



Marina Energy LLC

Atlantic County Utilities Authority Landfill Gas-to-Energy Project

The Atlantic County Utilities Authority operates a solid waste landfill and disposal facility at its 365-acre Haneman Environmental Park in Egg Harbor Township, New Jersey.

Recognizing the energy potential of methane gas, ACUA approved the development and installation of a collection system to capture and convert the gas to electric power. Methane gas, commonly called landfill gas, is a by-product of the decomposition of organic materials. It contains nearly half the energy content of natural gas. Without a control mechanism, the gas passes through the landfill's surface, producing unpleasant odors and more significantly, contributing over 20 times the global warming effect of carbon dioxide.

ACUA selected AC Landfill Energy, LLC, a joint venture of Marina Energy and DCO Energy, to construct a 1,600 kW landfill gas-to-energy facility to burn the collected gas in a reciprocating engine-generator set. The process, which converts the harmful elements of landfill gas into standard products of combustion, generates enough electricity to power ACUA's on-site operations and approximately 300 homes.

AC Landfill Energy retains the gas rights as well as owns, operates and maintains the facility over 15 years. The electricity is purchased by ACUA with the excess electricity marketed to the regional transmission system through Marina's sister company, South Jersey Energy.

This renewable energy project was financed with the aid of a tax-exempt debt from the NJ Economic Development Authority and a grant from the NJ Board of Public Utilities.

Client:ACUA and PJM Interconnection

Location:Egg Harbor Twp., New Jersey

Services:Electric Generation and Landfill Gas Disposal

Project Start:2004 (Q4)

Plant Capacity:1,600 kW electric

Developers:Marina Energy LLC and DCO Energy, LLC d/b/a AC Landfill Energy, LLC

Project Amount:\$3 million

