

## Micro-Turbine Install. demo at the National Park

Install modular packaged CCHP systems centered on Capstone micro-turbines with space heating and chilled water cooling.

### BACKGROUND

Floyd Bennett Field in Brooklyn is now part of the Gateway National Recreation Area managed by the U.S. National Park Service. Audit findings by Landsberg Engineering, P.C. under a U.S. DOE FEMP SAVEnergy Audit indicate that Floyd Bennett Field is an excellent location to demonstrate modular packaged combined cooling, heating and power (CCHP) systems centered on micro-turbines.

### OBJECTIVE

This project seeks to demonstrate CCHP at a federal site to display the technology's benefits at a high visibility facility, reduce electricity demand in a urban load pocket, and encourage government adoption of energy-conserving technologies. Partners in this project include Oak Ridge National Laboratory (ORNL), which will integrate national CCHP efforts into the project, and KeySpan Energy Delivery, which will be an aid in overcoming siting and permitting hurdles.

### DESCRIPTION

Landsberg Engineering, PC will design, procure, and oversee the installation of packaged CCHP systems based on Capstone micro-turbines, with to capacity of approximately 180kW and thermal heat recovery for space heating and cooling.

### BENEFITS

The CCHP system will have up to 200 kW reduction in peak electric demand from the downstate electric grid, and provide net annual savings to the facility of \$40,000. Lessons learned from this project will be used to facilitate the adoption of CCHP at other federal sites throughout the State and country.

### SCHEDULE AND STATUS

Design tasks completed, equipment procurement and installation underway.

<b>Funding</b>	<b>Encumb to Date</b>	<b>Pending</b>	<b>Total Anticipated</b>
Landsberg Engineering, P.C.	\$200,000.00	\$0.00	\$200,000.00
National Park Service	\$200,000.00	\$0.00	\$200,000.00
NYSERDA	\$425,000.00	\$0.00	\$425,000.00
Oak Ridge National Laboratory	\$100,000.00	\$0.00	\$100,000.00
<b>TOTALS</b>	<b>\$925,000.00</b>	<b>\$0.00</b>	<b>\$925,000.00</b>

<b>Manager</b>	Borowiec, Joseph C.
<b>Contracts</b>	STD-6541
<b>Contractors</b>	Landsberg Engineering, P.C.
<b>Technologies</b>	Cogeneration
<b>Cities</b>	Brooklyn, Clifton Park
<b>Counties</b>	Kings, Saratoga