



T.M. Bier & Associates, Inc. helps Rudin Management meet green building objectives at 80 Pine Street

March 07, 2011 - Front Section

T.M. Bier & Associates, Inc. assisted Rudin Management Company, Inc. in its goals to achieve energy efficiency and tenant comfort, while reducing operating costs and achieving centralized monitoring. TMBA provided its building automation system services at one of Rudin's premier, class A, eco-friendly office buildings located at 80 Pine St. The project involved the installation of a customized, state-of-the-art building automation system. Overseeing the installation was Michael Wrobel, chief engineer of 80 Pine St.

According to TMBA president Ted Bier, P.E., "Our goal with this leading-edge building automation and management technology application was to provide the building with control and monitoring capabilities relating to its heating, ventilating and air conditioning which, in turn, would afford greater energy savings and enhanced comfort and indoor air quality. We achieved this objective in several ways. Regarding the air conditioning, the system relies on outside air temperature and humidity sensors to determine whether to bring in outside air to cool the facility or use chilled water to cool the facility. If the outside air temperature and humidity are conducive, the system can achieve 'free' cooling and not have to load the chiller which requires more energy consumption."

Bier noted that the 1 million plus s/f, 39-story building also benefitted by TMBA's demand control ventilation approach. Using this approach, the building automation system monitors the building's carbon dioxide (CO₂) levels and the outside air's CO₂ level to facilitate the efficient reduction in the amount of outside air brought into the building, thereby reducing the amount of air which needs to be tempered, while also maintaining the building's indoor air quality.

In addition to these applications, the customized building automation system solution also provides control and monitoring of 80 Pine St.'s heating (hot water and steam), chiller, cooling tower and condenser, ConEd steam station and variable speed drives. The drives, which were installed during the course of the project, were designed to reduce fan noise and duct rumble, and wear and tear on motors and other systems through "soft starting." The building automation system also eliminates the need for frequent readjustments of the drives as they provide accurate control of the HVAC motors, and control the speed of the HVAC system's fans and pumps in order to conserve energy.

Another key function of the building automation system was remote monitoring of the building's equipment. Through the building automation system application, facility managers and building operators can connect into the system via the Internet and monitor all of the various system components, from the drives, steam station, cooling tower and condenser, to the chiller and HVAC equipment.

The TMBA building automation system is more than meeting Rudin's expectation. 80 Pine Street has achieved a significant improvement in its overall energy and building efficiency. Able to receive an advanced warning from the system in the event of equipment failure, the building staff can be

considerably more proactive. Further, since they can now monitor the equipment's performance and operating status from a central location, they are realizing important productivity gains, while also maintaining a more consistent standard of quality controls.

The application of such sophisticated building automation and management technology at 80 Pine Street is particularly noteworthy considering the building was constructed in 1957. However, in addition to its many amenities, the building reflects Rudin's strong commitment to green standards and practices. Along with its building automation system, the building adheres to Rudin's ongoing program of energy efficient lighting retrofits and optimum air quality, as well as a green waste management initiative through which an overall recycling rate of better than 60% is achieved, and a green cleaning standard requiring all cleaning contractors to use green cleaning products and procedures.

As one of the New York-Tri-State area's largest independent control systems integrators, T.M. Bier & Associates (TMBA) has been at the forefront of the building automation and energy management field for over three decades. The company offers end-to-end capabilities, from the design, installation, monitoring and servicing of building management and control systems, HVAC systems, lighting and security systems, to deregulated energy and financing programs. Through its comprehensive services, building owners and operators are realizing many important benefits including up to a 50% reduction in operating costs, the extended lifespan of building equipment, improved indoor air quality and comfort, and reduced carbon footprints. The company is a "go to" resource for leading builders, developers, general contractors, commercial/industrial property owners and property managers. It lists among its diverse client base Fortune 500 companies, hospitals, libraries, schools, shopping malls and municipalities. For more information, visit: www.tmba.com.

New York Real Estate Journal - 17 Accord Park Drive #207, Norwell MA 02061 - (781) 878-4540