

U.S. ARMY RESERVE 99TH REGIONAL SUPPORT COMMAND (RSC) An Energy Public Private Partnership (EP3) for Infrastructure Modernization



The 99th RSC provides physical infrastructure and support services to U.S. Army Reserve units across seventeen states encompassing more than 100 facilities.

The Army has long realized that inconsistent budgeting for maintenance and capital improvements results in deteriorating infrastructure that affects building occupants and mission readiness.

Using a public private partnership the Army engaged RWE Clean Energy to implement a wide range of facilities improvement projects to address deferred maintenance, environmental issues and other strategic prioritizes of the 99th RSC.

Working with RWE Clean Energy, the 99th RSC reduced its energy consumption by more than 20% and completed improvements to 3.3M square feet of Army facilities.

The scope of work included removal of underground oil tanks, new HVAC systems, renewable energy, building envelope improvements, control technologies and automation. The comprehensive program included replacement of old style lighting fixtures with new 70,000 hour LED fixtures at 81 facilities. In all, RWE Clean Energy implemented thirteen technology categories across 92 sites in eleven states.

By replacing aged and inefficient equipment and building systems using a paid-from-savings model, years of deferred maintenance and future capital replacement expenditures are avoided.



PROJECT DATA

Size

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

Construction Size

18-month development period
21-month construction period
November 2013 to February 2017

Term

24-year contract term

Guarantee Status

Annual Measurement & Verification
Meeting guarantee

Financing

Municipal Tax Exempt Lease
Annual Savings Guaranteed by
RWE Clean Energy



To manage risk and assure proper operation over the life of the P3 required a well-founded asset optimization program. RWE Clean Energy established preventative maintenance procedures to routinely perform tasks such as lubricating moving parts, cleaning and adjusting equipment, changing filters, tightening connections, inspecting controls and other tasks for systems installed during the project.

Using a holistic approach RWE Clean Energy delivered a cost-neutral, portfolio-wide solution addressing mission readiness, environmental sustainability, and fiscal stewardship.



PROJECT DATA

ENERGY CONSERVATION MEASUREMENTS / 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

