

Queens Veterans Administration Extended Care

To use natural gas fired internal combustion engines to produce 800kW of electrical power and thermal energy for various on-site loads.

BACKGROUND

The Queens Veterans Administration (VA) Extended Care Facility is a major hospital in the heart of the New York City metropolitan area and is also a central laundry processing and meal preparation site for all VA hospitals in the area. This 740,000 square foot facility is in operation 24 hours per day days/week and has 425 permanent employees. The building currently uses boilers fired with natural gas to provide domestic hot water, comfort heat and process heating. The building receives its electrical service from Consolidated Edison. The building is interested in working with Con Edison Sol to install a combined heat and power plant to meet portions of its electrical and thermal requirements.

OBJECTIVE

To design and install a natural gas fired combined heat and power system to meet a portion of its electrical and thermal energy requirements.

DESCRIPTION

The Contractor will: (1) establish the baseline energy usage of the building prior to installing the system; (2) develop the system's design; (3) collect bids and release purchase orders for constructing the system; (4) manage the construction process; (5) start-up and commission the system; (6) train the building's maintenance staff in the operation of the systems; (7) monitor and evaluate the performance of the system; and (8) disseminate the results of the system evaluation.

BENEFITS

The project will reduce peak load by 784 kW (34%), reduce annual electricity usage by 6,030,000 kWh/year, and result in over \$380,000 in net annual energy savings. Lean burn internal combustion engines will be used to reduce NOx and an oxidation catalyst to reduce CO and VOCs.

Funding	Encumb to Date	Pending	Total Anticipated
Consolidated Edison Solutions Inc.	\$1,380,000.00	\$0.00	\$1,380,000.00
NYSERDA	\$500,000.00	\$0.00	\$500,000.00
TOTALS	\$1,880,000.00	\$0.00	\$1,880,000.00

Manager	Douglas, Peter
Contracts	STD-7299
Contractors	Consolidated Edison Solutions Inc.
Technologies	Cogeneration
Cities	Jamaica
Counties	Queens