

Charting a Course to Energy Independence

**Providence, RI
August 9-12, 2009**

**Project Financing:
Long Term Partnerships through
UESC**





Overview

- Army Utility Related Programs
 - Commodities & Rates
 - Utility Energy Services Contracts (UESC)
 - Utility Privatization
 - Energy Security
 - Demand Response
 - Metering
 - Other



Utility Energy Services Contract

- Procurement method using utility expertise and \$ to meet Federal conservation mandates
- Allows utilities to provide Federal Customers:
 - Energy and Water efficiency improvement projects
 - Renewable Energy projects
 - Demand Reduction projects
- Utility's costs are repaid directly from Installation's avoided costs resulting from project implementation



Army UESC Program

- First Army UESC done in 1992
- 241 UESCs at more than 30 installations
- Over \$327M invested since inception
- Over \$40M annual savings
- Over 3.3 trillion Btu annual savings
- Funding provided to help installations partner with utilities and use of UESCs



New Developments

- Draft Army UESC Policy Guidance
- Army Study on “Improving Army Installation Collaboration with Utilities”
- Rebates & Incentives
- At least 6 new projects currently under development



Organizations & Responsibilities

- Assistant Secretary of the Army for Installations & Environment – ASA (I&E)
 - Oversight of Army Energy Program, including UESCs
- HQDA, OACSIM
 - Authority and responsibility for UESC guidance and general oversight
- Installation Management Command (IMCOM) – HQ & Regions
 - Management of UESC program within respective region and assistance with UESC implementation
- Installations
 - Project identification, implementation and pay utility bills
- Utilities
 - Project execution and funding
- Project Facilitator
 - Assistance for installations and utilities with UESC implementation



Starting a UESC

- UESC Team
 - Upper management or other decision-maker
 - Director of Public Works
 - Energy manager
 - Engineers
 - Environmental Office
 - Building operators / managers
 - Contracting Officer
 - Procurement personnel
 - Legal representative
 - Utilities budget manager
 - Tenants
 - Maintenance staff
 - Security
 - Information Technology staff
 - Master Planning
 - Utility partner
- Education / Project Documentation Plan
- Discuss goals, needs, and potential conflicts from each member's perspective
- Talk to all serving utilities (electric, gas, and water)
- Contract selection



Contract Methods

- **Area-Wide Contract**
 - Agreement between GSA and utility
 - General terms and conditions for providing utility services for any Federal agency within utility's service territory
 - Installation places task order under existing AWC
- **Basic Ordering Agreement**
 - Similar to AWC but agreement between any agency and utility
 - Installation places task order under existing BOA
- **Agency Master Agreement / Model Agreement**
 - Similar to BOA but more flexible
 - Model agreement to be used under AWC, BOA, or alone
- **Site-Specific Contract**
 - Used for special situations and when no AWC exists



Measurement & Verification

- Required for Army if cost-effective
- Realize calculated project savings
- M&V Plan
 - Define performance goals
 - Define baseline performance
 - Identify way to measure energy consumption before and after project implementation
 - Assign roles and responsibilities
- Verify proper maintenance, operation, savings at least annually



Additional Considerations

- O&M
 - Maintenance Plan
 - Training
 - O&M savings based on actual expenditures
- Fuel-Neutral Approach
 - Utility should offer services for all energy sources and water, regardless of commodity sold
- Partnering
 - Long-term relationship between installation and utility
- Bundling
 - Combine projects with long and short paybacks to maximize project effectiveness and get lower financing costs
- REM
- Risks and Responsibilities
 - Utility Rates/Prices
 - Weather, Operation, Users
 - Operation, Maintenance, and Repair



Project Execution

- Audit Request / Project Initiation
 - Initiated by either party
 - Before or after UESC is in place
- Kickoff Meeting
 - Clarify expectations
 - Assign roles and responsibilities
- The Audit
 - Completed by utility, typically at no cost
 - Include renewable energy
 - Installation reviews audit report (recommended measures, estimated costs and savings, baseline)



Project Execution (cont.)

- Feasibility Study
 - Funded by installation
 - Compare to independent government estimate
 - Explains procedures to acquire rebates and incentives
 - Utility must use competitive procurement to choose contractors, comparing costs and value
- Engineering & Design Package
 - 100% design
 - Negotiate price proposal, analyze financing costs
- Approval
 - Under \$10 million – IMCOM or Command
 - Over \$10 million – ACSIM
- Construction & Installation
 - Utility provides training to installation staff
- Project Completion & Acceptance
 - Conduct and review periodic performance verifications, and perform continuous commissioning



Resource Requirements

- Funding
 - Feasibility studies not resulting in project
 - Rebates (reimbursed) – deposit directly in utility account
 - Savings from project must remain in utilities account to pay for project
 - After project paid in full, “incentive account” created to use funds for further projects
 - Buyout of project
 - Not recommended; buy down or additional scope preferred
- Staffing
 - Use existing personnel
 - Training required
- Project Financing
 - Full or partial, can be shared with appropriations, rebates, or other available funds
- Payments
 - Made from utilities account or new account created for UESC payments
 - Can re-direct funds from other accounts to pay for project through savings
 - Must be made within current and future budget – do not reduce budget



Reporting Requirements

- Notification of Intent to Pursue
 - Installation to ACSIM
- Request for Project Approval
 - Installation to higher HQ
- Notification of Award a UESC TO
 - Installation to ACSIM
- Army Energy and Water Reporting System's (AEWRS) Energy Manager's Database
 - Installation; within 15 days of award
- Annual Energy Management Data Report
 - Installation
- Other Frequently Requested Information



Army UESC Examples

- Fort Knox
 - Nolin Rural Electric Cooperative
 - Over \$117 million, 91 task orders since 1996
- Fort Lewis
 - BPA, with rebates from Tacoma Public Utilities and Puget Sound Energy
 - Energy efficiency work and provide Resource Efficiency Manager
- Fort McPherson
 - Georgia Power (Southern Company)
 - Education assistance from FEMP and PNNL



Questions????

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