

Select Renewable Energy Experience



DIAMOND ALTERNATIVE ENERGY BIOREFINERY

Thomaston, GA

O'Neal is currently constructing a demonstration plant that will utilize proprietary biorefinery technology, developed by American Process Inc. (API), to produce cellulosic fuels and chemicals. The demonstration plant will show that cellulosic biorefineries are feasible and economically viable for rapid commercialization. The biorefinery is being developed through a partnership between Diamond Alternative Energy, a wholly-owned subsidiary of Valero Energy Corporation, and American Process Inc.



TAYLOR BIOMASS

Montgomery, NY

Taylor Biomass has selected O'Neal to construct a biomass facility in Montgomery, NY. The Montgomery Project uses the proprietary "Taylor Energy Solution" as the foundational technology for a three-part, integrated system design that converts the organic biomass portion of mixed solid waste (MSW) to electric power through gasification. The design of the Taylor Gasification Process uses three fluidized-bed reactors: a gasification reactor, a gas conditioning reactor, and a combustion reactor. The gasification and combustion reactors are circulating fluidized beds, while the gas conditioning reactor is of the bubbling fluidized bed type.



GE POWER SYSTEMS

Greenville, SC

O'Neal provided construction services to GE Power Systems for the installation of a solar array. In one year, the solar array produces over 145,000 kWh. GE selected O'Neal to install, tie in and landscape the array. Erection of the panels and electrical were self performed by O'Neal. This location was a pilot site for GE's involvement in the installation processes. The installation information was furnished to GE so they could develop instructional information and procedures for future customers.



TODD & SARGENT BIODIESEL PLANT

Emporia, KS

O'Neal was chosen to prepare detailed design documents for a 60 million gallon-per-year biodiesel facility located on a 40-acre site. The facility included a manufacturing building, tank farm, rail sidings, offload terminal, administration building, storage building, fire water supply tank, and related roads and parking areas. The O'Neal design included an 8,000 foot soybean oil pipeline routed from a nearby soybean processing facility. Other critical design elements included eight API-650 field-erected tanks for oils, methanol and related biodiesel feedstocks. O'Neal provided design for vessel sizing/design, vent relief, controls, materials of construction and required pumping. O'Neal process design efforts included the facility fire protection systems along with leadership in the HAZOP.

ECOPLUS

Charlotte, NC

EcoPlus, Inc. selected O'Neal to provide project delivery services for its planned waste-to-energy processing plants. O'Neal will provide design, procurement, and construction services for locations under development by EcoPlus, Inc. EcoPlus, Inc. holds patented technology for the conversion of fats, oils, and grease (FOG) into a solid, high-BTU, renewable fuel that is used in the generation of electricity.



TODD & SARGENT BIODIESEL PLANT

St. Rose, LA

O'Neal provided detailed design documents for a 60 million gallon-per-year biodiesel plant located at an intermodal fuel terminal facility in St. Rose, LA. The project included the transfer of facility and process design information from an existing biodiesel facility in Iowa. O'Neal's design scope included the process, piping, structural, HVAC and utilities for outside battery limits (OSBL) of the facility. O'Neal worked closely with the technology provider to integrate OSBL scope with the inside battery limits (ISBL) project scope.