Plant Jack McDonough

OWNER | Georgia Power

LOCATION | Smyrna, Georgia

FACILITY TYPE | Electric generation facility

PROJECT BACKGROUND

After Georgia Power completed construction of their new three-unit/840-megawatt combine cycle gas power plant, Brandenburg was contracted to demolish their 1960's vintage Plant Jack McDonough. This coal-fired power plant had a generating capacity of 517 megawatts and consisted of a boiler house containing two boilers, the turbine hall, precipitators, an 835-foot tall concrete stack, as well as the associated coal yard facilities and various outbuildings. Once demolition was complete, Brandenburg reused approximately 15,000 cubic yards of concrete, brick, and block that was generated from the demolition of the existing structure as well as importing over 65,000 cubic yards of material to backfill the 37-foot deep basement that covered the entire footprint of the boiler house and turbine hall. Brandenburg also performed the decontamination work, which included package and disposal of all hazardous materials such as asbestos, ash silo, ash trench, tank removal including acid and caustic, transformer oil, PCB contaminated concrete slabs, and other hazardous waste.

The project started in August 2012 and finished on schedule in January 2014. With over 101,000 man hours, no recordable injuries or near misses, this project is considered to be one of Brandenburg's most successful jobs, accomplished by well-engineered plans, a skilled workforce, and safe work plan.

SCOPE OF WORK

Demolished turbine room and two turbines with 37-foot deep basement situated directly beneath the turbine room floor

Removal of boiler house including two 1,734,000 lb/hr boilers, associated ductwork and precipitators

Removal of mechanical equipment, structural steel, scrap material, electrical, instrumentation equipment

Asset recovery

Asbestos abatement and hazardous waste removal

Site restoration: Importation of approximately 80,000 cubic yards of clean fill

Concrete stack removal – 835 foot tall, 180 foot circumference with inner steel stack of same height

Sealing of intake and discharge structures/lines

Electrical and mechanical reroutes to facilitate removal of the above structures

Removal of acid, caustic, and water storage tanks

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