NAVAL STATION
GUANTANAMO BAY ESPC

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NAVAL STATION GUANTANAMO BAY ESPC PROJECT
OVERVIEW

Key Features of the ESPC:

• Whole base solution providing energy resiliency, reliability and efficiency
• Liquefied natural gas (LNG) as primary fuel source
• LNG procured through Defense Logistics Agency (DLA)
• Cyber secure architecture
• Renewable energy – Photovoltaics, battery storage, and monitoring of the existing wind turbines
• Dual fuel capability providing resilience of supply
• Microgrid management system connecting together the installation’s power generation
• Enhanced maintenance, repair and replacement paid for through guaranteed savings
DEMAND SIDE

Scope:

• Heating ventilation and air conditioning
  - 10 buildings

• Interior and exterior lighting improvements
  - 118 buildings

• Commercial refrigeration improvements
  - 9 facilities

• Facility (demand) PV system - 1.73 MWdc

• Water fixture upgrades - 64 buildings

• Water and wastewater upgrades –
  Distribution pump upgrades (3 locations)
  & effluent reclaimed nursery irrigation system
SUPPLY SIDE

Scope:
- Distributed Generation –24 MW nominal combined cycle power plan (CCPP) with 4000 m³ LNG facility and storage
- New dual fuel power plant
- New LNG regasification and fuel storage terminal
- Two Siemens 5 MW class SGT-A05 high-efficiency dual fuel gas turbine generators
- One Siemens 10 MW nominal SST-300 steam turbine generator
- Two 2 MW natural gas engine generators
- One air-cooled condenser
- New seawater intake
SUMMARY

• The project supports the Navy’s three pillars of energy security: resiliency, reliability and efficiency

• New dual fuel power plant complex is Navy’s first use of LNG

• 18 percent of the power generated by the new plant will use renewable sources