



City of Winston-Salem Landfill Winston-Salem, NC - 4350 kw

The Salem Energy Systems (SES) facility is a landfill gas to energy plant producing a gross output of 4.3 megawatts of electrical power. The facility is located at the Hanes Mill Road Landfill which is owned by the City of Winston-Salem in North Carolina. The plant began commercial operation in July of 1996. The net 3.34 megawatts of electrical generation produced by the plant is sold to Duke Power Company for distribution to it's customers. This is adequate electricity to supply the electrical needs of almost 4,700 homes in Duke Power's service territory.

The plant's design centers around one Taurus T-6500 landfill gas-fired turbine from Solar Turbines Inc. Salem Energy Systems' turbine plant receives gas from a landfill gas collection system consisting of 112 extraction wells and over 21,000 linear feet of collection piping. Because the turbine requires high pressured gas, a compressor station is used to deliver the landfill gas to the turbine at 225 psig.

Salem Energy Systems is a joint venture with Landfill Energy Systems owning 50% of the generating facility. Landfill Energy Systems is responsible for the general management of the facility.