

## Control System Unlocks \$288,000 Rebate for Class A Office Building

Custom building management system (BMS) optimizes staff time, facility operations, and tenant comfort at Madison Avenue Office Building



Commercial

### Property Profile

- Location: Murray Hill, Manhattan
- Square Footage: 396,000
- Floors: 28
- Year Built: 1954
- Building Type: Office

### Services

- Controls & Building Automation
- Mechanical Systems: Cooling
- Ventilation
- Project Construction Management
- Commissioning

### Project Achievements

- Total Rebate: \$288,000
- Peak Demand Savings: 336 kW
- Annual Operations & Maintenance (O&M) Savings: \$16,000

### Project Highlight

Comprehensive control overhaul resulted in a more comfortable, energy efficient office building

This Class A Madison Avenue office building needed to overhaul its 60-year old cooling system, air handling units (AHUs), and building-wide lighting. To take advantage of the opportunity to fully modernize itself, the facility engaged EN-POWER GROUP to also design and project manage a building management system (BMS) to centrally control and operate the building's HVAC equipment. EN-POWER GROUP designed controls for the hybrid chilled water plant, cooling tower, seventeen (17) air handler units, and perimeter heating systems. Our upgrade enabled the building to participate in a demand (kW) management strategy and to obtain a \$288,000 rebate payout.

Benefits of the new controller include support equipment that's easier and less time-consuming to maintain, a user-friendly interface that can be remotely accessed from any device, and the ability to easily expand to integrate and control future equipment. This meant upgrading the facility's control system from a pneumatic system that relied on rubber tubes and energy- and maintenance-intensive air compressors to a modern

direct digital control (DDC) system, which requires no maintenance and provides faster feedback compared to old pneumatic systems. This new building management system (BMS) also has a graphical interface that allows operational staff and management to view all HVAC systems from any computer or smartphone, helping to reduce tenant comfort complaints as well as building energy consumption. Plus, DDC systems are easy to expand so buildings can quickly integrate and control any future equipment.

The controller not only unlocked the full-potential of the existing equipment, but also enabled the facility to receive major funding from Con Edison as building operators could now switch from electrically-fueled equipment to steam-fueled equipment during peak operating hours. This new fuel switching ability allowed the building to participate in Con Edison's Demand Management Program, resulting in a \$288,000 payout to the building and a peak demand reduction of 336 kW.