Natural Gas Cogen for Multi-Family Buildings

Install and demonstrate the effectiveness and reliability of two 60 kW reciprocating piston engines and add thermal balancing radiator to the system.

BACKGROUND

Coney Island Site 4A II Houses (SEA RISE II) is a 334-unit low-income residence managed by Grenadier Realty Corp. In 1985, a 140 kW co-generation system was installed in the building that never passed it's own manufacturer's commissioning performance tests and failed after a few months operation. Efforts to re-institute co-generation in ensuing years has failed due to lack of funds or economic viability. Recent changes in Con Edison's electric rates has again made CHP an attractive investment.

OBJECTIVE

The objective is to install and demonstrate the effectiveness and reliability of two 60 kW reciprocating piston engines with heat recovery to be used fo DHW heating for the building.

DESCRIPTION

The CHP system will consist of two Coast Intelligen 60kW CI-60 units and a thermal balancing radiator to provide DHW heating. Technology transfer includes providing information on a new co-generation website, in email subscriptions, and in a periodic electronic newsletter, distributed to represen from potential users/beneficiaries of distributed generation and to a broad audience of energy professionals through affiliations of the engineering tea members.

BENEFITS

This system will reduce Con Edison peak load by 120 kW, reduce annual electric usage by 893,500 kWh/year and result in over $62,300 in net annu energy savings. Approximately 100% of the rejected heat will be utilized.

Funding	Encumb to Date	Pending	Total Anticipated
Grenadier Realty Corp., AAF Sea Rise II, (Bay Park Two)	$208,000.00	$0.00	$208,000.00
NYSERDA	$206,100.00	$0.00	$206,100.00
TOTALS	**$414,100.00**	**$0.00**	**$414,100.00**

Manager	Borowiec, Joseph C.
Contracts	STD-6853
Contractors	Grenadier Realty Corp., AAF Sea Rise II, (Bay Park Two)
Technologies	Cogeneration
Cities	Brooklyn
Counties	Kings