



# WATERVLIT ARSENAL

WATERVLIT.NY



## SAFETY RECORD

ZERO Recordable Events



## PROJECT SIZE

\$11.9M



## PROJECT SCHEDULE

8/31/2017-6/21/2021



## CONTRACT METHOD

ESPC



## SAVINGS INFORMATION

Annual energy and operational savings of \$1.2 million



Watervliet Arsenal (WVA) was founded in 1813 and is the oldest continuously active arsenal in the U.S. Army. National Grid, WVA's utility provider, was looking to perform an audit for multiple facilities at WVA and proposed infrastructure upgrades designed to reduce energy and water usage while improving portions of its energy infrastructure. National Grid selected ESG to implement these improvements.

## SOLUTION

The following ECMs were installed:

- Controls Upgrades
  - WVA's Metasys Controls System Software was upgraded to the newest version
  - Existing steam meters connected to the control system
  - Controls installed on main air compressors and tied into control system
  - Steam control valves installed on steam mains and tied into control system
- HVAC Improvements
  - Removed and replaced Chlorodifluoromethane (R-22) package type equipment including chillers, split system air conditioners, and packaged rooftop units (RTUs)
- Lighting Upgrades
  - Existing fixture retrofits and complete fixture replacements of interior and exterior lighting at 42 buildings using LED
- Ventilation and Recommissioning
  - Provided new controls on existing rooftop air-handling units (AHUs) and exhaust fans to improve outdoor air (OA) control. Also, repaired and replaced various components on existing AHUs to improve system operation and efficiency

## RESULTS

This project resulted in reduced building energy intensity, reduced greenhouse gas emissions, enhanced working conditions for staff, and enhanced and modernized infrastructure. From the installed ECMs, more than 90 million kWh will be saved over the life of the contract.