





Utility Energy Services Contracts (UESC)

Examples of Implemented Projects
A Southeastern Perspective



GovEnergy
www.govenergy.gov



For More Information

Would you like to know more about this session?

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Don't forget to fill out and drop off your session evaluations!



Why UESC

- Partnership with Serving Utility
- Rebates may exist
- Simple to Use
- Moves Reasonability Fast
- No Service Fees
- GSA is a Resource if Needed



What's the Approach

- Work toward holistic solution
 - Lighting pays the way
 - Don't forget about the “dogs”
- Limitation on Contract Length
 - Some agencies are locked to ten year term
- Avoid “Bleeding Edge” or Black Box Technologies



What's the Approach

- Guaranteed Savings Typically Not Offered
 - Performance is Verified at Completion
 - Keep it Simple
-
- So, what can be done?



AF Energy Savings Project #1

Customer Need

- Steam losses in Maintenance Hanger heating system and piping



AF Energy Savings Project #1

Solution Offered:

- Install gas radiant heating system in all four aircraft hangar bays displacing steam heat
- Lighting retrofit to T8 fluorescent technology and electronic ballasts
- Replace electric motors with premium efficient motors
- Redesigned steam distribution within the building including replacement of failed steam traps, condensate receivers, and insulation



AF Energy Savings Project #1

Benefits/Results:

- Recognizes annual dollar savings in excess of \$470,000 annually and energy savings of 89,980 MMBtu/yr
- Provided flexible financing that allowed Air Force to pay off loan any time without penalty

Investment - \$2.9 Million



AF Energy Savings Project #1





C-17



AF Energy Savings Project #2

Customer Need:

- Increase production rate for aircraft paint/depaint operations in 3 hangers by improving building atmosphere control



AF Energy Savings Project #2

Solution Offered:

- Install central chiller plant to provide 3,000 tons of cooling for atmosphere conditioning
- Connect to hangers via underground distribution piping, valving, and controls
- Modification to air handlers in three (3) large paint/depaint hangars
- Upgrades to the HVAC system controls



AF Energy Savings Project #2

Benefits/Results:

- Increased aircraft production
- New hangar and central plant infrastructure
- Better working conditions for employees
- Leverage government resources – money and manpower
- Fast delivery - nine (9) months

Investment: \$8 million



AF Energy Savings Project #2





Navy Energy Project #1

Customer Need:

- Repair, modify, and consolidate base-wide Supervisory Control and Data Acquisition System (SCADA) for three utility systems operating 24 x 7



Navy Energy Project #1

Solution Offered:

- Implemented base-wide SCADA system to control and monitor electrical, thermal, and waste water systems from one location
- Optimize use of the existing 36 megawatts of diesel generation capacity
- Installation included computers, projectors, telephone equipment, routers, switches, PLCs and other ancillary devices



Navy Energy Project #1

Benefits/Results:

- Extensive energy savings generated for Base through simplified system use
- Timely completion of original contract has led to additional projects
- Paid for by Labor savings

Investment: \$2.3 million



Navy Energy Project #1





Navy Energy Project #2

Customer Need:

- Conducted a thorough base wide study of the Installation to assess the entire energy situation



Navy Energy Project #2

Solution Offered:

- Replace two (2) inefficient fossil-fuel boilers with electric steam generators
- Installation of new high efficiency chillers with ozone friendly refrigerant
- Installation of high efficiency lighting
- Removal of underground fuel oil storage tanks and eight (8) chilling units containing harmful refrigerants



Navy Energy Project #2

Benefits/Results:

- \$216,000 in annual energy savings
- 32% reduction in base energy usage
- Project awarded with Efficient Building Award for Innovative Energy Technology from EEI and Energy User News

Investment: \$1.2 million



Navy Energy Project #2





Civil Agency Project #1

Customer Need:

- Replacement of old, inefficient lighting
- No budget dollars available – project required to be self funded through energy savings
- Zero impact to patient care and operations



Civil Agency Project #1

Solution Offered:

- Replaced or upgraded over 10,000 lighting fixtures including:
 - Indoor fluorescents
 - Exterior parking lot lighting
 - Exit signs
- Financed project through energy savings



Civil Agency Project #1

Benefits/Results:

- \$140,000 annual energy savings
- Zero dollar contribution by client
- Upgraded infrastructure
- Reduced electric and air-conditioning loads

Investment: \$560,000



Want to Learn More

Join us at the next Federal Utility
Partnership Working Group (FUPWG)

November 19-20, 2008

Norfolk, Virginia

And bring your Contracting Officer