

Case Study LNG #16

Mobile LNG Regas System at Coal Fueled Power Plant



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Highlights:

Location — West Virginia Scope of Project:

- LNG in mobile format provided a quick solution to meet required timeline
- Minimum permitting
- Increased power plant equipment reliability
- One of the most efficient and cleanest coal-fired plants in the US using LNG as backup
- All equipment built in the USA
- Factory built & tested mobile equipment
- Total of 181,500 gal LNG storage
- Full regasification system included, for instant 'on' capability for burner supply
- Allowed for guaranteed start up and run when called
- Safety features installed on the system
- Péak flows of 1.8 million scfh
- Project Completion: June 2015

See LNG Mobile Regasification Spec Sheet (PN 15089669)



Application:

The original layout was designed to support the startup of a new coal fueled power plant located in West Virginia. The mobile onsite equipment configuration guaranteed capacity for two full starts. The LNG system morphed from three month operational support to year round. It was developed into support for winter and summer performance risks, meeting the latest PJM Capacity Performance requirements.

System Configuration:

- 12 Chart regasification/Queen LNG storage units with on-board pumps
- E-stops at all egress locations
- Operations coordination with plant processes
- 1mw 480v electric power supply from plant

Accomplishments:

- Full integrated mobile system operated as a single source of natural gas at pressures of up to 100 psig
- System approach has automatic switching, operations thru PLC panels
- LNG system has gone from three months of operation support to year round (no Chart equipment is currently on site)
- Mobile system gave winter peak or pipeline outage coverage

Customer Quote:

"Utilizing Chart LNG equipment in this application allowed Thigpen Energy to run the temporary LNG system at the extreme volumes of 1,800,000 scf per hour. That is an operation that not many in the world can put on their resume and Chart's equipment performed as promised."

James T. Schauer, CEO & Managing Director, Thigpen Energy

