



CONTRACTED GENERATION

Scope

- Provide 8MW of critical back-up power for a gas processing plant
- Provide immediate and redundant power in the event of a scheduled or unscheduled outage

Completion

- Designed civil, mechanical and electrical infrastructure
- Paralleled 23 Natural Gas Generators for reliable and redundant power
- Able to seamlessly transfer power to and from utility

Gravity was selected by a Midstream company who had a large power requirement for providing 100% back-up power for a gas processing plant project in West Texas.

Upon reviewing power requirements it was determined that 8MW of power generation capacity was needed to serve as back-up power for a Cryo Facility.

Gravity was able to quickly determine a design concept, project path and completion schedule, that included the civil, mechanical and electrical infrastructure. The design result was paralleling 23 Natural Gas Generators together. By paralleling the generators together, Gravity can provide reliable and redundant power. The redundancy of this design comes from losing a small fraction of capacity during an unplanned maintenance event, versus potentially the entire plant in a design utilizing two or three large generator sets. The use of advanced digital controllers allows Gravity to efficiently scale the units up and down based on demand with spinning reserve.

Due to the smaller size, the units are extremely agile, 23 gensets can be started simultaneously and produce power within 16 seconds. In this application, switchgear and protective relays are used to seamlessly transfer power to and from utility, placing the plant and generation in island mode for Peak avoidance.

The equipment is monitored remotely so issues can be identified and maintenance can be performed before an event occurs.