



Utility Energy Services Contracting

Program Manager 256-895-1344

U.S. ARMY CORPS OF ENGINEERS

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The U.S. Army Engineering and Support Center, Huntsville, Utility Energy Services Contracting (UESC) program negotiates contracts with local electric, gas and water utility companies that enable the utility companies to provide federal agency customers with comprehensive energy and water efficiency improvements and demand reduction services. UESC projects can encompass a broad range of energy conservation measures (ECM), including system upgrades and recommissioning, deep retrofit projects, renewable energy, cogeneration plants and microgrids. UESC gives federal customers the flexibility to specifically tailor a project to a customer's energy needs and financing strategies.

A UESC contract is a method whereby a selected local electric, gas or water utility company assesses the energy savings opportunities, fronts the capital costs, and designs and installs the equipment in the project. When project financing is required, the utility company is paid from the resulting savings. Project development and implementation costs can be fully or partially financed or be completely paid for upon project acceptance. UESC also has a fast-track process to expedite awards for those energy projects with a short list of specific ECMs. The UESC program provides several benefits to the federal customer:

- Measurement and Verification (M&V) is optional for all projects, Army and non-Army
- Annual performance assurance inspections are mandatory for all projects
- Older systems can be replaced with newer more efficient systems
- Operations and Maintenance (O&M) effort is optional for non-Army projects

Utility Energy Services Contracting (UESC) vs. Energy Savings Performance Contracting (ESPC) What's the Difference?

- UESC projects are competed among a federal customer's local utility companies that often have long-term existing relationships with the federal customer, while ESPC projects are competed between Energy Services Companies (ESCO).
- The maximum contract term for a U.S. Army and non-Army UESC and ESPC project is 25 years for all customers
- UESC does not require savings M&V (though M&V can be obtained) and does not provide guaranteed savings for the customer. UESC does require annual equipment performance verification. ESPC task orders require annual savings M&V, as well as a minimum guaranteed savings amount.

UESC allows local electric, gas and water utilities to provide their federal customers:

- Energy and water efficiency improvement projects
- Renewable energy projects
- Recent energy management and demand reduction projects

Fiscal Year 2015 initiatives: approximately \$50 million in project awards

- Defense Intelligence Agency (Phase I, II and III A & B) — Central Utility Plant to include cooling/heating plant, backup generators to provide heating/cooling, energy management and deep retrofits to four buildings, provide new gas-fired water heaters, lighting upgrades and controls, photovoltaic (PV), systems and solar domestic hot water generation
- Defense Intelligence Agency (Phase III C out of IV phases) — New gas-fired water heaters, lighting upgrades and controls, PV systems and solar domestic hot water generation
- Fort Detrick, Maryland — Decentralize a central steam plant
- Fort Campbell, Kentucky — 1.4 MW DC solar PV array (joint effort with the Power Purchase Agreement Program), redundant natural gas and water lines, and post-wide exterior LED lighting

U.S. Army Corps of Engineers – Engineering and Support Center, Huntsville

P.O. Box 1600, Huntsville, AL 35807 Public Affairs Office 256-895-1694

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Fiscal Year 2016 initiatives: more than \$50 million in projected awards

- Robins Air Force Base, Georgia — Ground-mounted solar PV, upgrade Direct Digital Control System and lighting upgrades toward Net Zero Energy; Combined Heat and Power Plant, HVAC upgrades, solar and thermal PV, demand reduction and new process logic control interface devices
- Fort Campbell, Kentucky — Provide energy and water measurements, include retrofiting building components and retuning building controls, for more than 40 buildings
- 160th Special Operations Aviation Regiment (SOAR), Fort Campbell — Lighting retrofit, energy management systems, hot water improvements and HVAC system improvements

Project/Services Examples

- Interior and Exterior Lighting Replacement
- Transformer Replacement
- Lighting Control Improvements
- Motor Replacement with High Efficiency Motors
- Combined Heat and Power (CHP)
- Construction of New Cogeneration Facilities
- Boiler Control Improvements
- Packaged Air Conditioning Unit Replacement
- Cooling Tower Retrofits
- Economizer Installation (air conditioning and boilers)
- Facility Management System Replacement/Alteration
- Occupancy Sensors
- LED Exit Sign Installation
- Fans and Pump Replacement or Impeller Trimming
- Chiller Retrofits/Replacements
- Upgrade of NG Fired Boilers with New Controls (low nitrogen oxide burners)
- Solar Domestic Hot Water systems
- Solar Air Preheating systems
- Steam Trap or Steam Line Maintenance or Replacement
- Insulation Installation
- Variable Speed Drive Utilization
- Weatherization
- Window Replacement
- Window Coverings and Awnings
- Reflective Solar Window Tinting
- Daylighting
- Fuel Cell Installation
- PV System Installation or Other Renewable Generation
- Faucet Replacement (infrared sensors)
- Replacement of A/C & Heating Units with Heat Pumps
- Addition of Liquid Refrigerant Pumps to Reciprocating Air Conditioning Units
- Refrigerator Replacement with High Efficiency Units
- Window A/C Replacement with High Efficiency Units
- Water Conservation Device Installation
- Power Factor Correction
- Geothermal Heating/Cooling

UESC Project	Annual Project Savings	Energy Savings (MBtus)
Defense Distribution Center Susquehanna (DLA)	\$3,713,771	14,996
Defense Intelligence Agency I	\$573,945	56,948
Defense Intelligence Agency II	\$137,620	7,710
Defense Intelligence Agency III A,B & C	\$391,023	32,930
Fort Campbell exterior lighting	\$195,163	16,572
Fort Detrick	\$1,602,587	1,217
Totals	\$6,614,109	130,373

Installation Hotline – UESC support is available to federal agency and military installation energy managers and Directorate of Public Works personnel in the continental United States and overseas.
Call 256-895-1344.

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