2008

Innovative System to Improve Little Rabbit Watershed

ANDERSON, Ind. -- The Little Rabbit River is used as both a public water supply and a warm-water fishery. These uses make the river an invaluable asset and resource to the people of Overisel Michigan. The land in and around the Little Rabbit River is roughly 73% agricultural, making it susceptible to excessive nutrient and sediment contamination from cropland, as well as from animal waste runoff. These contaminants cause concerns for the users and the ecosystem of the Little Rabbit River Watershed prompting action among the people in and around the water system.

To address this issue, farmers in the area worked with a team comprised of Phase 3 Renewables and I Power Energy Systems for a solution to this growing concern. What they came up with was an innovative project combining an anaerobic digester and two 65kW generators. The system is currently being commissioned at an 8000 head swine finishing facility and will provide an enhanced nutrient management system, self-sufficient energy production, and will produce pelleted fertilizer and clean irrigation water. This pioneering project will provide these benefits to both dairy and non-dairy operations by utilizing separated bio-fibers. The odorless, pathogen and weed-seed-free nutrient pellets can be broadcasted onto fields in a single annual application (reducing soil compaction, traffic and vehicle emissions) at agronomic rates, sold outside of Allegan County to a host of commercial opportunities, or used as replacement bedding for dairy cows.

While the anaerobic digester itself is addressing the treatment of the waste it is also producing the methane for the generators. The two 65kW generators are making the farm self-sufficient by providing the farm's full electrical services and heating requirements thus displacing some farm costs. These generators are not only providing the benefits of electricity and heat, but they are also significantly reducing the CO2 and methane released to the atmosphere making the entire system and the surrounding farms more environmentally sound.

This eco-friendly and self-sufficient process can be easily transferred to almost any other site where these benefits are desired, and it does not require special capabilities beyond the basic mechanical and operational skills possessed by typical farmers. Also, because the capital and operating costs are proportionate to the size of the installation, the technology can be economically reapplied to somewhat smaller or larger operations making it an accessible technology and an obtainable solution for similar issues.

To help with this project Geerlings Hillside Farms was awarded the USDA Section 9006 Renewable Energy Grant that recognizes the significant positive influence on energy conservation and animal waste management, as well as the prestigious Michigan Julian-Stille Agricultural Innovation Grant. Also, Phase 3 was awarded the Farm Pilot Program Coordination Innovation Grant.