



Case Study LNG #9

LNG Storage &
Regasification



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Highlights:

Location — Northern Territories, Canada

Scope of Project:

- Regasification application to support local power utility
- Peak gas supply of 1800 m³/h
- Reduced emissions

Application:

Dedicated LNG regasification system operating 24/7/365 in a power generation application for a local utility located in the Northwest Territories, Canada. System was installed and operational in late winter of 2014.

Project Background:

Customer has two power plants, one designed to run on diesel and one designed to run on natural gas. The plant that operated on natural gas received its supply from a well in the Mackenzie Delta, which powered the gas plant from 1999 to 2012, until the well stopped flowing. The diesel plant, normally used as standby power for the town, generated the town's power in 2013, while the customer looked for solutions.

Chart was requested to provide a complete turnkey equipment solution to provide LNG as an alternate gas supply for the power plant that was originally fed from the well. This was the Northern Canada's first LNG vaporization system. Peak gas output would need to be in the neighborhood of 1,800 m³/h of natural gas.

System Configuration:

- Two (2) 18,000 gallon storage tanks for a total storage volume of 36,000 gallons. System was designed to "drop in" a future third tank.
- Offloading skid: Allows for filling storage tanks while system is supplying gas to the plant
- Waterbath vaporization (using waste hot water from power plant)
- Final line pressure regulation
- Complete controls integration of the LNG Regasification plant
- Startup and commissioning support

Significant Accomplishments:

- First LNG installation in Northwest Territories, Canada
- Chart was able to provide a turnkey equipment package with factory built modular components (tanks, pump skid, vaporizer, pressure regulation skid)
- Utilized pre-fabricated interconnecting piping spools that minimized field welding

