



UTILITY WASTEWATER TREATMENT SYSTEM PROJECT

POWER UTILITY – SOUTHEAST USA

TOTAL INSTALLED COST \$28,000,000

PENTA provided civil, structural, mechanical, HVAC and electrical engineering and design services for a North Carolina utility wastewater treatment system to treat the purge stream from a flue gas desulfurization system. PENTA provided the preliminary engineering to support the permit application and the detailed engineering package for construction. The wastewater treatment system process design was provided by others.

The PENTA Civil/Structural/Architectural scope included site design, building design, equipment foundations and pipe supports. The system bioreactor had 16 compartments, 123 ft x 75 ft x 26 ft.



A total of 640 drawings were prepared including 410 loop sheets.

The Mechanical scope included plant layout, equipment arrangements, piping and HVAC design. The piping was extensively HDPE.

The Electrical scope included power distribution throughout the facility, lighting, grounding as well as instrumentation control wiring and loop sheets. The control system consisted of Emerson DCS.

