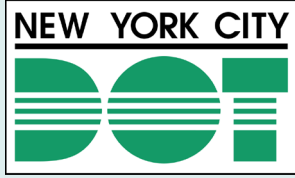


AGENCY



FACILITY

Staten Island Ferry Whitehall Terminal

MEASURES IMPLEMENTED

Fan Scheduling,
Fan VFD Setback,
Cooling Tower Load Sharing

SYSTEMS USED



Air System

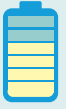
FUEL SOURCE



Electricity

30%

Electricity
.....
in energy reductions



\$145,000

.....
in annual energy
cost savings



575 Metric Tons

.....
in annual avoided
GHG emissions



Project Description

Facility Description

The Staten Island Ferry Whitehall Terminal is a 280,000 ft³ facility run by the Department of Transportation (DOT), built in 2005. The facility is the primary ferry terminal for the Staten Island Ferry on the Manhattan side. The facility is served by a variety of air handling units (AHUs), heating and ventilation units, fan coil units, and exhaust fans. Additionally, cooling is provided by two absorption chillers, and heating is provided by two hot water boilers. The building successfully operates with a centralized building automation system (BAS) that communicates properly with the AHUs.

Project Background

Various HVAC equipment at the Whitehall Ferry Terminal was manually controlled via the BAS, leading to a reliance on building operator behavior to ensure optimal performance. After working with the Load Management team, the staff at the Whitehall Ferry Terminal was able to implement the following measures: 1) fan VFD setbacks for multiple AHUs, 2) cooling tower load sharing and 3) fan scheduling for multiple AHUs.

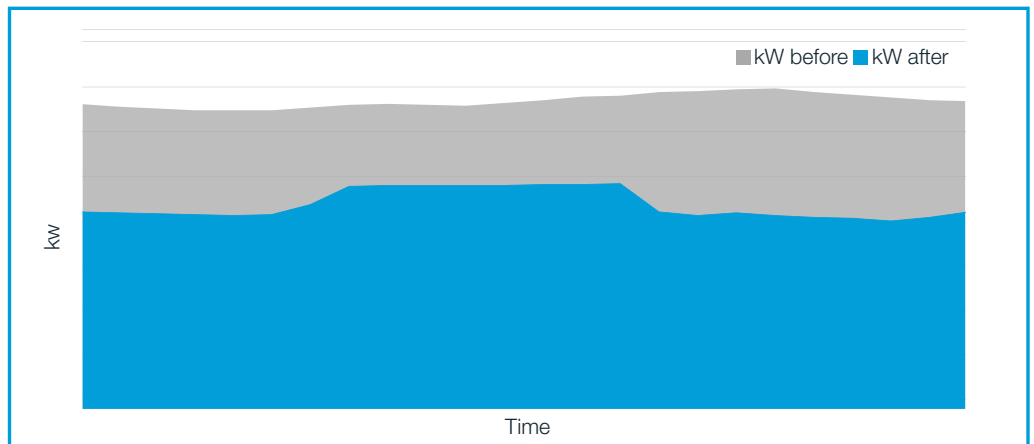
Project Results

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 implementation, the Load Management team continued to work with the staff at the Whitehall Ferry Terminal to verify findings and identify additional improvements.

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 fan speed. (i.e., VFDs on fan motors)
- 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



Contact Us!

If interested in implementing a similar project, please contact the Load Management team (LMHotline@dcas.nyc.gov). For more information about this project, please contact Caitlin Churchill (mchurchill@dot.nyc.gov).