

FEDERAL UTILITY PARTNERSHIP WORKING GROUP SEMINAR

May 7 - 8, 2014

Virginia Beach, VA

Hosted by:



UESC Program Case Study – Ft. Rucker

- Contract Value \$16.6M/Total Project Lifetime Savings \$25.6M
- The work scope consists of the following types of ECM's:
 - Lighting / LED Upgrades in 21 buildings
 - Fuel Conversion to include natural gas line extensions to 3 air fields and mechanical conversions in 25 buildings
 - Controls Upgrades in 9 buildings
 - HVAC Upgrades in 5 buildings (14 cooling units, 60 tons and under)
 - Retro-commissioning (Rx) in 29 buildings
 - New Central Chill Plant and Chiller Loop for 21 buildings
 - Whole Building Retrofit for 1 building
 - Mechanical Upgrades
 - Heat Recovery Chillers in 4 buildings
 - Chiller Replacement in 1 building
 - Solar Water Heating for Swimming Pool in 1 building

Performance Assurance Approach – Ft. Rucker

- Collaborative approach development between the Utility and Fort Rucker to determine Risks & Responsibilities
- Performance Verification (M&V) Requirements / Frequency
 - Baseline Development by the Utility
 - Post Construction As Built Savings Adjustments by the Utility
 - Full Performance Verification Analysis 12 months after project construction completion by the Utility
 - Ongoing Performance Verification provided by Fort Rucker with options on future years of Performance Verification Provided by the Utility
- Ongoing O&M / Re-commissioning Activities
 - Full commissioning at project completion by the Utility
 - Comprehensive training and O&M services transition at project construction close-out by the Utility to Fort Rucker
 - Ongoing O&M / Re-commissioning services provided by Fort Rucker with option to engage the Utility as needed

Performance Verification Services Provided by the Utility – Ft. Rucker UESC Project

- Baseline Development – Achieved through IGA / Feasibility Study and Final Proposal Process
- Post Construction As Built Savings Adjustment
 - Upon completion, APC/ESG will commission the installed equipment to ensure the efficiency performance and savings projections are adjusted, as needed, to reflect the actual final equipment configuration installed at the project final acceptance
 - Final As Built results provided in the commissioning report
- Term Performance Verification by the Utility to include:
 - Onsite system performance inspection, point to point check/function test/sensor inspection as needed
 - Review of control sequence/operating schedule/performance trending
 - Report of any malfunctioning equipment/system
 - Provide owner training as needed
 - Prepare post-installation performance report