

COMBUSTION TURBINE & COMPRESSOR REPAIR

WILLIAMS FIELD SERVICES
CAMERON MEADOWS PLANT
CAMERON, LOUISIANA



DESCRIPTION:

The Cameron Meadows plant is a natural gas processing facility that takes raw fuel from the Gulf of Mexico, removes liquids and provides natural gas to the Williams pipeline system. The heart of the plant is a GE Frame 5R combustion turbine that drives a Cooper centrifugal five stage compressor enabling the plant to process the raw gas into pipeline quality natural gas. The plant had sustained extensive damage from hurricane Rita in September 2005. When the eye of the hurricane passed over Cameron, the storm surge associated with the storm was as high as eight to 10 feet. Inside the plant, the salt water level rose up the split line section of the turbine and much of the major equipment was under water. Dirt and debris covered the entire area, infiltrating even the smallest of spaces.

SERVICES PROVIDED:

NAES was awarded the contract to perform the work necessary to repair the damaged turbine and compressor unit and return it to operating condition in the shortest time frame possible. NAES began work at the plant on November 1, 2005 and performed the following scope of work enabling the plant to resume operation in February 2006:

- Overall project management for the turbine/compressor and associated systems
- Complete disassembly, cleaning and refurbishment of Frame 5RLA gas turbine
- Gas turbine compressor rotor un-stack, entire rotating blade replacement, re-stack, and high speed balance
- Replacement of all turbine rotor rotating buckets and high-speed balance
- Replacement of all control and electrical wiring, including new conduit (enhanced routing)
- Replacement of all existing control components as necessary
- Fabrication, installation and wiring of new gas turbine control cab
- Complete refurbishment of load gear box, including gear grinding
- Complete refurbishment of gas-driven starter turbine, including rotor spin balance
- Complete refurbishment of all combustion and hot gas path components
- Complete refurbishment of accessory gearbox
- Inlet system painting with two-part epoxy paint
- Startup services



NAES is a global leader dedicated to adding value by optimizing the performance of energy related facilities. NAES and its divisions and subsidiaries offer a world of services to help make your energy facility work -- better.

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