



Case Study

LNG #27

Using LNG for Prime Power
Replacing Diesel



www.ChartLNG.com

©2020 Chart Inc. LNG@chartindustries.com

P/N 21547650

Highlights:

- Microgrid system producing 10 MW of power
- 70% fewer emissions over facility's previous diesel generated electricity

Location—Puerto Rico

Scope of Project:

- FEED Study, design, engineering and project management
- Full equipment supply including shop built storage system, vaporization and controls
- PHA compliance
- Meets NFPA 59A



Application:

Taking advantage of steady growth in the supply of Liquefied Natural Gas (LNG) on the island of Puerto Rico (PR), a manufacturing operation moved away from diesel generated electricity to clean burning natural gas.

Project Background:

Due to the intermittent nature of electricity on PR, as well as the high costs of operating on diesel, pharmaceutical manufacturing plant operators approached Chart to assist with turn-key engineering and equipment supply of an LNG storage and regasification system. The site needed to comply with PHA recommendations and include fully integrated safety systems.

System Configuration:

Chart's equipment includes a single LNG trailer offload manifold with two pumps, and four 30,000 gal. vertical storage tanks for a total gross capacity of 120,000 gallons of LNG. This LNG is vaporized thru Chart-built ambient air vaporizers and final line switching skid.

The system can reliably supply 80,000 SCFH of natural gas with minimum human interaction utilizing a Chart-supplied PLC system with remote monitoring capabilities and a NEMA 4x rating.

Significant Accomplishments:

The energy security of the LNG fuel supply from the US, as well as operating on a virtual pipeline system, was proven during the aftermath of Hurricane Maria. While diesel was in short supply for many critical needs during the weeks and months following the storm, LNG run facilities were able to receive deliveries of LNG, run natural gas generators and feed electricity back into the island grid.

