

CASE STUDY

Energy Efficiency

Brought to you by Columbia Gas of Massachusetts
and Western Massachusetts Electric Company

Baystate Health/Baystate Medical

SPRINGFIELD, MA

The building at 3300 Main Street is a four story facility constructed in 1998 consisting of approximately 105,000 square feet. The main operations of this facility are specialty outpatient services including; behavioral health, cardiology, and neurology.

PROJECT SUMMARY

In an effort to help identify energy saving opportunities at Baystate Health, Columbia Gas and Western Massachusetts Electric Company (WMECo) provided funding toward the cost of a comprehensive energy assessment. Engineering firm Celtic Energy was hired to perform an extensive energy assessment of the facility; they identified two gas and eleven electric energy efficiency improvements.

Natural Gas Savings: Baystate Health installed three new HydroTherm boilers and controls, replacing two large inefficient boilers. Columbia Gas contributed \$100,000 to the natural gas improvements that totaled \$572,000.

Electric Savings: Newer and more energy efficient fluorescent lighting was installed along with more efficient LED and compact fluorescent technologies (which also provide an improved quality of light according to the customer). HVAC renovations consisted of converting the entire building to a digital energy management system and significantly upgrading VAV boxes, the hot water system, boiler controls, roof top air handlers and pumping systems. WMECo contributed \$410,000 to the implementation of these measures, which cost \$728,000.

The Result: Energy savings through improved control and operation of the facilities' HVAC equipment and lighting systems.

The natural gas improvements are expected to save over 57,000 therms or about \$66,570 in heating savings per year. Over the life of the project this equates to supplying heat to over 1,100 homes for one year.

The electrical efficiency improvements are expected to save 1.5 million kWh per year or about \$200,000 in electrical savings per year.

THE NEED

To identify gas and electric savings opportunities at the Baystate Health/Baystate Medical Facility to lower operating costs.

THE SOLUTION

A comprehensive energy assessment and the installation of three new energy efficient HydroTherm boilers as well as a comprehensive HVAC and lighting upgrades.

- **Gas Project Cost**
\$572,000
- **Gas Incentive Paid**
\$100,000
- **Est. Annual Gas Savings**
\$66,570
- **Total Project Cost**
\$1.3 million
- **Electric Incentive Paid**
\$410,000
- **Est. Annual Electric Savings**
\$200,000

Before



After



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COLUMBIA GAS & WMECO AS STRATEGIC PARTNERS

The Columbia Gas & WMECo Energy Efficiency teams worked with Baystate Health to identify energy savings opportunities.

“Baystate Health is one of Columbia Gas’s largest customers,” states Paul Giguere, Columbia Gas C&I program manager. We met monthly to go over each project and discuss everything from a MeLink exhaust hood system in the cafeteria on the main campus to what we did here at 3300 Main Street. Baystate Health is a true energy efficiency champion that realizes the true benefits energy efficiency technology can offer.”

“WMECo and Columbia Gas have been wonderful partners,” states Antonio Z. Braz, Manager of Mechanical, Electrical and Plumbing Infrastructure Facilities Planning & Engineering at Baystate Health. “The incentives we get from the utilities on top of the dollar savings we see in operating costs year after year help us put more funding toward patient care and helping those in the community.”

ABOUT COLUMBIA GAS OF MASSACHUSETTS

Columbia Gas of Massachusetts is an energy services company serving nearly 300,000 natural gas customers in Massachusetts. The company is a wholly-owned subsidiary of NiSource Inc., based in Merrillville, Ind. NiSource Inc. is a Fortune 500 holding company with headquarters in Merrillville, Ind., whose core operating companies engage in natural gas transmission, storage and distribution, as well as electric generation, transmission and distribution. NiSource operating companies deliver energy to 3.7 million customers located within the high-demand energy corridor stretching from the Gulf Coast through the Midwest to New England.



ABOUT WESTERN MASSACHUSETTS ELECTRIC COMPANY

Western Massachusetts Electric Company (WMECo) serves over 200,000 customers in 59 communities in the Western region of Massachusetts. WMECo is a subsidiary of Northeast Utilities, which operates New England’s largest utility system serving more than 3.6 million electric and natural gas customers in Connecticut, Massachusetts and New Hampshire.



Baystate Health was awarded the Northeast Energy Efficiency Partnerships Business Leadership Award for its work with Western Mass Electric Co. and Columbia Gas of Massachusetts.

ABOUT MASS SAVE®

Mass Save is an initiative sponsored by Massachusetts’ gas and electric utilities and energy efficiency service providers, including Berkshire Gas, Cape Light Compact, Columbia Gas of Massachusetts, National Grid, New England Gas Company, NSTAR, Until, and Western Massachusetts Electric Company. The Sponsors of Mass Save work closely with the Massachusetts Department of Energy Resources to provide a wide range of services, incentives, trainings, and information promoting energy efficiency that help residents and businesses manage energy use and related costs.

MASS SAVE IS BROUGHT TO YOU BY:



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