

Typical Resource Efficiency Manager Scope of Work

Task 1: Develop installation energy savings plan and associated implementation strategy. The contractor shall develop, with the installation senior management, a site-specific installation energy savings plan and an implementation strategy to execute the approved plan. The REM shall recommend policies to establish the installation energy savings plan, which shall comply with the appropriate Federal Executive Orders and Regulations. The outcome of this effort is the elimination of unnecessary energy use and cost and environmental degradation. The recommendation shall include incentive programs to motivate installation personnel to reduce energy. The contractor will be responsible for the development, refinement and implementation of the energy strategic plan. The plan will identify a long-range energy strategy, which encompasses fulfilling the mission needs while accommodating the comfort and well being of the installation personnel. The plan will consider a five-year implementation strategy. The plan shall clearly identify projects to be implemented, prioritization of projects, anticipated time of implementation, and a strategy for the implementation. The strategy will address, but not be limited to, military construction funding, direct operation and maintenance funding, utility modernization funds, Energy Savings Performance Contracts (ESPC), utility company incentives, Demand Side Management (DSM) contracts, privatization, Energy Conservation Investment Program (ECIP), various Department of Energy funding mechanisms, potential grant money, and other opportunities from available sources.

Task 2: Develop an Energy Awareness Program. The contractor shall develop and sustain a comprehensive Energy Awareness program, which encompasses training, publicity, and incentives. The program shall include: training for building energy coordinators; training for family housing occupants; outline methods of information transfer on energy topics; success stories; helpful conservation tips; and a frame work for recognizing notable accomplishments of installation personnel in energy and water conservation. The contractor shall help plan and carry out continual energy awareness activities and implement an energy suggestion program. The contractor shall prepare an annual energy report, and nominations for energy awards from higher headquarters.

Task 3: Energy Accounting and Rate Analysis. The contractor shall maintain a current database of water, sewage, electricity, natural gas, and fossil fuels on a monthly basis. The database shall clearly indicate the consumption, demand, and all associated costs of the commodities. The contractor shall use this database to input the required information into the [] System. The contractor shall investigate various purchasing options for the indicated utilities and make cost savings recommendations to lower the cost of delivered utilities. The contractor shall use information management systems, spreadsheets, meter and billing databases, and expertise to identify and help correct anomalies in facility energy use. Anomalies may include unexplained electric demand spikes, deviations from recent and last year's consumption patterns, unusual load curves, unusually high-energy use per square foot and similar indicators. The contractor will work with installation personnel to field check, diagnose such problems, and determine energy cost savings that can be realized upon correction. This effort shall be coordinated with ongoing ESPC and/or DSM activities to prevent the duplication of effort. In many cases, the contractor may be able to correct the problem at no cost or, if authorized, with low-cost measures. The contractor shall clearly document the savings associated with the measures. The method of determining the savings shall be subject to the approval of the Contracting Officer and the Installation Representative. In other cases, the contractor will refer more complex problems and recommended corrective actions to the Contracting Officer and Installation Representative.

Task 4: Energy Audits and Project Development. The contractor shall continually investigate energy saving opportunities at the installation. The goal of the investigations should be to identify and recommend energy projects, programs, and initiatives. The contractor should consider upgrading equipment, replacing equipment, revising maintenance practices, optimizing facility operations, or other means to minimize utility costs. The contractor shall prepare project implementation packages including energy audits and any required energy analysis using spreadsheets and energy accounting software to document energy savings and perform an economic analysis for proposed energy efficiency measures. The contractor shall coordinate this effort with any ongoing ESPC or DSM activity to prevent the duplication of effort. The Contracting Officer and the Installation Representative shall approve the method of identifying the savings.

Task 5: Support for ESPC, DSM, Utility Privatization, and other potential energy programs. The contractor shall investigate financial options for implementing energy projects available through ESPC, DSM, utility privatization, and other programs. When these programs are utilized at an installation, the contractor shall provide the required coordination between the Government and the other parties. This coordination shall include, but not be limited to:

- a. Assimilating data, such as utility bills, consumption data, facility drawings, etc.
- b. Reviewing and coordinating site surveys, feasibility studies, designs, proposals, shop drawings, project close out documentation, measurement and verification reports, invoices and payments, maintenance procedures, and other documentation prepared by other contractors.
- c. Serving as the primary point of contact between the Installation Representative and the appropriate contracting agency Contracting Officer or Contracting Officer's Representative (COR) for the ESPC, DSM, utility privatization or other energy contract.

Task 6: Apply for rebates and grants to help implement energy projects and maximize the return to the Government. The contractor shall continually investigate utility company rebates, utility company incentives, miscellaneous grants, and other available funds that may exist for energy projects and programs. The contractor shall prepare the appropriate applications required for the various rebates, incentives, and funds for Government submission, unless others prepare the application as part of an ESPC or utility privatization project. For ESPC and utility privatization projects, the contractor shall assist in the collection of data for the available rebates or grants. The rebates and grants shall become the property of the Government. The Government shall determine how the funds will be used.

Task 7.0 (OPTIONAL) Additional Services. The Contracting Officer may request the following additional services through a modification:

- a. ESPC/DSM/ or Utility Privatization efforts. These additional services include, but are not limited to:
 - 1) Quality Assurance (QA) to insure that the contractual requirements of other parties are met during all phases of projects.
 - 2) Monitoring and verifying that the other contractors are performing work in accordance with approved site, safety, and health plans.
 - 3) Monitoring and verifying that the other contractors are performing work in accordance with the approved project quality control plan.
 - 4) Preparation of daily reports.
 - 5) Monitoring implementation schedules for all phases of work.
 - 6) Witnessing any testing, metering, or verification required for baseline developments.

- 7) Witnessing any testing metering, or verification required for actual energy consumption during the term of the various contracts.
 - 8) Monitoring maintenance efforts to insure that the contractual requirements are met.
 - 9) Assist in a long range development of new Utility Monitoring and Control System (UMCS). Work including assistance in developing pre-planning, planning documentation on which building will prove the greatest serving, including new barracks, hangers, gymnasiums and administrative buildings. Knowledgeable of control systems and automatic setback systems to save energy. Must be able to calculate and verify the net savings of the proposed and also the completed systems, now under contract.
 - 10) Familiar with large lighting, security lighting and sensor systems. Review [] plans/specifications, and has ability to study and identify potential savings, and application of solar powered lights, stop lights, etc.
 - 11) Develop energy savings cost estimates for buildings, 1391 development fast payback projects, etc. Such as radiant heating, ground source heat pumps, water saving toilets, sky-lighting light terminals, high efficient electrical motor application and air conditioning systems.
- b. Equipment Rental. The contractor shall be required to rent equipment such as energy monitoring equipment required to implement various aspects of this scope of work, as directed by the Contracting Officer

Expertise: The Contractor is responsible for providing REM personnel having expertise in the following areas:

- 1) The Contractor should have a thorough understanding of load profile data presentation and manipulation. The contractor shall have proficiency with the [] system for energy reporting.
- 2) The Contractor should have a thorough understanding of potential utility rates that may be encountered at each site.
- 3) The Contractor shall have a minimum of 5 to 7 years of experience in the actual execution of energy accounting, utility rate analysis, energy audits, and energy project development. The expertise should be based on the actual performance of the detailed tasks instead of simply functioning in a management role.
- 4) The Contractor shall have a minimum of 5 to 7 years of experience in providing technical resources and management of energy related services related to work that is similar to the tasks that are identified within this scope of work.
- 5) The contractor should have working knowledge in utilizing the Microsoft Office suite of products including Excel, PowerPoint, Word, Project, and Access to analyze energy usage data and present results of findings and proposals for cost-effective solutions. The contractor should have proficiency in utilizing Acrobat™ software for converting documents to electronic format. Proficiency in IBM compatible PC, related peripherals, and operating system enhancements is required for all performers assigned to this Task.
- 6) The contractor should have working knowledge in various energy estimating software packages such as but not limited to Trane Trace, DOE II, and other energy simulation software.
- 7) The contractor should have working knowledge in documenting and monitoring maintenance procedures using software such as Maximo.
- 8) The contractor should have working knowledge in various construction techniques and procedures for energy related projects including but not limited to: lighting systems; electrical systems; heating, ventilation, and air conditioning systems; control systems; energy distribution systems (chilled water, steam, and hot water); and plumbing systems.

- 9) The contractor should have working knowledge in the use of BIN, heating degree-days, and other simplified methods of energy simulation calculations.
- 10) The contractor should have working knowledge of executive orders, ESPC legislation, DSM legislation, utility privatization legislation, and other energy legislation and regulations related to the Army's energy program.
- 11) The contractor shall maintain a working knowledge of current energy related topics through organizations such as American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the Association of Energy Engineers and other organizations.
- 12) The contractor should have a thorough understanding of the [] ESPC program including but not limited to the Department of Energy (DOE) ESPC guidance, DOE's measurement and verification protocols, the International Measurement and Verification Protocols, ASHRAE's measurement and verification procedures, CEHNC's area wide ESPC contracts and DOE's super ESPC contracts.

Citizenship/Clearances. The contractor and all his personnel involved in the performance of this contract must be U. S. citizens and must be able to pass a National Agency Check with Local Agency Check and Credit Check (NACLC). The [] and Security Directorate will process the contractor's request for a NACLC during in processing of all contractor personnel.

Deliverables: Unless otherwise indicated by the Contracting Officer, the contractor shall submit 3 copies of each deliverable to the Contracting Officer and 3 copies to the Installation Representative. All deliverables will be subject to the approval of the Contracting Officer, unless otherwise indicated by the Contracting Officer.

Deliverables will be as follows:

Installation Energy Savings Plan and Associated Implementation Strategy: The contractor shall submit the energy savings plan and associated implementation plan in accordance with Task 1 within 90 days of issuance of the award of the contract. Updates to this documentation shall be provided on an as needed basis to insure that it is kept current.

Energy Accounting Database: The contractor shall provide documentation for the energy accounting database as required by Task 3 within 90 days of issuance of the award of the contract. This information shall be updated and submitted each month thereafter with the monthly report for the duration of this task order.

Monthly Reports: The contractor shall submit a report each month that clearly documents all work performed under this statement of work. The report shall include a summary of all work including, but not limited to: An energy savings summary sheet that shows the savings generated by each implemented project on a monthly basis; energy awareness activities, award nominations, proposed incentive awards; utility rate analyses, energy audits performed; ESPC/DSM/Utility Privatization activities and information required in Task 6; documentation of anticipated energy and other savings generated as a result of the REM activities; identification of all potential rebates and grants; identification of all recommended energy and water savings opportunities; a summary of work that is anticipated to be needed within the next month; and a lessons learned section including recommendation to enhance the REM process.

Audits and Project Development Documentation: The contractor shall submit audits and project development documentation. It should be noted that one of the primary goals of REM is to facilitate the implementation of projects. Therefore, this documentation should be submitted at least quarterly to demonstrate project implementation. The documentation should include project descriptions, energy savings, other savings, supporting calculations,

method of implementation, utilization of available incentives, impact to the installation, and all rationale associated with the project.

ESPC/DSM/Utility Privatization Comments and Related Data: The contractor shall provide ESPC, DSM, and utility privatization comments and related data as required in Task 5 on an as needed basis.

Rebate and Grant Applications: The contractor shall provide a copy of the rebate and grant applications with all supporting rationale. This information shall be provided to the Installation Representative and Contracting Officer for approval prior to submission of a formal application to the required organization that is supplying the rebate or grant.

Training Material: The contractor shall prepare training presentations, briefings, reports, articles, correspondence and other work products as appropriate to successfully implement the REM activities as identified in the various tasks.

Detailed Presentations and Reports: The Contractor shall prepare detailed presentations and reports concerning energy activities as needed. The Contractor shall also participate in or present briefings related to energy activities.

Contractor and Government Furnished Resources. The Government intends to provide the contractor with office space, telephone, access to fax/printer/scanner, LAN connection, and access to a Government pool of vehicles for one individual located at [], unless otherwise indicated by the installation representative. The Government will process the contractor's National Agency Check with Local Agency Check and Credit Check (NACLC) requests at no cost to the contractor. The contractor shall provide all other resources needed to accomplish the tasks included in the statement of work in its entirety including but not limited to a Personal Computer(s), cell phone, facsimile device, printer, copier, scanner, software, digital camera, temperature sensors, etc.

Work Hours: Unless otherwise directed or approved by the Installation Representative, the REM will work a normal work schedule (40 hours per week), Monday through Friday, within the hours of 0700 and 1700; not including legal holidays and weekends.

Travel: The contractor shall be responsible for complying with the U.S. Government "Joint Travel Regulations" while on official travel. Travel location(s), number of Contractor personnel to travel and frequency of travel shall be as agreed upon on subtasks.