DP&L Stuart & Killen FGD Projects

CONTRACTOR OF CHOICE

Early in 2006, Bowen Engineering reached a new milestone in company history with the largest single pour of 4,500 cubic yards (cy) of concrete for the chimney stack foundation at the Dayton Power & Light (DP&L) Stuart project. Additionally, Bowen crews completed 3,000 cy, 2,500 cy, 1,800 cy and numerous other 500 cy pours at the Stuart and Killen project sites.

Bowen's $30M site and civil underground utilities projects progressed simultaneously at two individual power generating stations, J.M. Stuart Station in Aberdeen, Ohio, and the Killen Station in nearby Manchester, with minimal interruption of planned generating capacity.

The objectives of the projects were to mitigate sulphur dioxide and mercury oxide emissions on each of the 600-megawatt, coal-fired units over a three-year period to comply with federal EPA requirements for reducing these emissions.

DP&L's goal was to provide a guaranteed 97% removal of sulphur dioxide using CT-121 FGD technology, which also conserves more power over standard methods. The new technology reduced upwards of 487,000 tons of sulphur dioxide, a significant proportion of the fine particulate matter and mercury oxide emissions.

The scope of the FGD project included the addition of new ductwork down-stream of the existing electrostatic precipitators, new booster fans, new flue gas quenching, new absorber vessels, new wet ducts, and a new common wet stack servicing all four units.

Other components of the project included coordination of limestone barge unloading, receiving, storage, grinding, slurry preparation, gypsum dewatering, storage and load-out. Electrical power, control and utility services were also part of the FGD work that involved coordination with Bowen Engineering and many other prime contractor's work sequence.

Bowen Vice President Jim Ankrum, stated, "For any project of this size, coordination and communication are essential to meet project deadlines. The Bowen team, many subcontractors, and client Dayton Power & Light, worked closely to manage schedules, reduce delays and keep workflow on schedule. The magnitude of this project involved coordination and access challenges unlike any other in Bowen history."

HIGHLIGHTS

Total Contracts
$30,000,000

Project Locations
Aberdeen, OH
Manchester, OH

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