

North Shore Medical Center - LEED Gold for Power Plant

September 26, 2014 - Spotlights

The Central Utility Plant is a central boiler plant and combined heat & power system that provides heating, hot water, steam and electricity to the entire North Shore Medical Center. It will serve 1 million s/f of campus buildings and future planned additions. It is the first energy plant on the Atlantic coast to achieve LEED Gold and it has the distinction of having the highest efficiency amongst all certified power plants in the nation.

This state-of-the art CUP plant uses 65% less energy than the LEED standard ASHRAE 90.1-2007 earning all 19 points under optimize energy performance; houses two high pressure and three low pressure steam boilers all with low NOx burners and 820kW cogeneration unit and heat recovery system located on the roof. The CHP system is 100% base loaded with negligent waste heat and it provides annually 38% of the electricity and 33% of the steam for the all existing campus buildings. Other sustainable features include commitment to open space of the adjacent wetlands, white roof to reduce heat island effect on local environment and avoidance of materials that contain chemicals that are listed on Partners Health Care's hazardous chemicals list. North Shore Medical Center's new 72-bed addition, slated to be completed in 2017, will also be served by this energy plant.

Project Team Included:

Owner: North Shore Medical Center/Partners Healthcare

LEED/Sustainability Consultant: Richard Moore Env. Consulting

Architecture/Civil/Landscape: HDR

MEP/Energy Engineer: Engineered Solutions Inc.

Construction Manager: Turner Construction Co

Facilities Commissioning: SSR

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