

Powering the City of Bridgeport

Working with companies including Controlled Air, Inc.; O, R&L Construction; and Power Island Energy, Centrica Business Solutions helped deliver an electrical power network microgrid utilising three CHP units with 100% GRID Redundancy for the City of Bridgeport, CT.



Sustainable, cost effective for local government

The US City of Bridgeport, Connecticut, needed a microgrid solution to be built with 100% GRID Redundancy at no cost to the city, while saving on long-term costs and reducing environmental impact.

Continuous cogeneration power in times of need

Centrica Business Solutions joined with Controlled Air, Inc.; O,R&L Construction; Power Island Energy; and several other companies to deliver a cogeneration system featuring chilled and thermal water loops, controls system and underground piping for a microgrid to power key municipal buildings for the city.

The design build portion of the project was managed by O,R&L Construction, specialists in commercial building services.

The microgrid includes three Combined Heat and Power (CHP) units, a stand-by power generator set provided by Centrica Business Solutions (formerly ENER-G Rudox) and an electrical power network designed to provide continuous power during grid failure. The project was part of a municipal pilot programme launched through the State Department of Energy and Environmental Protection (CT DEEP) in 2013.

The results

The microgrid provides power to key municipal buildings, and utilises the engine heat loss to supply heating and cooling to critical facilities, such as City Hall, the Police Headquarters and the Golden Hill Senior Centre.

The team has estimated annual savings of approximately 85,554 MMBtu in energy, all while meeting several budget and city needs. The microgrid was built with 100% redundancy at no cost to the city, with the potential for reducing environmental impact and long-term energy costs.



Projected annual energy savings (37k from CHPs)



No cost to the city



Delivered with total redundancy



This project is the first of its type in the state of Connecticut. Supported by a combination of public and private funding, we've helped to create a standalone system that's providing uninterrupted, environmentally friendly and reliable power."

John McDermott, Head of Projects & Engineering, Centrica Business Solutions North America

Why change?

Centrica Business Solutions' combined heating, cooling and power units:

- Save 85,554 MMBtus annually
- Use free by-product resources offering even more benefits
- Offer reliable electrical source