

**PROCEDURES FOR USING ARMY REGIONAL  
ENERGY SAVINGS PERFORMANCE CONTRACTS (ESPC)  
OPTION B – FULL SERVICE  
THROUGH MOA WITH AFCESA  
May 2004**

The Air Force Civil Engineer Support Agency (AFCESA) has entered into an agreement with the U.S. Army Engineering and Support Center, Huntsville (USAESCH) that allows Air Force bases to use the Army Regional Energy Savings Performance Contracts (ESPCs) under Option B - Full Service. Under this option, USAESCH retains ordering authority and all follow-on interactions will be between USAESCH and the Air Force installation. The development and award of task orders will be a joint effort between USAESCH and the Air Force installation.

The cost to the installation is approximately 1% of the total annual utility bill (electricity and gas consumption) for the approximate two to three years that project support is required. This is an estimate only based upon previous project costs and will be modified based upon the actual installation and project requirements. In order to use this option, funding must be provided before work can begin, but may be paid in whole, or in part, on an annual basis.

AFCESA is the facilitator for a base wanting to participate in the Army ESPC and will coordinate with USAESCH for an Air Force installation wanting to use the USAESCH ESPC contract(s). As facilitator, AFCESA will inform USAESCH in writing the Air Force installations which have elected to deal directly with Huntsville.

<b>WHO</b>	<b>WHAT</b>
<b>Installation Contracting Officer and Civil Engineer</b>	To access the Full Service Option the contracting office forwards a request (coordinated with the Base Civil Engineer and Contracting Squadron Commander) to HQ AFCESA/CESM, 139 Barnes Drive Suite 1, Tyndall AFB FL, 32403-5319. The request (Attachment 1) should indicate interest in using Army Regional ESPC and identify the Contracting Officer and Civil Engineer. For each person identified, the request should provide address, phone number (DSN and Commercial), Fax number, and e-mail address.
<b>HQ AFCESA/CESM</b>	Inform USAESCH in writing of the Air Force facility who has elected to deal directly with Huntsville (Attachment 2). The Best Business Practices (Attachment 3) are provided to help the installation implement an ESPC. These suggestions will help in translating the requirements and applying the lessons learned toward achieving a successful ESPC project.
<b>USAESCH and Air Force Installation</b>	Under the Full Option - develop Memorandum of Agreement - USAESCH will provide a draft memorandum to the Air Force installation for coordination and review. Upon receipt of the Air Force installation's comments, the MOA is finalized and sent to installation for signature.
<b>USAESCH</b>	Perform training with installation personnel on use and management of Army ESPC contract (if prior training has not been accomplished) to improve knowledge and understanding of the Army process, legislation, and appropriate management controls.

**USAESCH and Air Force  
Installation Civil Engineer and  
Contracting Officer**

USAESCH will provide an ESCO selection Customer Survey form to the Civil Engineer. This form provides the basis for the beginning of the cooperative selection process and the installation for one ESPC contractor to work at the installation's site. An ESCO is matched with the installation based upon the installation's needs and requirements and an ESCO's capabilities to support the installation.

**USAESCH and Air Force  
Installation Civil Engineer and  
Contracting Officer**

Holds an on-site kick-off meeting with the ESCO and installation personnel to establish roles and responsibilities and a project development and review schedule.

**ESCO**

Conducts a survey/audit and evaluates the installation facilities for potential energy conservation measures (ECM) and submits proposal(s) to USAESCH in accordance with the Army 4 or 46 State ESPC contracts.

**Personnel**

Review the proposal at each stage of development and ultimately award a task order.

**Installation Contracting Officer**

Inform HQ AFCESA of task order award amount and add to distribution list to receive a copy of the task order cover page and continuation pages for input into AFCESA database.

**Installation Civil Engineer**

Submit semi-annual updates to AFCESA detailing contractor's investment, dollar savings, MBTU savings, etc.

Attachments:

1. Letter to Request Full Service
2. AFCESA Letter to USAESCH
3. ETL 02-5 Best Practices

**AFCESA POCs:**

AF Energy Program Manager	Mr. Pat Mumme	DSN	523-6361	<a href="mailto:pat.mumme@tyndall.af.mil">pat.mumme@tyndall.af.mil</a>
Contract Support:	Mr. Gary Hein	DSN	523-6329	<a href="mailto:gary.hein@tyndall.af.mil">gary.hein@tyndall.af.mil</a>
	Mr. Tim Adams	DSN	523-6168	<a href="mailto:tim.adams@tyndall.af.mil">tim.adams@tyndall.af.mil</a>
	Ms. Lynda Sisk	DSN	523-6220	<a href="mailto:linda.sisk@tyndall.af.mil">linda.sisk@tyndall.af.mil</a>
	Mr. Michael Cross	DSN	523-6481	<a href="mailto:michael.cross@tyndall.af.mil">michael.cross@tyndall.af.mil</a>
	Mr. Kevin Wahlstrom	DSN	523-6302	<a href="mailto:kevin.wahlstrom@tyndall.af.mil">kevin.wahlstrom@tyndall.af.mil</a>
	Ms. Ebony Payton	DSN	523-6236	<a href="mailto:ebony.payton@tyndall.af.mil">ebony.payton@tyndall.af.mil</a>
	Ms. Brenda Tipton	DSN	523-6012	<a href="mailto:brenda.tipton@tyndall.af.mil">brenda.tipton@tyndall.af.mil</a>

**Attachment 1**

**Sample Letter to Request Full Service under Army ESPC**

MEMORANDUM FOR HQ AFCESA/CESM

ATTN: Mr. Pat Mumme  
139 Barnes Drive, Suite 1  
Tyndall AFB FL 32403-5319

FROM: ***Requesting Base Contracting Office***

SUBJECT: Energy Savings Performance Contracting (ESPC) Participation

1. ***BASE NAME*** would like to actively participate in the Huntsville Corps of Engineers' 46 State Energy Savings Performance Contract (ESPC). We hereby furnish the following information as required by the Army Procedures through the MOA with AFCESA.
2. The ESPC point of contacts are ***Name of Civil Engineer*** (normally the Base Energy Manager) at ***DSN Number***; and ***Name of Contracting Officer*** at ***DSN Number***.
3. Please contact ***NAME of contact at base (usually CE)*** if you need further information.

***Signature***  
***Title Contracting Officer***

Attachment: Base Request letter

INSTRUCTIONS AND FORMATS  
for  
AIR FORCE IMPLEMENTATION  
of  
US ARMY CORPS OF ENGINEERS ESPC

**Attachment 2**

**Sample AFCESA Letter to USAESCH**

MEMORANDUM FOR CMDR, US ARMY ENGINEERING AND SUPPORT CENTER  
ATTENTION: CEHNC-PM-CR (Mr. Earl Johnson)

FROM: HQ AFCESA/CESM  
139 Barnes Drive Suite 1  
Tyndall AFB FL 32403-5319

SUBJECT: Energy Savings Performance Contracting (ESPC) Program

1. As required by the Memorandum of Agreement (MOA) between AFCESA and the Army Engineering and Support Center (USAESCH), **Base Name** AFB has provided written correspondence provided as Attachment 1, indicating their desire to deal directly with USAESCH under Option A or B – Full Service.
2. If you have any questions, or require additional information, the point of contact for this effort is Ms. Lynda Sisk, DSN 523-6220 or the undersigned, DSN 523-6361.

PAT MUMME  
Facilities Energy Program Manager

INSTRUCTIONS AND FORMATS  
for  
AIR FORCE IMPLEMENTATION  
of  
US ARMY CORPS OF ENGINEERS ESPC

**Attachment 3**

**Best Practices**

**Best Practices.** The following best business practices are provided as recommendations to help the installation implement an ESPC. These suggestions will help in translating the requirements and applying the lessons learned toward achieving a successful ECM.

**1. M&V Plan.** The M&V plan is the cornerstone of an ESPC, ensuring the installation's ability to confirm that actual energy savings are occurring and verified in a reasonable, cost-effective manner. Using this plan annually guarantees to the base that the equipment installed is performing as predicted. Using a good M&V plan will help mitigate risk to the base, eliminate conflicts when systems fail to meet their expected savings, and ensures that the ESCO remains engaged with the base over the full term of the contract. All M&V plans should be in agreement with the most current IPMVP. Whenever possible M&V, baseline development and testing should be presented in the AF M&V format using the prototypes. Current prototypes can be downloaded from the AFCESA Website at [http://www.afcesa.af.mil/ces/cesm/energy/cesm\\_prototypes.asp](http://www.afcesa.af.mil/ces/cesm/energy/cesm_prototypes.asp).

**1.1. Baseline Development.** An energy baseline is a prediction of the amount of energy that would have been used if there had been no energy conservation equipment installed.

**1.1.1.** It is recommended that actual metering and data collection be performed by the ESCO but verified by the base to ensure the baseline reflects realistic energy consumption upon which the savings calculations will be based. Data collection requirements vary by ECP and M&V method but a minimum of three months' data is recommended for weather impacted ECPs. If the ESCO and AF determine that simulation is the preferred methodology, the models must be validated (calibrated).

**1.1.2.** All assumptions made in the Phase I report should be validated in Phase II by the ESCO. Validation includes all pertinent data and formulas, used to compute the energy savings, be documented so the base energy manager can easily explain these savings now or in the future.

**1.1.3.** It is recommended that baseline development and data collection begin immediately after the initial kickoff meeting. The longer the data collection period, the lower the risk to the base and ESCO (lower risks result in lower overall costs).

**1.1.4.** Review of the baseline by an independent party is recommended. The MAJCOM/base would pay the cost of these reviews.

**1.2. Performance Tests.**

**1.2.1.** A performance test is a process for achieving, verifying, and documenting the performance of equipment installed or modified as part of an ECP. The process begins in Phase II with the development and approval of a performance test plan and implemented after the TO award. Implementation is

INSTRUCTIONS AND FORMATS  
for  
AIR FORCE IMPLEMENTATION  
of  
US ARMY CORPS OF ENGINEERS ESPC

accomplished during construction to certify that all equipment is functioning and operating properly and the results approved before conducting the energy savings verification tests.

**1.2.2.** The performance test plan developed as part of Phase II is prepared for each ECP which describes all aspects of the test process, including schedules, responsibilities, documentation requirements, and functional performance test requirements. The functional performance tests should describe at what conditions or loads the tests are to be performed, location of test sensors, frequency of measurements, type of test equipment, test methods, and the acceptable range of results. The level of detail depends on the complexity of the ECP. The acceptance testing plan should be of sufficient detail such that the base knows exactly they type tests will be performed prior to signing the task order award.

**1.2.3.** After the performance test is performed, a final acceptance report should be submitted for approval in writing to the base contracting officer and base energy manager. The final acceptance report is submitted after all functional performance tests are completed. The final acceptance report should include the executive summary, ECP description, the performance plan, and all test results.

**1.3. Energy Savings Validation.**

**1.3.1.** It is recommended that a formal set of test procedures with the acceptable range of results be developed to validate energy savings. These energy savings validation test procedures should be submitted by the ESCO at Phase II and approved before awarding the TO. The tests should describe at what conditions or loads the tests are to be performed, location of test sensors, frequency of measurements, type of test equipment, test methods, and the acceptable range of results. The test procedures should verify all energy savings that are guaranteed under the ECP/ECM.

**1.3.2.** It is recommended that after approving the performance test results for each ECP, the ESCO perform the approved energy savings test procedures to validate the energy savings for each ECP.

**1.3.3.** Once the validated energy savings have been approved for all ECPs, payment will begin the first full month after acceptance of the ECM.

**1.4. Annual Reconciliation Plan (Audit of Savings).**

**1.4.1.** Each ECP in the TO should have a detailed annual (at a minimum) reconciliation plan approved before the TO award. The plan should describe a formal set of test procedures, acceptable range of results, schedule of how reconciliation payments will be assessed if savings fall below the guarantee, and a certification by the ESCO that all O&M requirements and conditions have been met for each ECP in the TO.

**1.4.2.** The test procedures should be similar to those developed to validate energy savings. The purpose is to test, validate, and document the energy savings.

INSTRUCTIONS AND FORMATS  
for  
AIR FORCE IMPLEMENTATION  
of  
US ARMY CORPS OF ENGINEERS ESPC

**1.4.3.** The contracting officer must approve the annual reconciliation of savings after coordination by the base energy manager.

**1.4.4.** It is recommended that an independent audit of the ECP's savings be performed every five years, and a report sent to the base contracting officer, base energy manager, and MAJCOM energy manager. The MAJCOM/base will pay the cost of these reviews.

**2. Maintenance Related to TO.**

**2.1.** All maintenance is an ESCO responsibility and should be performed by the ESCO; however, in some cases the installation may have the capability to perform such maintenance. If maintenance is performed by the installation, the responsibility remains with the ESCO. Having the ESCO perform the maintenance eliminates the risk to the installation that a reduction of energy savings is the result of improper routine maintenance by the installation.

**2.2.** If the base agrees to perform the maintenance, it should carefully consider the consequences should it become unable to perform in accordance with the maintenance schedule. Since the ESCO is ultimately responsible, they will determine if the government is meeting TO requirements. If the base fails to perform proper maintenance, the ESCO may take over the maintenance and charge the base for performance. This will require modifying the TO, reworking the TO's financial provisions, and possibly extending the TO's term length or buying out if the TO term cannot be extended. When the base assumes maintenance, the ESCO must provide a detailed maintenance schedule reflecting by whom, when, and how often the maintenance is to be performed as detailed in the Phase II report. Since all costs must be accounted for, the estimated cost of the ESCO performing the maintenance should be captured in the proposal and reflected in the cost analysis, but may not have to be included as a cost to the ECM. Additional cost must be reflected in the cost analysis as a cost to the ECM if maintenance costs increase over pre-ECP levels.

**3. Pricing of TO Work.**

**3.1.** The installation should request the ESCO provide detailed supporting documentation needed to determine price reasonableness.

**3.2.** ESCO estimates for each ECP should identify all major costs (e.g., equipment, labor, design, maintenance, repair, parts, overhead and profit [OH&P], travel, M&V). The government should also prepare an independent estimate.

**3.3.** Contingencies should be clearly identified and negotiated for each ECP in the Phase II reports. Contingency costs mitigate a projects risk, which is a factor in the profit negotiated; therefore the level of contingencies needed for a project should be carefully considered. See FAR 31.205-7

**3.4.** Ancillary savings are those that are not attributed to utility savings, such as manpower, materials, or elimination of contract-operated functions. Ancillary savings are any savings attributable to the project

## INSTRUCTIONS AND FORMATS

for

## AIR FORCE IMPLEMENTATION

of

## US ARMY CORPS OF ENGINEERS ESPC

other than energy savings. Maintenance, repair or operation costs for tasks currently being performed by the government or by a contractor hired by the Government are ancillary savings if the ESCO assumes the tasks, reduces the task, or eliminates the task. Operations costs for tasks currently being performed by the Government or by a contractor hired by the government are ancillary savings if the ESCO assumes the task, reduces the task, or eliminates the task. The Government will determine whether an ESCO proposed task elimination or reduction would be considered an ancillary savings available for sharing. The Government will provide dollar value of the ancillary savings.

**3.4.1.** Government civilian positions must be deleted from the official manpower rosters or reallocated by the BCE to offset known manpower shortfalls before related savings can be added to the ESPC proposal. Caution is recommended since O&M funds will need to be expended if positions are reallocated and credit is taken for manpower reduction.

**3.4.2. Reducing Contract-Operated Functions.** Since only the final negotiated savings can be applied to the ESPC contract, it is recommended that all negotiated cost reductions due to the reduction or elimination of contract-operated functions be completed before those savings are accepted in the proposed TO.

**4. Equipment Ownership.** The ESCO retains ownership of all installed equipment for the term of the contract.

**5. Infrastructure Privatization.** Any utility system or family housing being considered for privatization should not be included in any ESPC efforts. Any utility system is defined as infrastructure outside the 1.5-meter (5-foot) line of the using facility, and includes production and distribution assets. If it is necessary to include a utility system in the ECP then the base needs to have a written agreement with the ESCO for the new utility systems owner to buyout that system should privatization take place.