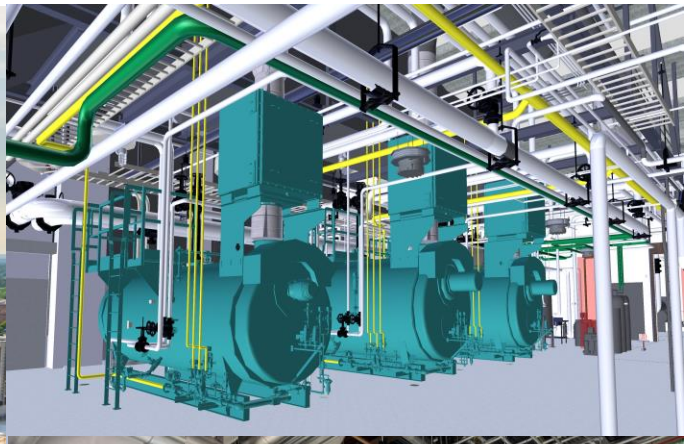

CASE STUDY

Continuous Power for a State-of-the-Art Hospital & Research Facility

Jack & Sheryl Morris Cancer Center

A critical feature of the 12-story, 520,000-square-foot cancer hospital at Rutgers University in New Brunswick, New Jersey is a central utility plant (CUP) that allows the facility to generate its own electricity, heating and cooling. The CUP is a high-level, sophisticated microgrid unlike any other in the healthcare industry, designed and implemented by Concord Engineering Group as the Engineer of Record.

THE CONCORD DIFFERENCE

- We deliver end-to-end whole plant solutions specializing in services that enhance performance, increase efficiency, and reduce downtime.
- The Cancer Center system provides energy at a much lower cost in normal and emergency operation.
- Our experience with sophisticated energy load and demand management platforms and “microgrid and resiliency as a service” business models is unique.

THE CHALLENGE

- Build a new Central Utility Plant in the basement of a parking garage, in an urban environment, with space and noise constraints.
- Implement an energy efficient CUP that provides low cost utilities during normal operations and is flexible during an emergency.
- Provide multiple power sources & multiple fuel sources to ensure the hospital has a resilient, continuous supply of energy for the entire facility, even in an emergency situation.

CONCORD ENGINEERING SOLUTION

- Flexible automated controls making real time decisions on how energy is distributed.
- CHP system generates three forms of energy from one fuel source.
- Fast-starting natural gas powered generation system operates when utility demand power prices are high.
- Diesel fuel emergency generation system can power the hospital for a minimum of (4) days.
- Cooling provided by new chiller plant with motor driven centrifugal chillers, absorption chilling and free cooling.

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LOCATION

New Jersey, USA

SERVICES

MEP Engineering
Engineer of Record
CHP
Energy Services
Microgrid Architecture
Load Flow Analysis

PARTNERS

New Brunswick Development Corp.
DCO Energy
HOK
O’Donnell & Naccarato

TAGS

Microgrid
CUP
Hospital Resiliency

GET IN TOUCH

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