

## Retro-commissioning Means More than Local Law Compliance

*Through retro-commissioning, large multifamily residence reduces annual natural gas bills by 12% while also improving site safety and operational practices*



Multifamily

### Property Profile

- Location: Battery Park City, Manhattan
- Square Footage: 230,000
- Units: 209
- Year Built: 1998
- Building Style: Rental Apartments

### Services

- New York City Local Law 87
- Retro-Commissioning
- Energy Auditing (ASHRAE Level II)

### Project Achievements

Retro-commissioning (optimizing existing equipment)

- Cost of retro-commissioning measures (RCMs): \$14,300
- Annual Utility Savings from RCMs: 18,000 therms
- Annual Utility Cost Savings: \$12,400
- Simple Payback: 1.2 years

### Project Highlight

Retro-commissioning measures reduced annual natural gas bills by over 12%, had a payback of less than one year, and slashed daily O&M actions by permanently resolving equipment problems

A 209-unit Battery Park City property enlisted EN-POWER GROUP as its Local Law 87 service provider in 2016. As part of New York City Local Law 87 compliance, buildings greater than 50,000 sqft must undergo retro commissioning, a systematic process that optimizes existing energy system performance through the verification of equipment design, installation, operation, maintenance, and setpoints.

When EN-POWER GROUP's engineers performed retro commissioning testing on the property's building systems, they identified multiple major deficiencies including an improperly charged expansion tank and high levels of carbon monoxide during boiler combustion testing. However, the most severe issue discovered was the expensive heating plant controller that was installed but never commissioned – meaning it could not turn on and off the boilers, let alone adjust heating hot water temperatures. These deficiencies not only caused a considerable amount of energy to be wasted, but also

forced building staff to deal with daily boiler room floods and to operate the boilers manually (i.e., physically adjusting the boilers by hand to prevent overheating).

Local Law 87 only requires providers to identify issues and ensure corresponding corrective measures were completed. However, EN-POWER GROUP staff went beyond this: Explaining the importance of each required repair, referring the property to qualified contractors, and helping to field bids to ensure all repairs were completed correctly and by the compliance deadline. Once the repairs were completed, engineers returned to the site to verify the repairs and discuss new operations and maintenance (O&M) practices with building staff. With EN-POWER GROUP's expertise, the property complied with Local Law 87 in a timely fashion, reduced its natural gas costs by 12% annually, and drastically reduced its required daily O&M needs and health and safety (H&S) risks.