# LOAD MANAGEMENT

## LM Case Study: No Cost Implementation

### AGENCY

### FACILITY
The Charles S. Hirsch Center for Forensic Sciences

### MEASURES IMPLEMENTED
Fan Scheduling,
Addressing Simultaneous Heating and Cooling,
DAT Control,
Zone Temperature Setpoint,
VAV with Reheats

### SYSTEMS USED
Air System
Terminal Units
Perimeter Units

### FUEL SOURCE
District Steam
Electricity

**22%** Steam **10%** Electricity
in energy reductions

**$200,000**
in annual energy cost savings

**575 Metric Tons**
in annual avoided GHG emissions

## Project Description

### Facility Description
The Charles S. Hirsch Center for Forensic Sciences is a 330,000 ft$^2$ facility run by the Office of the Chief Medical Examiner (OCME), built in 2007. The Center runs the largest public DNA crime laboratory in North America. The facility also houses laboratories, evidence facilities, and administrative offices. The 15-story facility is serviced by a variety of air-handling units (AHUs), including air-conditioning units (ACUs), heating and ventilation units (HVs), and exhaust fans. Additionally, heat is provided from Con Edison's district steam that is converted to hot water via heat exchangers.

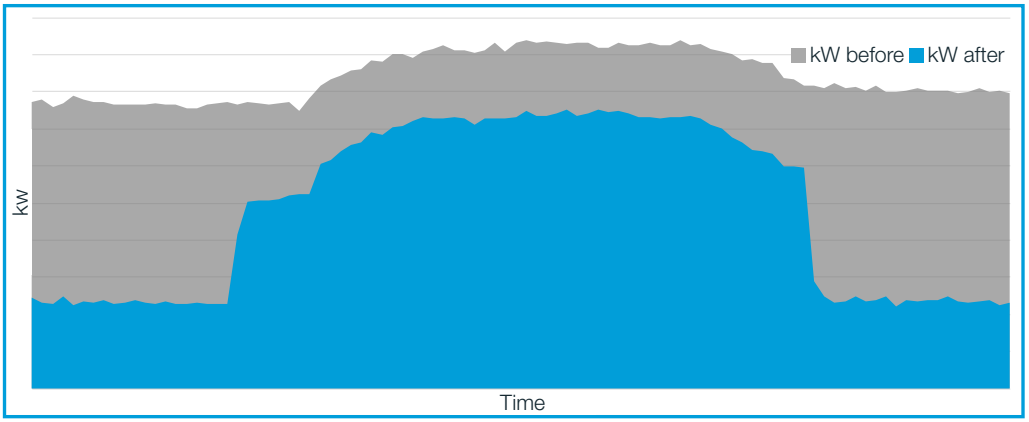
### Project Background
Even with equipment in a state of good repair and the BMS communicating properly, the LM team and OCME team were still able to identify some energy saving measures. These measures included: 1) implementing a stricter schedule on several AHUs, and 2) seasonally optimizing the AHUs VAV re-heats and hot water fin and tube radiators.

### Project Results
As with most measures identified by the Load Management team, no financial investment was needed, and energy savings were realized instantaneously upon implementing the measures. After implemented, the Load Management team continued to work with the Hirsch Center's facilities team to ensure the measures persisted and never negatively impacted the strict conditions of the zones.

## To Implement This at Your Facility, have…

- The ability to schedule equipment on the BAS.
- An operable centralized BAS that communicates properly with the equipment of interest.
- A consistent occupancy schedule that does not vary week to week.
- The ability to modulate heating supply. (i.e. valve modulation on district steam intake, boiler firing rate modulation, etc.)
- The system of interest in a state of good operation.
- A facilities team enthusiastic about optimizing their building's energy consumption!

## Daily Load Profile Change




Energy

NYC DCAS
Citywide Administrative Services

## Contact Us!
If interested in implementing a similar project, please contact Elizabeth Taveras (Etaveras@dcas.nyc.gov).
For more information about this project please contact Jim Eves (jeves@ocme.nyc.gov).