

U.S. ARMY RESERVE 99TH REGIONAL SUPPORT COMMAND

Energy Savings Performance Contract (ESPC, 2015)



In 2011, on behalf of the 99th Regional Support Command (99th RSC), the Defense Logistics Agency Energy planned to issue an Energy Savings Performance Contract (ESPC) task order using the Department of Energy Super ESPC indefinite delivery, indefinite quantity (IDIQ) contract. RWE Clean Energy was ultimately selected for the award of this opportunity.

After being awarded the ESPC contract, RWE Clean Energy completed an Investment Grade Audit (IGA) and implemented innovative Energy Conservation Methods (ECMs) in 13 Technical Categories (TCs) that collectively addressed the strategic objectives prioritized by the 99th RSC.

The 99th RSC has reduced its energy consumption by 64,486 MBTU. The 2012 total consumption of the 99th RSC at all its sites, as reported to RWE Clean Energy, was 415,852 MBTU. Following completion of the ECM's, fully implemented in December 2015, the 99th RSC is anticipated to realize a reduction in overall energy consumption of 15.5%. To date, the verified savings exceed the project savings (2016 calendar year).

The IGA identified a comprehensive package of ECMs representing thirteen technology categories across ninety-two sites in eleven states, involving 3,315,598 square feet of Army facilities. Our proposed ECMs encompassed the following improvements:

- Removal of fuel oil/oil tanks from Fort Totten USARC in New York and conversion of space heating systems to natural gas
- Dramatically expanding the renewable energy generation footprint with \$2.5 million of solar photovoltaic arrays
- Replacing interior and/or exterior fluorescent, incandescent, and high intensity discharge lighting fixtures with brand new 70,000 hour life LED fixtures at eighty-one facilities
- Installation of nearly \$2.3 million in enhancements to building direct digital controls systems



PROJECT DATA

SIZE

92 Sites in 11 States
3,315,598 Square Feet
\$25.4 Million Implementation Cost

CONSTRUCTION DATES

November 2013 to June 2015

TERM

18-month construction period
21-year performance measurement period

GUARANTEE STATUS

Meeting guarantee

FINANCING

\$57 Million



- Investment of \$9.2 million in the replacement of aged and inefficient major equipment and systems, eliminating years of deferred maintenance and avoiding future capital replacement expenditures
 - Installation of new high efficiency condensing boilers at thirteen locations
 - Replacement of air handling units, rooftop units, and/or chillers at fourteen locations
- Maintenance for select equipment and systems installed during the project
 - Establish preventative maintenance to routinely perform tasks such as cleaning, adjusting, changing filters, lubricating moving parts, tightening connections, etc.
 - Identification of repair/replace maintenance to perform predictive maintenance tasks and reactive maintenance service as needed for emergencies



PROJECT DATA

ENERGY CONSERVATION MEASURES/IMPROVEMENTS

- Building Envelope Modifications
- Renewable Energy Systems
- Lighting Upgrades
- Heating, Ventilating and A/C
- Electric Motors and Drives
- Water/Wastewater Conservation
- Chilled Water System
- Hot Water System
- Steam Systems
- Chiller Plant Improvements
- Boiler Plant Improvements
- Building Automation Systems Energy Management Controls Systems



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