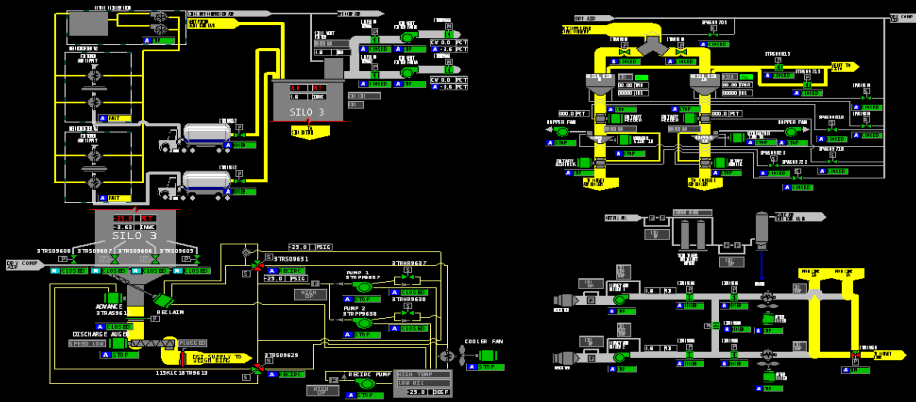


Bulk Storage, Unloading and Transfer System



PROJECT: Bulk Storage, Unloading and Transfer System SO₂ Mitigation

CLIENT: National Power Generation Company

LOCATION: Ohio River

PROJECT DESCRIPTION:

River provided engineering services for dry sorbent storage, unloading, transfer and distribution at a generation plant along the Ohio River. The project provided materials needed for a component of the flue gas desulfurization (FGD) process at this plant and additional plants in this region.

The system is designed with pneumatic rail unloading to three 500-ton bulk storage tanks. The sorbent material has unique properties which require the product to be reclaimed from the storage tanks using specialized hydraulic equipment. The product is then transferred pneumatically using specially designed air conditioning equipment to a day silo located near the flue gas ducts for the generation units. The system is designed with truck loading equipment using air gravity conveyors, telescoping spouts and scales to facilitate distribution of the product to other plants.

River provided the following engineering services for the project:

- Structural foundation loads
- Structural steel design
- General arrangement drawings
- Mechanical process piping details
- Instrumentation and controls wiring diagrams
- Elementary schematics for equipment control
- Physical routing of raceways and cables
- Mechanical, control and operational specifications
- Electrical and mechanical equipment procurement

