The New York Presbyterian Hospital/Cornell Medical Center
New York, NY

The principals of WM Group have enjoyed a long and successful relationship with this renowned teaching hospital with several buildings totaling 2,000,000 sq ft. Most recent projects include the on-going modernization and expansion program. As a part of the modernization program, a master plan was completed to upgrade the chilled water and steam systems.

The original chilled water plant consisted of six chillers with a total capacity of 8500 tons. Cooling demand was projected to increase from 5500 tons to 11,000 tons. The master plan called for replacement of two aged chillers with three new 2000 ton units and installation of 15,000 gpm cooling towers. A comprehensive study was performed analyzing various chiller types, sizes and energy sources and efficiencies. The study indicated that a combination of steam and electric chillers would result in a plant having the lowest energy costs. Hemant and Doug were then commissioned to design the plant upgrade for a phased implementation. The project was completed and the chillers were operational for the 1995 cooling season.

The boiler plant’s existing three 125,000 lbs/hr boilers produce 185 psig saturated steam. The boilers operate on No. 6 fuel oil without a standby fuel. They designed the conversion of these boilers to gas fired with No. 2 fuel oil as the backup fuel and the installation of state-of-the-art emission control and monitoring systems. The facility was the first major stationary source in metropolitan New York area receiving an operating permit since the State adopted the Clean Air Act. Due to the constant steam demand, the project was designed for phased installation such that the steam service was uninterrupted.

This past year WM Group was responsible for the design of a new 125,000 lbs/hr boiler installation, its auxiliaries and an economizer. Several existing boilers were retrofitted with economizers. The confined space of the plant presented a challenge for designing the new equipment. Proper coordination allowed for the smooth installation of the equipment without any difficulties.

Completion Date: Project Cost:
Major Modernization: 1989-99 $ 700 M
Boiler Plant Upgrade: 1995 $ 3.5 M
Boiler Plant Upgrade: 2002 $ 3.7 M

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Portions of the projects completed by the principals of WM Group Engineers under previous employment

"...has been responsive, creative and thorough. Projects they have engineered for us range from an entirely new 1,000,000 sf hospital to rebuilding a 60-year old high pressure steam plant without interrupting service to the facility. The projects have been consistently on time and within budget."

- Paul Schwabacher, P.E., Assistant Director, Facilities New York Hospital