Power
Cogeneration

Client
Air Liquide

Location
Geismar, Louisiana, USA

Air Liquide Shell Cogeneration Facility

CH2M HILL provided engineering, procurement, construction and startup and testing of an 80 MW Cogeneration Plant at Shell's Geismar, Louisiana facility. The major plant equipment consisted of two General Electric Frame 6B Gas Turbine Generators and two Deltak HRSG's.

Value Added

Examples of value added by CH2M HILL include the following:

- CH2M HILL managed the GE Combustion Turbine Generator and the Deltak HRSG purchase orders on behalf of the Owner, including a plant Performance Test and performance testing of GE combustion turbines and Deltak HRSG's.
- CH2M HILL did configuration of DCS and interfaced the system with the existing Shell Chemicals Plant.
- Plant was constructed inside Shell Chemicals Plant.

Project Specifics

The Project had an aggressive schedule and budget associated with CH2M HILL's scope of work. All cost and schedule milestones were achieved. In fact, the commercial operation date was achieved just 13 months after site mobilization. The Project required CH2M HILL to interface with many companies, including Shell and Air Liquide, the Project prime. The Project involved a "first-of-a-kind" installation of GE 6B gas turbines manufactured in Europe to specific US standards. CH2M HILL was required to interface with Germany, France and GE's Schenectady, NY offices for project issues from engineering through startup and testing.

The Project was designed utilizing a 3D model, which was used for constructability reviews, sequencing plans and design integration. The Project was essentially free of interferences due to design overlap. The Project also had a commendable safety record, with zero lost time cases.