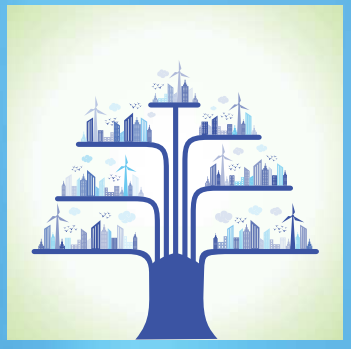
Procuring Energy Management Services with the GSA Areawide Contract

A Practical Guide to Procuring Energy Management Services through a GSA Areawide Contract



General Services Administration
Public Buildings Service
Energy Division

The purpose of this guidebook is to provide an introduction to Utility Energy Service Contracts (UESCs) and to outline how the GSA Areawide Contract may be used to enter into these contracts.

General Services Administration
Public Buildings Service - Energy Division

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GSA Makes Energy Management Simple

Introduction

Utility Energy Service Contracts (UESCs) allow agencies to implement energy efficiency, water conservation, and electricity demand measures through their local utility service company. These measures are typically labeled collectively as energy conservation measures (ECMs). In a UESC, the utility company provides the analysis, design, installation, and financing to implement these projects. During the contract period, the Agency pays for the cost of the UESC from the "avoided-costs-savings" resulting from the energy and water conservation improvements.

UESC measures may be direct or indirect improvements to real property. Direct improvements are those that make physical changes to the facility, such as lighting replacements and HVAC replacements. Indirect improvements to real property are those that do not make physical changes to the facility equipment or systems. Examples of indirect improvements include, but are not limited to, preliminary or comprehensive energy audits, recommissioning of building systems, and control sequence optimization.

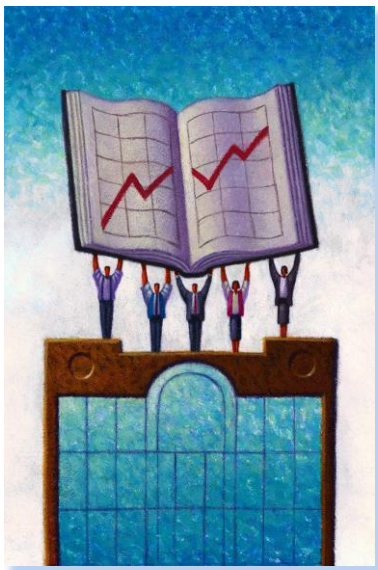
As outlined in the GSA *Utility Areawide Guide*, GSA Areawide Contracts can be used to procure energy management services (EMS) from a utility company acting in its capacity as a regulated public utility. The Areawide Contract has the flexibility to cover many types of energy, water, and demand-side conservation measures, provided the measure meets the following criteria:

1. The measure must produce measureable energy or water reductions or measurable amounts of demand reduction;

2. The measure must be directly related to the use of energy or water, or demand reduction;

3. The preponderance of work covered by the measure (measured in dollars) must be for items 1 and 2 above; and

4. The measure must be a direct or indirect improvement to real property. Real property is defined by the *Federal Management Regulation (FMR), Subchapter C* and Federal Acquisition Regulation (FAR), Part 2.



More information can be obtained by contacting the GSA Energy Division. Additional helpful resources are available on the UESC pages of the DOE FEMP website, including the *UESC Enabling Documents* and the *UESC Guide: A Resource for Contracting Officers Working on UESC Projects,* which together provide enabling legislation, agency legal options and guidance, and samples and templates. The FEMP UESC website also includes links to current training, best practices, case studies, and contacts.

DOE FEMP Utility Energy Service Contracts
Available <http://energy.gov/eere/femp/utility-energy-service-contracts>

Is the GSA Areawide Contract Right for the Situation?

The first item to consider is the availability of a GSA Areawide Contract in the facility service area. As documented in the Federal Acquisition Regulations (FAR), Agencies are required to promote full and open competition when acquiring utility services; therefore, if the GSA Areawide Contract is available in the service area, the facility shall use that Areawide Contract unless one of two exceptions, as outlined below, is met:

1. Service is available from more than one (1) supplier, or

2. The head of the contracting activity or designee otherwise determines that use of the Areawide Contract is not advantageous to the Government. If service is available from more than one supplier, service shall be acquired using competitive acquisition procedures (see 41.202(a)). The determination required by paragraph (c)(1)(ii) of this section shall be documented in the contract file with an information copy furnished to GSA at the address in 41.301(a).

If more than one (1) franchised utility company is available in the service area or if the Areawide Contract is determined to be non-advantageous, then the facility is required by the FAR to acquire service via competitive acquisition procedures (i.e., separate contract), allowing all Utilities the opportunity to bid for service. If the Areawide Contract is determined to provide the best value to the government in response to the need for energy management services, the process must be documented through the justification and approval process as outlined in the FAR. A sample justification and approval form is located in Appendix B of this manual. This form is from page 25 of the *UESC Guide: A Resource for Contracting Officers Working on UESC Projects*. The *GSA Procurement Guide for Public Utility Services* outlines how to determine if the GSA Areawide Contract is right for a particular situation and the process by which to evaluate all available options to ensure the best value is obtained by the government:

GSA Procurement Guide for Public Utility Services
Available <http://gsa.gov/energy>

The scope of this guidebook is to outline the process for using the GSA Areawide Contract for energy management services after it has been determined that the Areawide Contract provides the best value to the government.

A World of Energy Management Options

Overview

The GSA Areawide Contract includes an exhibit titled "The Energy Management Services Authorization" (EMSA), which is the vehicle used by the Ordering Agency to specify energy management services (EMS). The EMSA allows a facility to procure a variety of EMS, including energy audits, engineering and design studies, installation of energy conservation measures (ECM), and O&M and training services. A sample EMSA can be found on page 8, and a representative list of potential ECMs is included in the table on page 6.

The terms, conditions, and definitions necessary for the Ordering Agency and the Contractor to specify in detail the scope of the requested EMS are included as an attachment to the EMSA. This attachment includes language regarding the services available under the EMSA, contract performance requirements, payment options, termination conditions, warranty terms, and project schedules, among other items.

The EMSA and its attachments direct the Ordering Agency and the Contracting Utility through the procedures for identifying and implementing ECMs, from preliminary audit of the facility to design, construction, and operations and maintenance (O&M) of the ECM. The benefits of the Areawide Contract and the EMSA are outlined on page 7, while guidance is provided in the subsequent section to understand and use the EMSA for the various available services.

"The Energy Management Services Authorization allows a facility to procure a variety of energy management services, including, but not limited to, the following:

- *Energy audits;*
- *Engineering and design studies;*
- *Construction and installation; and*
- *O&M and training services.*

Responsibility and Reporting

- Responsibility: Contracting officers shall ensure that all Ordering Agency subject matter experts (SMEs) are involved in the decision-making process for ECM contracting and project implementation. SMEs shall include, but are not limited to, facility managers, energy managers, construction specialists, and utility experts.
- Reporting: Contracting officers shall ensure that contract and annual audit files for each issued EMSA are sent to the GSA Energy Division for review. The Energy Division is responsible for ensuring that the GSA Areawide Contract is used appropriately and is not abused for projects outside the energy management scope. It is important to note that the Ordering Agency is responsible for all audit procedures, while GSA only conducts a review to ensure that the Areawide Contract is used appropriately.

Representative Energy Conservation Measures (ECM)

- Addition of Liquid Refrigerant Pumps to Reciprocating Air Conditioning Units;
- Air Distribution Improvements;
- Boiler Control Improvements;
- Chiller Retrofits;
- Construction of New Cogeneration Facilities;
- Cooling Tower Retrofits;
- Daylighting Controls;
- Distributed Generation Installation;
- Economizer Installation;
- Electric / Gas Service Entrance Construction;
- Energy Consulting Services;
- Energy Management Control Systems;
- Exit Sign Upgrades;
- Facility Management System Replacement or Alteration;
- Fans and Pump Replacement / Impeller Trimming;
- Fuel Cell Installation;
- Ground Source Heat Pumps;
- HVAC Controls Upgrades and Techniques;
- Ice Storage Cooling Methods;
- Instantaneous Water Heating;
- Insulation Installation;
- Interior & Exterior Lighting Replacement;
- Lighting Control Improvements;
- Load Shaving Techniques;
- Motor Replacement with High Efficiency Units;
- Network Protectors;
- New HVAC Design and Construction;
- Occupancy Sensors;
- Packaged Air Conditioning Unit Replacement;
- Photovoltaic System Installation;
- Re/Retro-Commissioning Activities;
- Reflective Solar Window Tinting;
- Refrigerator Replacement with High Efficiency Units;
- Renewable Energy Projects;
- Replacement and/or Conversion of HVAC Systems;
- Solar Air Preheating System;
- Solar Domestic Hot Water System;
- Steam Trap Maintenance and Replacement;
- Transformer Replacement;
- Upgrade of Natural Gas-Fired Boilers with New Controls ;
- Variable Speed Drive Utilization;
- Water Conservation Device / Fixture Installation;
- Weatherization;
- Window Air Conditioning Replacement;
- Window Covering and/or Awning Installation;
- Window / Door Replacement; and
- Other Measures that Reduce Energy Consumption, Demand, or Water Consumption Related Costs.

Benefits of the GSA Areawide Contract

There are many benefits to using the GSA Areawide Contract to fulfill a facility's energy management needs:

1. **Ease of use** - The negotiated AWC provides contract language, provisions, and terms and conditions that support the Ordering Agency's authorization for energy management services. The GSA Areawide Contract is one of the easiest and quickest ways to procure energy management services.

2. **Flexibility** - Nearly every type of EMS is available through the GSA Areawide Contract. An Ordering Agency can use as many Authorizations as it needs to take advantage of the myriad of services its Utility might offer. In addition, because the Ordering Agency can specify special requirements and additional instructions, renewable energy and out-of-the-box ECMs can be implemented and financed through the GSA Areawide Contract.

3. **Established track record** – The GSA Energy Division currently has about 100 Areawide Contracts with Utilities across the nation, and many Agencies' already have a history of working with this procurement tool. The GSA Areawide Contract has a proven track record, having facilitated successful partnerships between Agencies and utilities for years.

4. **Private Financing** - The Areawide Contract provides an alternative method for financing an EMS, similar to an energy savings performance contract.

5. **Help is just a phone call away**...or a mouse click. The Energy Division is available to provide technical and contract management and administration information and assistance whenever you require it.

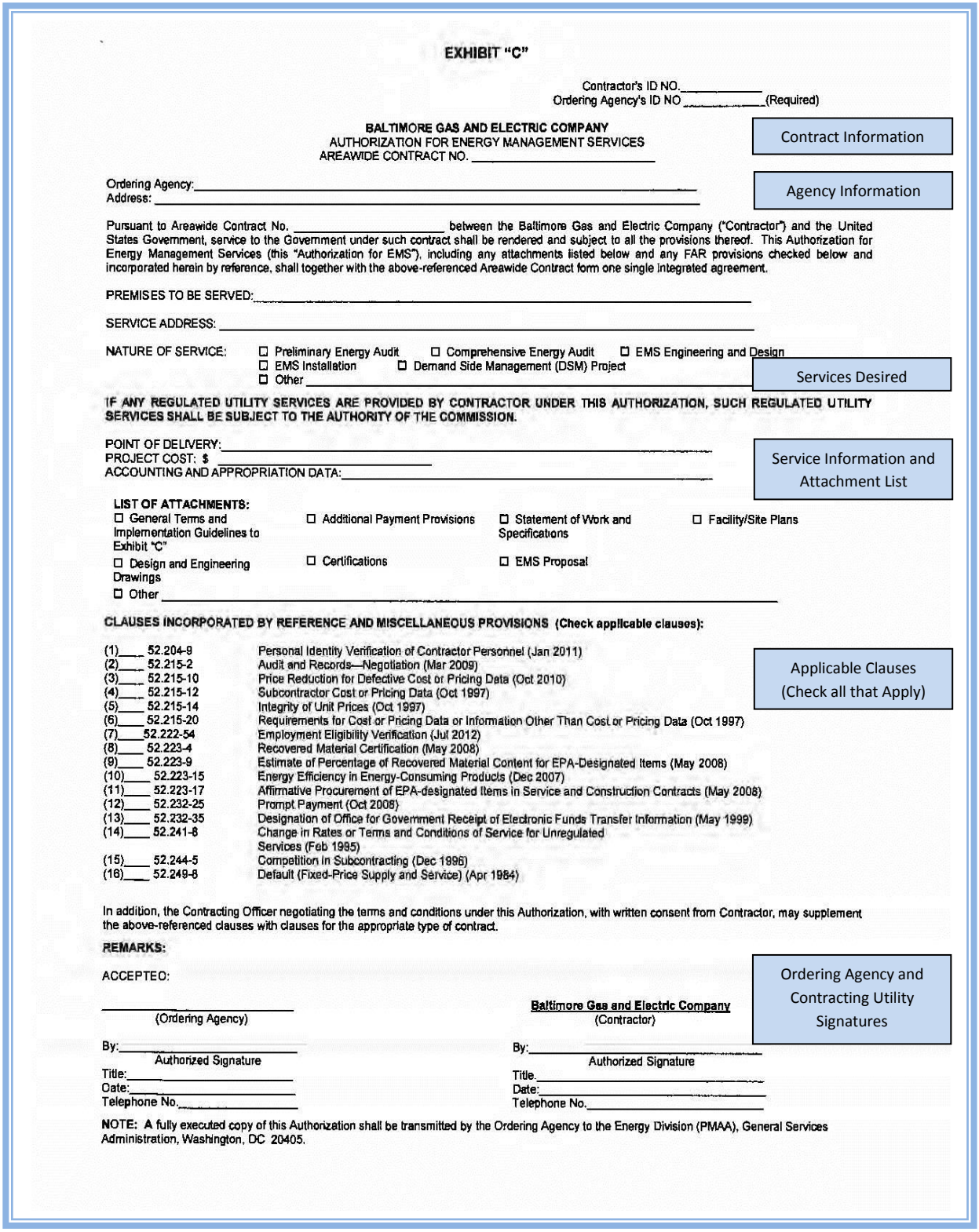


EXHIBIT "C"

Contractor's ID NO._____
Ordering Agency's ID NO _____(Required)

BALTIMORE GAS AND ELECTRIC COMPANY
AUTHORIZATION FOR ENERGY MANAGEMENT SERVICES
AREAWIDE CONTRACT NO. _____

Contract Information

Ordering Agency:_____
Address: _____

Agency Information

Pursuant to Areawide Contract No. _____ between the Baltimore Gas and Electric Company ("Contractor") and the United States Government, service to the Government under such contract shall be rendered and subject to all the provisions thereof. This Authorization for Energy Management Services (this "Authorization for EMS"), including any attachments listed below and any FAR provisions checked below and incorporated herein by reference, shall together with the above-referenced Areawide Contract form one single integrated agreement.

PREMISES TO BE SERVED:_____

SERVICE ADDRESS: _____

NATURE OF SERVICE: ☐ Preliminary Energy Audit ☐ Comprehensive Energy Audit ☐ EMS Engineering and Design
☐ EMS Installation ☐ Demand Side Management (DSM) Project
☐ Other _____

Services Desired

IF ANY REGULATED UTILITY SERVICES ARE PROVIDED BY CONTRACTOR UNDER THIS AUTHORIZATION, SUCH REGULATED UTILITY SERVICES SHALL BE SUBJECT TO THE AUTHORITY OF THE COMMISSION.

POINT OF DELIVERY:_____
PROJECT COST: $ _____
ACCOUNTING AND APPROPRIATION DATA:_____

Service Information and Attachment List

LIST OF ATTACHMENTS:
☐ General Terms and Implementation Guidelines to Exhibit "C"
☐ Additional Payment Provisions
☐ Statement of Work and Specifications
☐ Facility/Site Plans
☐ Design and Engineering Drawings
☐ Certifications
☐ EMS Proposal
☐ Other _____

CLAUSES INCORPORATED BY REFERENCE AND MISCELLANEOUS PROVISIONS (Check applicable clauses):

Applicable Clauses (Check all that Apply)

(1)____ 52.204-9 Personal Identity Verification of Contractor Personnel (Jan 2011)
(2)____ 52.215-2 Audit and Records—Negotiation (Mar 2009)
(3)____ 52.215-10 Price Reduction for Defective Cost or Pricing Data (Oct 2010)
(4)____ 52.215-12 Subcontractor Cost or Pricing Data (Oct 1997)
(5)____ 52.215-14 Integrity of Unit Prices (Oct 1997)
(6)____ 52.215-20 Requirements for Cost or Pricing Data or Information Other Than Cost or Pricing Data (Oct 1997)
(7)____52.222-54 Employment Eligibility Verification (Jul 2012)
(8)____ 52.223-4 Recovered Material Certification (May 2008)
(9)____ 52.223-9 Estimate of Percentage of Recovered Material Content for EPA-Designated Items (May 2008)
(10)____ 52.223-15 Energy Efficiency in Energy-Consuming Products (Dec 2007)
(11)____ 52.223-17 Affirmative Procurement of EPA-designated Items in Service and Construction Contracts (May 2008)
(12)____ 52.232-25 Prompt Payment (Oct 2008)
(13)____ 52.232-35 Designation of Office for Government Receipt of Electronic Funds Transfer Information (May 1999)
(14)____ 52.241-8 Change in Rates or Terms and Conditions of Service for Unregulated Services (Feb 1995)
(15)____ 52.244-5 Competition In Subcontracting (Dec 1996)
(16)____ 52.249-8 Default (Fixed-Price Supply and Service) (Apr 1984)

In addition, the Contracting Officer negotiating the terms and conditions under this Authorization, with written consent from Contractor, may supplement the above-referenced clauses with clauses for the appropriate type of contract.

REMARKS:

ACCEPTED:

Ordering Agency and Contracting Utility Signatures

_____
(Ordering Agency)

By:_____
Authorized Signature
Title:_____
Date:_____
Telephone No._____

Baltimore Gas and Electric Company
(Contractor)

By:_____
Authorized Signature
Title:_____
Date:_____
Telephone No._____

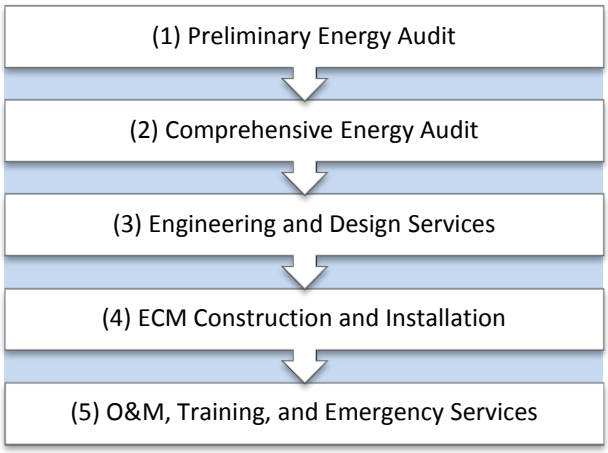
NOTE: A fully executed copy of this Authorization shall be transmitted by the Ordering Agency to the Energy Division (PMAA), General Services Administration, Washington, DC 20405.

Sample Energy Management Authorization Form

Services Available with the EMSA

Overview

The EMSA is designed to help the Ordering Agency and Contracting Utility move easily through ECM implementation, setting up the process with the appropriate terms and conditions.



The terms and conditions of the EMSA contain the general requirements related to the contracting process, including the services available under the EMSA, contract performance requirements, payment options, termination conditions, warranty terms, and project schedules, among other items. As discussed in the sub-sections below, the EMSA can be used to acquire a wide range of EMS, including preliminary energy audits, comprehensive energy audits, ECM engineering and design services, ECM construction and installation, and O&M (including re/retro-commissioning) and training services.

Preliminary Energy Audit

A preliminary energy audit, also known as a screening audit or walk-through audit, typically involves a brief review of facility utility invoices and meter data, a walk-through of the facility to become familiar with the energy consuming equipment and building construction, and brief interviews with facility personnel to understand general building operation characteristics. The main purpose of a preliminary energy audit is to outline the characteristics of the existing facility, breakdown the energy use of the facility's systems, and determine possible energy savings opportunities. Preliminary energy audit services can be obtained from a Utility via the Areawide Contract by using the EMSA. The Ordering Agency will need to supply the Contracting Utility with all documentation required for an effective energy audit, including but not limited to, fuel use records, utility invoices, facility drawings, and O&M manuals. The preliminary energy audit concludes with a report that details the energy consumption trends of the facility or system(s) and outlines the possible energy conservation measures (ECMs).

Preliminary Audit Report Details

- *Estimated energy & water savings;*
- *Estimated cost savings;*
- *Current utility rates;*
- *Project implementation cost;*
- *Financial incentives / rebates;*
- *Description of existing systems;*
- *Description of proposed systems;*
- *Overview of environmental impacts.*

The preliminary energy audit typically will require the Contracting Utility to spend 1-2 days on-site gathering the necessary information, along with 2-4 weeks for analysis and report development, depending on the

size and complexity of the facility. Therefore, the duration and cost of the preliminary energy audit is minimal compared to the other services offered under the EMSA. The cost of the preliminary audit is defined on a specific project basis by the Contracting Utility and may be provided free of charge, depending on the situation and the guarantee of future services rendered following the audit.

Upon completion of the preliminary energy audit, either the Ordering Agency or the Contracting Utility may elect to not proceed with further phase(s) of the identified potential projects. The EMSA can be terminated without further obligation

It is essential for Agency subject matter experts (SMEs) to evaluate the preliminary energy audit report and determine whether the proposed ECMs meet the Agency's expectations and requirements for energy management. SMEs typically include facility managers, energy managers, construction specialists, and utility experts. The metrics of each proposed ECM, including but not limited to, systems affected, total cost, energy and water savings, cost savings, return on investment (ROI), and payback period, should be analyzed to determine if each ECM is economically feasible and aligns with the O&M strategy of the facility.

This level of audit typically is not sufficient for reaching a final decision on implementing proposed ECMs; however, it is necessary to prioritize ECMs and to determine the need for a more detailed audit, such as the comprehensive energy audit described below. Therefore, due to the minimal cost and time required, it is recommended that the Ordering Agency always obtain preliminary energy audit services from the Contracting Utility to determine if further services are necessary, such as a comprehensive energy audit or ECM installation and construction.

Comprehensive Energy Audit

Guidance on how to evaluate energy saving projects and determine their feasibility is provided by DOE.

Available <http://energy.gov/eere/femp>

If evaluation of the preliminary energy audit report indicates that one (1) or more of the proposed ECMs is economically feasible and adheres to the overall strategy for the facility, then the Ordering Agency can elect to proceed with a comprehensive energy audit. The comprehensive energy audit, also known as an investment-grade audit, expands on the preliminary energy audit by collecting more detailed information about facility operations and performing a more detailed evaluation of the ECMs of the most interest to facility personnel.

The comprehensive energy audit goes beyond a simple observation of facility operations, and places more emphasis on energy use trends and profiles of the selected system(s). Utility invoices for 1-3 years and sub-metering data (if available) is collected, while monitoring devices (such as data loggers) are strategically placed on the necessary system(s) to better understand the energy profile of the facility. In addition, dynamic

computer models typically are used to compare the current facility energy use versus that with the proposed ECM(s) implemented. The model is able to make use of simulations, including the changing of dynamic variables, such as operating schedules and weather, to develop a realistic baseline against which savings generated by the proposed ECM(s) are calculated. The simulations will provide comprehensive data on ECM costs and savings and help identify the areas where the greatest amount of savings will be achieved with the smallest investment.

The comprehensive energy audit process provides a greater level of accuracy and accountability of energy compared to the preliminary energy audit; and is necessary to understand facility characteristics and ultimately program ECMs for design and construction. To authorize these services using the Areawide Contract, the Ordering Agency needs to complete the EMSA with a written statement of work (SOW) that will outline the ECMs to be investigated further, based on the preliminary energy audit, and document the return on investment criteria mutually agreed upon by both parties. This will be used as a guide for determining the economic acceptability of each ECM. Based on the SOW, the comprehensive energy audit will conclude with a report submitted by the Contracting Utility. This report needs to specify the measures recommended for implementation, the unfeasible measures eliminated from consideration, provide supporting analysis for each recommended measure, estimate the projected implementation cost, anticipate the life-cycle cost savings, payback period, and return on investment, and detail the proposed schedule of all implementation tasks. To ensure all necessary information for determining the economic viability is included in the audit report, the Ordering Agency should include the following cost and technical factors as performance criteria in the SOW.

The American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) is the industry leader in energy audit procedures. Agencies are encouraged use their publication titled, "Procedures for Commercial Building Energy Audits" when developing the EMSA and SOW for Preliminary and Comprehensive Energy Audits.

Available <https://www.ashrae.org/resources>

Cost Performance Factors

➢	Installation costs by ECM;	➢	Salvage value of removed system(s);
➢	Installation costs by system(s);	➢	Energy cost savings by ECM;
➢	Annual Agency O&M costs by ECM;	➢	Other cost savings by ECM (i.e., O&M);
➢	Annual Utility M&V costs by ECM;	➢	Life-cycle cost analysis (LCCA) by ECM.

Technical Performance Factors

➢	Description of existing equipment and system(s) to be removed, replaced, or effected;
➢	Description of new equipment or system(s) to be installed;
➢	Specifications and/or catalog cut-sheets for new equipment to be installed;
➢	Requirements for Ordering Agency support required throughout the duration of construction;
➢	Type, quantity, and schedule of utility interruptions required for ECM implementation;
➢	Description of environmental compliance issues and recommendations;
➢	Estimate of annual energy and water savings and demand reduction over the life of the ECM;
➢	Site plan showing implementation locations and recommended sites;
➢	Detailed ECM calculations with description of methodology and assumptions;
➢	Analysis of how new equipment or system(s) will interact with other building systems;
➢	Measurement and verification techniques to be used to verify proposed savings;
➢	Estimated equipment lifetime and maintenance requirements;
➢	Outline of expected construction schedule, including major milestones;
➢	Determination that renewable and alternative fueled ECMs were part of the analysis process;
➢	Identification of hazardous materials that may be present and affect each ECM;
➢	Impacts on air quality and occupant comfort and productivity.

Engineering and Design (E&D) Services

If the energy audit(s) yield positive results and economically feasible ECMs, then the Ordering Agency may elect to proceed with the Engineering and Design (E&D) phase. E&D service can be obtained with the EMSA prior to installation and construction of ECMs. To obtain these services, the Ordering Agency needs to complete the EMSA and include a written SOW and specifications, as necessary, for the E&D services that have been agreed upon by both the Ordering Agency and the Contracting Utility. The E&D task will conclude with the Contracting Utility issuing an implementation proposal that includes all required E&D documents to complete the construction and installation of the proposed ECM(s). To ensure the implementation proposal includes all necessary documentation, the Ordering Agency contracting officer should ensure the Authorization SOW includes, at a minimum, the following performance criteria:

- Written basis of design (BOD) detailing the existing situation and the conditions, needs, and requirements taken into account in designing the proposed ECMs;
- Specifications and drawings for all ECM(s) to be implemented, including those involving changes to existing systems; and
- Revised technical and costs factors.

All engineering and design documents should be jointly reviewed by Ordering Agency SMEs and the Contracting Utility at 35%, 95%, and 100% design, minimum, to ensure all questions and comments are addressed and do not linger until the final proposal.

The Ordering Agency shall evaluate these documents, presented as the implementation Proposal, for technical soundness and price. The contracting officer shall make certain that all Ordering Agency SMEs are included in the implementation proposal review to ensure the design complies with all Agency requirements, follows the terms and conditions of the EMSA, and is ultimately in the best interest of the facility and Agency. The SOW should require the E&D documents to be jointly reviewed by the Ordering Agency and the Contracting Utility at approximately the 35%, 95%, and 100% completion points. This will ensure that all questions, concerns, and comments are discussed early on and do not linger until the submission of the final implementation proposal. The Contracting Utility also should be required by the SOW to present a briefing to all Agency and facility stakeholders and managers on the final implementation proposal to outline its effects (i.e., energy benefits, implementation cost, and operation changes), schedule, risks and concerns, and to answer any question they might have.

The engineering and design phase concludes with this briefing and the Ordering Agency decision on whether to implement the proposed recommendations, as discussed in the subsequent section, or opt out and not implement them. If the Ordering Agency opts not to implement the recommendations, it is still liable to the Contracting Utility for reimbursement, based on the negotiated prices, for the engineering and design services.

ECM Construction and Installation

FAR Part 41 requires agencies to attach the EMSA to a standard form, such as SF 26: Award/Contract. Standard forms are readily available from the GSA Online Forms Library.

FAR Part 41 Available <https://www.acquisition.gov/>

Standard Forms Available <http://www.gsa.gov/>

After evaluation of the E&D implementation proposal, the Ordering Agency may elect to proceed with project implementation. Construction and installation services can be obtained via the EMSA, which should include all aspects of the E&D implementation proposal agreed to by both parties. The proposal components (i.e., BOD, drawings, specifications, and cost factors) should be included as appendices to the EMSA along with a SOW that details all aspects of construction and installation pertinent to the project and facility. Example SOW terms and conditions are outlined on the subsequent page, which will ease Contracting Utility confusion and questions throughout the entire performance period and ensure the projects are completed to Agency standards and facility requirements. The DOE *UESC Guide: A Resource for Contracting Officers Working on UESC Projects* also provides example templates to be used when developing the SOW for EMS construction and installation services.

O&M, Training, and Emergency Response Services

Typically, unless otherwise provided in the contract terms, the Ordering Agency is responsible for operation and maintenance (O&M) of the installed retrofits following acceptance. However, the Ordering Agency can request the Contracting Utility to provide O&M training and/or emergency response services for installed or related equipment and systems. These services can be obtained with the EMSA and should be accompanied with a SOW, specifications, negotiated price schedule, and project schedule for the desired services.

Example Construction and Installation SOW Components

➢ Purpose of the EMS installation;	➢ Wage rates and labor standards;
➢ Description and location of project(s) to be Installed;	➢ Safety requirements;
➢ Price, billing, financing, and payment terms;	➢ Bonding and insurance requirements;
➢ Energy and cost savings required for project approval and payment;	➢ Agency contact information and job coordination details;
➢ Measurement and verification (M&V) approved methods and techniques;	➢ Representations, certifications, and other statements of offerors;
➢ Pre-construction requirements (i.e., submittals, meetings, schedules);	➢ Small business subcontracting plan (if applicable);
➢ Post-construction requirements (i.e., as-built drawings, warranty documents, training services, O&M manuals);	➢ Title-to, and responsibility for, contractor installed equipment;
➢ Required project submittals (i.e., product data, shop drawings, test reports, etc.)	➢ Warranty terms and conditions;
➢ Performance period and schedule;	➢ Environmental protection and permitting requirements;
➢ Project acceptance requirements, performance metrics, and commissioning;	➢ Contractor responsibilities;
➢ Assignment of claims;	➢ General provisions (i.e., FAR clauses, Agency clauses, site specific clauses);
➢ Software and data ownership;	➢ Security and access requirements.

Other Services Available

The GSA Areawide Contract and the supplemental EMSA can be used to obtain other energy management services not listed above, as long as the following four (4) criteria are evident in the proposed project. If at least one (1) of these criteria is not met, then the Ordering Agency needs to pursue another avenue of procurement, as applicable to FAR and agency-specific regulations.

1. The measure must produce measureable energy or water reductions or measurable amounts of demand reduction;
2. The measure must be directly related to the use of energy or water, or demand reduction;
3. The preponderance of work covered by the measure (measured in dollars) must be for items 1 and 2 above; and
4. The measure must be an improvement to real property.

Get to Know the Common EMSA Terms

- Acceptance: Written transfer of custody or ownership of completed work (including all punchlist items) or service performed in connection with an EMS by the Ordering Agency.
- Areawide Contract: A master contract entered into between the Government and a utility service provider to cover the utility service acquisitions of all Federal agencies in the franchised certified service territory.
- Authorization: One of the order forms attached to the Areawide Contract as an exhibit, which is used to acquire utility service under the Areawide Contract.
- Energy Conservation Measure: A specific energy or water-related project intended to provide energy savings and/or demand reduction in Federal facilities
- Energy Management Service: Any project or service that is intended to reduce and/or manage energy demand or water use in a facility, as well as those services that determine whether such reductions are feasible (such as an energy audit).
- Ordering Agency: Any Agency authorized to obtain services under an Areawide Contract.
- Termination Schedule: A schedule developed for any financed EMS specifying the lump sum payment necessary, at any time during the contract period following the task order award, for the complete repayment of the costs incurred by the Contracting Utility with respect to the EMS, including any finance costs accrued at that point.
- Utility Service: Any service available from the Contracting Utility, such as electric service, natural gas service, ECM, EMS, and/or any other service available pursuant to the Contractor's Tariff.

Obtain the Best Value for the Government

Overview

Energy management services can be funded and administered through the GSA Areawide Contract. While Federal regulations do not require guaranteed savings for UESCs, they do permit an Ordering Agency to attempt to negotiate for inclusion of guarantees if the Contracting Utility is willing to provide one. However, language must be included in the negotiated Authorizations (i.e., Performance Assurance Plans) that secure guarantees of the energy and/or cost savings. The DOE *UESC Guide: A Resource for Contracting Officers Working on UESC Projects* provides sample Performance Assurance Plan templates and guidance.

The Ordering Agency's project manager, contracting officer, and other decision makers should evaluate carefully the costs and benefits of seeking such guarantees in favor of the Government. All such determinations should be documented and included in the Ordering Agency files so that intelligent business review, management evaluation, lessons learned, best practices, and audits can be facilitated.

The method of savings guarantee by the Contracting Utility can be as simple as using an engineering estimate of savings; however, savings must be measured and verified (M&V) by the Contracting Utility using an approved approach, as outlined in the DOE *M&V Guidelines: Measurement and Verification for Federal Energy Projects.* An example approach is the International Performance Measurement and Verification Protocol (IPMVP), which has been developed by a coalition of international organizations, including DOE. The Ordering Agency should ensure that the EMSA includes language to resolve the discrepancy if the M&V process indicates that the implemented measure fails to achieve at least the guaranteed savings.

Available M&V Guidelines

- *DOE M&V Guidelines: Measurement and Verification for Federal Energy Projects;*
- *International Performance Measurement and Verification Protocol (IPMVP); and*
- *ASHRAE Guideline 14: Measurement of Energy and Demand Savings*

Issuing Multiple EMSAs for a Single Project

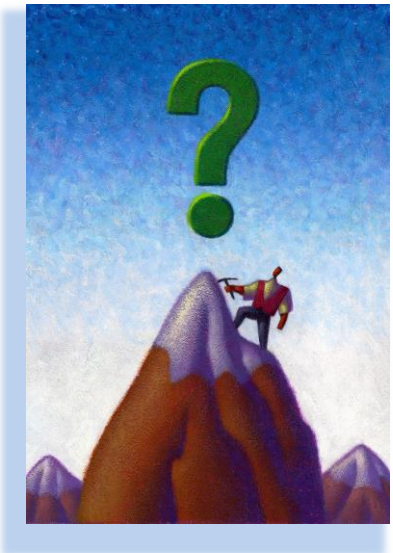
Ordering agencies will need to issue an EMSA for each energy management service (EMS) obtained via the Areawide Contract. For example a facility interested in taking a project through the entire process from Preliminary Energy Audit to O&M, Training, and Emergency Response will need to issue, in sequential order, an EMSA for each of the five (5) services desired. To avoid confusion in the EMSA, the Ordering Agency should include language in the SOW that clearly details the EMSAs issued for prior services and a findings summary from those previous EMSAs.

Decision to Install an ECM

Before ECM implementation, the Ordering Agency must decide if the proposed ECM(s) are economically feasible and are in the best interest of the facility O&M program. The following bullet points outline sample questions that should be addressed during the decision making process:

Appendix C provides a sample list of actions to be completed by Agencies and Utilities when completing UESC contracts. Additional action lists and flow charts to guide Agencies through the entire process are available in the DOE UESC Guide: A Resource for Contracting Officers Working on UESC Projects

- Have preliminary and/or comprehensive energy audits been performed at the facility by the Contracting Utility?
- Did the audit report(s) include a life-cycle cost analysis (LCCA) for all proposed ECMs?
- How does the actual utility budget history for the facility compare to the proposed escalation and inflation rates from the Utility? Does the budget outpace the escalated savings?
- What method was used to conduct the LCCA and are the market rate / price forecasts reasonable and accurate?
- Did the LCCA indicate that one (1) or more ECMs provide an acceptable ROI and are a good business deal for the Ordering Agency?
- Have E&D services been performed for all desired ECMs?
- Did the E&D implementation proposal indicate no adverse changes to facility infrastructure and O&M practices?
- Have all Ordering Agency SMEs been involved in the energy audit and engineering and design phases?



- Do any SMEs have any lingering questions or concerns regarding the construction and installation of the proposed ECMs?
- What M&V method will be used to ensure guaranteed savings are achieved?
- Have deductions for performance failures been incorporated into the EMSA?
- Does the EMSA provide ultimate ownership of the installed project hardware and software components to the Ordering Agency?
- Are extended warranties available and do they make economic sense for the Agency?
- Does the agreement contain provisions for the buyout of the principal?

Caution should be exercised when negotiating market rates, interest rates, and energy price forecasts with the Contracting Utility. The Ordering Agency is responsible to ensure the Contracting Utility is providing reasonable and accurate price forecasts, utility rates, and inflation rates in the energy audit reports and the E&D implementation proposal. Instructions and guidelines for price forecasts, net present value (NPV) calculations, and life cycle cost analysis can be found on the DOE FEMP website for Building Life Cycle Cost Programs, including, but not limited to, *Handbook 135: Life Cycle Costing Manual* and *the Annual Supplement to Handbook 135:*

FEMP Building Life Cycle Cost Programs:
Available <http://www1.eere.energy.gov/femp/building-life-cycle-programs>

Measurement and Verification (M&V)

Energy conservation measures (ECMs) that are financed through energy savings are encouraging options as Agencies work to meet Federal energy mandates and requirements with shrinking facility budgets. The key to a successful ECM implementation is an effective measurement and verification (M&V) program. M&V is a shared responsibility of the Ordering Agency and the Contracting Utility, as the former will need to verify that the proposed savings are being generated, while the latter will want to protect its investment in the project.

"Facility energy (O&M or water) savings cannot be measured, since they represent the absence of energy use. Instead, savings are determined by comparing the energy use before and after installation of conservation measure(s), making adjustments for changes in conditions."

-DOE M&V Guidelines: Measurement and Verification for Federal Energy Projects, Version 3.0

The DOE Federal Energy Management Program (FEMP) has published *M&V Guidelines*: *Measurement and Verification for Federal Energy Projects*, which outlines the purpose, risk, responsibility, process, and options for using M&V to verify energy and cost savings. The general steps to the M&V process include verification of the project's potential to generate savings, measurement of the project's actual performance, and comparison of potential to actual performance:

- Verify the Project's Potential to Generate Savings
  - Confirm the baseline (existing conditions) were accurately defined;
  - Ensure proposed equipment and systems were installed;
  - Test and commission installed systems to ensure they are operating as intended; and
  - Use engineering analysis to generate the predicted savings.

- Measure the Project's Actual Performance Post-Installation
    - Monitor installed systems to measure performance and energy consumed; and
    - Analyze the measured data to determine actual energy and cost savings.
- Compare actual results to potential calculations to verify proposed figures
    - Perform engineering analysis to adjust for changes in facility operation that affect energy use (i.e., weather, occupancy, schedules, etc.); and
    - Calculate the actual savings of the installed ECMs.

Actual Savings = (Baseline Potential Energy - Post-Installation Actual Energy) + Adjustments

The general approach to verifying baseline and post-installation conditions involves inspections, spot measurement tests, continuous metering, and/or commissioning activities. Commissioning is the process of documenting and verifying the performance of systems to ensure that they operate in conformity with the design intent. General commissioning activities include, but are not limited to, the following:

- Documentation of design assumptions for the project;
- Documentation of the design intent for use by contractors, owners, and operators;
- Functional performance testing and documentation necessary to evaluate all installed energy efficient equipment and/or systems for acceptance; and
- Adjustments of energy efficient equipment and/or systems to meet actual needs and operating performance with the facility.

More information regarding commissioning can be found on the DOE website.

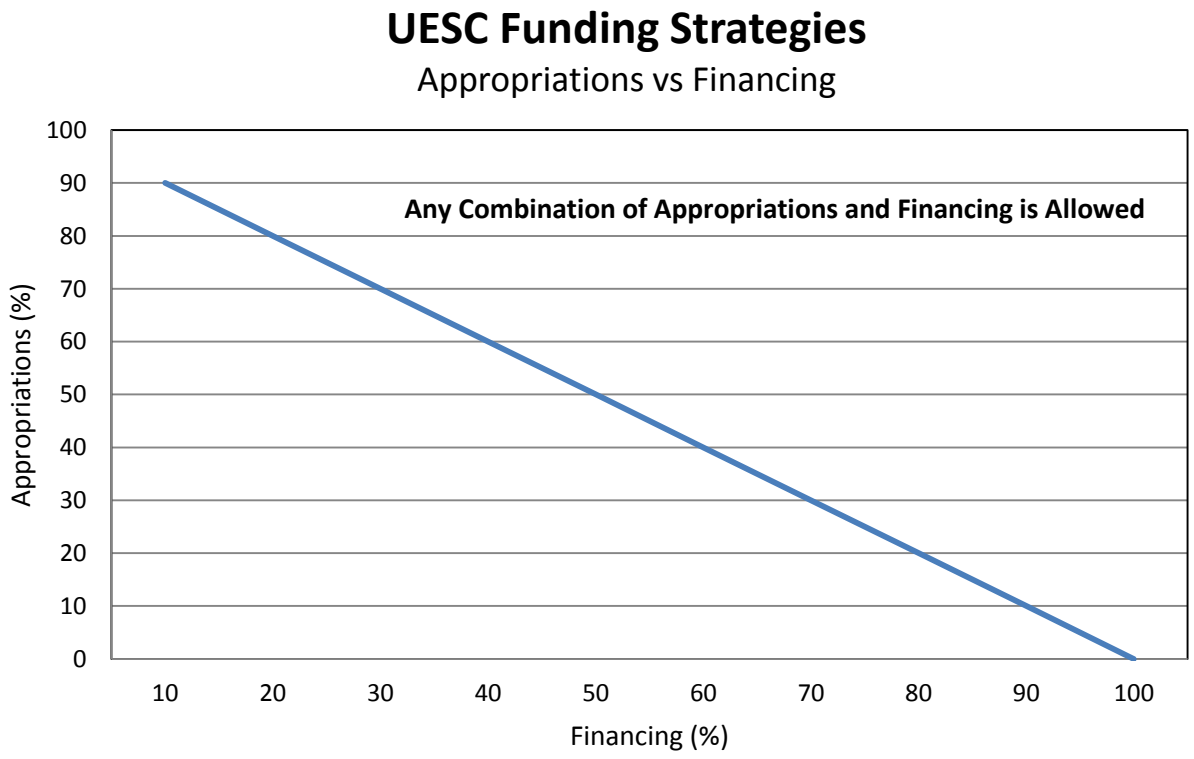
Available <http://energy.gov/eere/femp/>

More information regarding commissioning, including the purpose, types, process, and desired results can be found on the DOE website for Commissioning. It is recommended that the commissioning of installed ECMs be incorporated into the EMSA by the Ordering Agency to ensure that the installed system(s) operate to the design intent and the facility's operational needs. Recommissioning, which is the commissioning of existing building systems, should be conducted on the ECMS every four (4) years to ensure all systems are operating as intended and the government is achieving the greatest performance throughout the duration of the contract.

Financing Strategies

When full funding is not available for an ECM, the agency may acquire financing through a UESC. 42 USC 8253: Sections 432 and 512 (EISA 2007) authorize agencies to use appropriations and private financing to comply with its requirements. UESC projects can be funded through a combination of appropriations and financing, from 100% appropriations to 100% financing, including all combinations in between. With this flexibility in mind, contracting officers should evaluate funding options early and employ a strategy that optimizes the impact of existing appropriations and financing options.

Ideally, the funding strategy will support the financial structure that maximizes value to the government – in terms of energy savings, facility mission, and minimizing cost.



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Meeting Your Energy Efficiency Goals

The *Energy Policy Act (EPAct) of 2005*, the *Energy Independence and Security Act (EISA) of 2007*, and numerous executive orders require the Federal Government, as the nation's largest energy consumer, to significantly improve its energy efficiency and management practices to save taxpayer dollars and reduce related greenhouse gases. These documents also encourage the use of alternative financing of projects that save energy and money for the Government.

One of the best contracting alternatives to help your Agency meet these energy efficiency requirements is the GSA Areawide Contract and the associated EMSA. The Areawide Contract can facilitate the procurement of energy efficiency, demand-side management, and water conservation measures. It is recognized as a useful tool for Federal facility managers trying to cut energy and operating costs to meet the goals of these Federal mandates.

Use of the GSA Areawide Contract can be an important component of your facility's overall energy strategy - one that maximizes O&M strategies, incorporates energy efficient systems, optimizes use of energy and alternative fuels, obtains the best energy prices, and ultimately seeks out the best overall value for the Government.

GSA can help your Agency and/or facility through the Areawide Contract and numerous other programs. Please visit the website below for more information and links to points of contact within GSA that can be of service on your next project.

GSA Energy Division

Available <http://gsa.gov/energy>

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Appendix A

Sample EMSA Terms and Conditions

EXHIBIT "C"

Contractor's ID NO._____
Ordering Agency's ID NO _____(Required)

BALTIMORE GAS AND ELECTRIC COMPANY
AUTHORIZATION FOR ENERGY MANAGEMENT SERVICES
AREAWIDE CONTRACT NO. _____

Ordering Agency:_____
Address: _____

Pursuant to Areawide Contract No. _____ between the Baltimore Gas and Electric Company ("Contractor") and the United States Government, service to the Government under such contract shall be rendered and subject to all the provisions thereof. This Authorization for Energy Management Services (this "Authorization for EMS"), including any attachments listed below and any FAR provisions checked below and incorporated herein by reference, shall together with the above-referenced Areawide Contract form one single integrated agreement.

PREMISES TO BE SERVED:_____

SERVICE ADDRESS: _____

NATURE OF SERVICE: ☐ Preliminary Energy Audit ☐ Comprehensive Energy Audit ☐ EMS Engineering and Design
☐ EMS Installation ☐ Demand Side Management (DSM) Project
☐ Other _____

IF ANY REGULATED UTILITY SERVICES ARE PROVIDED BY CONTRACTOR UNDER THIS AUTHORIZATION, SUCH REGULATED UTILITY SERVICES SHALL BE SUBJECT TO THE AUTHORITY OF THE COMMISSION.

POINT OF DELIVERY:_____
PROJECT COST: $ _____
ACCOUNTING AND APPROPRIATION DATA:_____

LIST OF ATTACHMENTS:

☐ General Terms and Implementation Guidelines to Exhibit "C"	☐ Additional Payment Provisions	☐ Statement of Work and Specifications	☐ Facility/Site Plans
☐ Design and Engineering Drawings	☐ Certifications	☐ EMS Proposal	
☐ Other _____			

CLAUSES INCORPORATED BY REFERENCE AND MISCELLANEOUS PROVISIONS (Check applicable clauses):

(1)____	52.204-9	Personal Identity Verification of Contractor Personnel (Jan 2011)
(2)____	52.215-2	Audit and Records—Negotiation (Mar 2009)
(3)____	52.215-10	Price Reduction for Defective Cost or Pricing Data (Oct 2010)
(4)____	52.215-12	Subcontractor Cost or Pricing Data (Oct 1997)
(5)____	52.215-14	Integrity of Unit Prices (Oct 1997)
(6)____	52.215-20	Requirements for Cost or Pricing Data or Information Other Than Cost or Pricing Data (Oct 1997)
(7)____	52.222-54	Employment Eligibility Verification (Jul 2012)
(8)____	52.223-4	Recovered Material Certification (May 2008)
(9)____	52.223-9	Estimate of Percentage of Recovered Material Content for EPA-Designated Items (May 2008)
(10)____	52.223-15	Energy Efficiency in Energy-Consuming Products (Dec 2007)
(11)____	52.223-17	Affirmative Procurement of EPA-designated Items in Service and Construction Contracts (May 2008)
(12)____	52.232-25	Prompt Payment (Oct 2008)
(13)____	52.232-35	Designation of Office for Government Receipt of Electronic Funds Transfer Information (May 1999)
(14)____	52.241-8	Change in Rates or Terms and Conditions of Service for Unregulated Services (Feb 1995)
(15)____	52.244-5	Competition in Subcontracting (Dec 1996)
(16)____	52.249-8	Default (Fixed-Price Supply and Service) (Apr 1984)

In addition, the Contracting Officer negotiating the terms and conditions under this Authorization, with written consent from Contractor, may supplement the above-referenced clauses with clauses for the appropriate type of contract.

REMARKS:

ACCEPTEO:

_____
(Ordering Agency)

By:_____
Authorized Signature
Title:_____
Date:_____
Telephone No._____

Baltimore Gas and Electric Company
(Contractor)

By:_____
Authorized Signature
Title._____
Date:_____
Telephone No._____

NOTE: A fully executed copy of this Authorization shall be transmitted by the Ordering Agency to the Energy Division (PMAA), General Services Administration, Washington, DC 20405.

GENERAL TERMS AND IMPLEMENTATION GUIDELINES TO EXHIBIT "C"
BALTIMORE GAS AND ELECTRIC COMPANY
AUTHORIZATION FOR ENERGY MANAGEMENT SERVICES
ORDERING AGENCY TASK ORDER NO. _____

Section A – Definitions and Scope of Energy Management Services

A.1. Definitions

Terms not otherwise defined herein shall have the meaning ascribed to them in the Areawide Contract pursuant to which the Authorization for Energy Management Services to which these General Conditions are a part has been entered into.

"Acceptance" - Written acceptance of completed work (including all punchlist items) or services performed in connection with an EMS by a Contracting Officer's Representative, or, if no such representative is designated, a warranted Contracting Officer of the Ordering Agency for the Authorization for EMS.

"As-Builts" - Final drawings of the actual, completed work.

"Contracting Officer" or *"C.O."* - Ordering Agency official authorized to enter into, administer, and/or terminate contracts on behalf of the Ordering Agency and make related determinations and findings within the limits established pursuant to law.

"Contracting Officer's Representative" - Local or project site official delegated limited authority as set forth in a formal delegation letter signed by the Contracting Officer for a given Authorization for EMS.

"EMS Proposal" – The proposal provided by the Contractor and accepted by the Ordering Agency in the form attached to Exhibit "C".

"Facility Manager" - Manager responsible for the operation of an Ordering Agency facility or building

"General Terms" – These General Terms and Implementation Guidelines to Exhibit "C".

"Hazardous Materials" – Any substance or material ragulated or governed by any applicable governmental authority under laws or regulations pertaining to the protection of the environment, natural resources or human health, or any substance, emission, or material now or hereafter deemed by any governmental authority having jurisdiction to be a "hazardous substance," "toxic substance," "pesticide," "hazardous waste," "regulated substance," "pollutant," "contaminant," or any similar classification, including but not limited to by reason of deleterious properties, ignitability, corrosivity, raactivity, carcinogenicity, or reproductive toxicity.

"Occupied Period" - Hours during which a facility or building is occupied and used in the normal course of business.

"Project Cost" - The total costs (as defined in Paragraph B 1.) attributable to the implementation of an EMS, as specified by the Contractor and Ordering Agency in the Authorization for EMS.

"Substantially Complete" - Point at which the Ordering Agency has taken beneficial use of the equipment being installed under the applicable Authorization for EMS.

"Termination Schedule" – A schedule developed for any financed EMS specifying the lump sum payment necessary, at any time during the contract period following the task order award, for the complete repayment of the costs incurred by Contractor with respect to the EMS, including any finance costs accrued at that point.

A.2. Scope of Services and Energy Conservation Measures – Contractor shall provide the specific products and services and EMSs set forth in the Authorization for EMS, including any specific ECMs. For purposes of clarification, any reference to EMS herein shall include all ECMs that are part of and specified in the applicable Authorization for EMS. By way of example only, work which may be provided to an Ordering Agency as part of an ECM includes the following:

A. Addition of Liquid Refrigerant Pumps to Reciprocating Air Conditioning Units
B. Boiler Control Improvements
C. Chiller Retrofits
D. Construction of New Cogeneration Facilities
E. Cooling Tower Retrofits
F. Daylighting Controls
G. Distributed Generation
H. Economizer Installation
I. Electric and Gas Service Entrance Design and Construction (new and retrofit)
J. Energy Consulting Services
K. Energy Management Control Systems (New/Replacement/Modifications)
L. Exit Sign Installation
M. Facility Management System Replacement/Alteration
N. Fans and Pump Replacement or Impeller Trimming
O. Fuel Cell Installation
P. Insulation Installation
Q. Interior and Exterior Lighting Replacement
R. Lighting Control Improvements
S. Load Shaping
T. Motor Replacement with High Efficiency Motors
U. Network Protectors
V. New HVAC design and construction
W. Occupancy Sensors
X. Packaged Air Conditioning Unit in Replacement
Y. Photovoltaic System Installation
Z. Reflective Solar Window Tinting
AA. Refrigerator Replacement w/ High Efficiency Units
BB. Renewable Energy Projects (Passive Solar Lighting, Bio-Mass, etc.)
CC. Replacement and/or Conversion of Air Conditioning & Heating Units
DD. Solar Air Preheating System
EE. Solar Domestic Hot Water System
FF. Steam Trap Maintenance and Replacement
GG. Transformer Replacement
HH. Upgrade of Natural Gas-Fired Boilers with New Controls (low NOx Burners)
II. Variable Speed Drive Utilization
JJ. Water Conservation Device Installation
KK. Weatherization
LL. Window Air Conditioning Replacement with High Efficiency Units
MM. Window Coverings and Awnings
NN. Window Replacement
OO. Any other EMSs which reduce energy consumption, demand and/or other related costs, or result in other benefits to the Ordering Agency

A.3.A. Preliminary Energy Audit – This Section A.3.A shall apply to any preliminary energy audit requested by an Ordering Agency and set forth in the Authorization for EMS.

The Ordering Agency may desire the Contractor to perform a preliminary energy audit of specified facilities, systems, or components within a facility, to determine if any potential opportunities exist for energy conservation, water conservation, demand reduction, other related cost savings, and/or other

benefits; and whether further detailed energy analyses are warranted. An Authorization for EMS that includes a preliminary energy audit shall also include a written statement of work and specifications for the preliminary energy audit that has been agreed upon by the parties. Upon the request of the Contractor, the Ordering Agency shall provide to the Contractor any available building/facility plans to assist the Contractor in performing the preliminary energy audit.
The preliminary energy audit shall generally consist of an overview of a facility, or an energy-consuming system or component within a facility, conducted by a qualified energy expert. The preliminary energy audit will typically consist of a review of Ordering Agency documentation, fuel use records, energy bills, operator interviews, and a field inspection. The Contractor will utilize the information gathered to identify recommended EMSs for the facility, system, or component.

Based upon the preliminary energy audit, the Contractor shall submit to the Ordering Agency's Contracting Officer a preliminary energy audit report. The preliminary energy audit report will typically consist of an executive summary, a table of contents, and a narrative describing the facility, system or component within the facility, its operation, current energy use and cost, and possible modifications to the facility, system, or component which may result in a reduction of energy consumption, water consumption, demand, and/or other related costs, or may result in other benefits to the Ordering Agency.

The preliminary energy audit report shall identify potential ECMs, and for each, an estimated Project Cost and the estimated energy savings, provided in units of energy and energy cost. Potential ECMs shall be identified based on the Ordering Agency's criteria, which shall be agreed to by the parties in the Authorization for EMS.

The Contractor shall generate a prioritized list of recommendations, in sequence of implementation that are life-cycle cost effective and can be implemented in the facility being audited. The preliminary audit, to the extent applicable, shall include the following information:

a. Preliminary estimated energy and water savings,
b. Preliminary estimated cost savings, including reduced maintenance costs,
c. Current utility rates,
d. Preliminary retrofit cost,
e. Utility financial incentive/rebate, if any,
f. Description of existing equipment,
g. Description of the proposed retrofit equipment,
h. Overview of the general environmental impact and potential hazardous wastes identified through existing facility records, if any.

The following table is provided as a sample format that the Ordering Agency may utilize per EMS for their convenience:

Preliminary Audit Sample Format

ECM # 1: *(Insert Description)*

Electric Energy Savings		Electric Demand Savings		Natural Gas Savings		Other Savings		Total Energy Savings	Total Energy Cost Savings	Implementation Price	Rebates (if applicable)	Net Savings	Simple Payback
kWh/yr	$/yr	kW/yr	$/yr	MBtu/yr	$/yr	MBtu/yr	$/yr	MBtu/yr	$/yr	$	$	$	

If Financing is considered
ECM # 1: *(Insert Description)*

Implementation Price	Financing Procurement Price	Term	Indicative Interest Rate	Index	Adder	Source of Index	Interest	Principal	Other	Total Annual Payment	Indicative Termination Schedule
$	$	yr	%		%		$/yr	$/yr	$/yr	$/yr	%

Upon the completion of a preliminary energy audit, if either party elects not to proceed with further phases of the identified potential projects, the Authorization for EMS shall be terminated without further obligation or liability of either party.

A.3.B. Comprehensive Energy Audit - This Section A.3.B shall apply to any comprehensive energy audit requested by an Ordering Agency and set forth in the Authorization for EMS.

After evaluation of the preliminary energy audit report, the Ordering Agency may elect to proceed with a comprehensive energy audit to determine whether particular EMSs proposed by the Contractor are feasible. The comprehensive energy audit shall be conducted by a qualified energy auditor. The qualifications of the energy auditor shall be submitted to and approved by the Ordering Agency's Contracting Officer. An Authorization for EMS that includes a comprehensive energy audit shall also include a written statement of work and specifications (including mutually acceptable payback criteria requirements which may be used by the Ordering Agency as a guide for determining the economic acceptability of a project) for the comprehensive energy audit that has been agreed upon by the parties.

Based on the comprehensive energy audit, the Contractor shall submit to the Ordering Agency's Contracting Officer a comprehensive energy audit report specifying projects recommended for implementation and providing for each project an estimate of the expected implementation cost, the anticipated life-cycle cost savings, the estimated payback period which may be used by the Ordering Agency as a guide for determining the economic acceptability of a project, and the estimated timing for implementation. The comprehensive audit report will provide the following information, unless otherwise specified in the Authorization for EMS or subsequently waived by the Contracting Officer:

1. **Technical Factors:**

   a. Audits of energy and water consumption of existing equipment and facilities, including estimated demand reduction and energy and water savings, and proposed retrofit costs and financial incentives (rebates), if any;

   b. Existing equipment or components to be removed or replaced;

   c. New equipment or components to be installed;

   d. Specifications and/or catalog cuts for new equipment, including, as appropriate, power rating, estimated energy consumption, input/output, power ratio, lighting level, estimated equipment life, and/or maintenance requirements;

   e. Ordering Agency support required for EMS implementation, *e.g.*, interruptions or temporary changes to operations and movement of equipment;.

   f. Utility interruptions required for EMS implementation, including type (*e.g.*, natural gas electricity, water, steam, sewer, telephone, and cable)., location and duration;

   g. Preliminary environmental compliance requirements, which the Ordering Agency acknowledges may change as a project progresses;

   h. Estimated annual energy savings and demand reduction over life of EMS;

   i. If a proposed ECM requires installation of equipment outside existing buildings or structures, a site plan showing recommended sites, and any feasible alternates;

   j. Detailed EMS calculations with description of methodologies and assumptions;

   k. Analysis of how each EMS will affect component being modified and how it interacts with other building systems;

l. Method to verify energy savings (if such monitoring is required by the Ordering Agency) after installation and periodically during the contract term;

m. Estimated equipment life;

n. Estimated construction schedule in calendar days, showing significant milestones;

o. Determination that proposed EMS has been recommended and selected without regard to fuel source; and

p. Based on the information provided to the Contractor by the Ordering Agency concerning the facility and related operations and the Contractor's physical inspection of the site, preliminary identification of any Hazardous Materials which might be present and affect the EMS's implementation.

2. Cost Factors

a. Estimated annual operation costs (*e.g.*, increased use of alternate fuel sources replacement filters, and increased maintenance costs);

b. Estimated project costs, broken down by EMS to the extent practicable;

c. Estimated costs of any monitoring & verification of savings required;

d. Estimated annual cost savings;

e. Estimated unit costs for major components and systems; and

f. Estimated life cycle cost analysis.

A.3.C. EMS Engineering and Design – This Section A.3.C shall apply to any EMS engineering and design work requested by an Ordering Agency and set forth in the Authorization for EMS.

After evaluation of the comprehensive energy audit report, the Ordering Agency may elect to proceed with the EMS engineering and design work. An Authorization for EMS that includes EMS engineering and design work shall also include a written statement of work and specifications for the EMS engineering and design work that has been agreed upon by the parties.

The Contractor shall coordinate the EMS engineering and design work with the Ordering Agency's Contracting Officer, and a joint technical review of the construction drawings and specifications and design and analyses shall be conducted with the Ordering Agency when the engineering and design documents are approximately 35% and 95% complete, unless an alternate review schedule is specified in the Authorization for EMS.

Upon completion of engineering and design, the Contractor shall submit to the Ordering Agency's Contracting Officer all required engineering and design documents including, to the extent applicable, an EMS implementation proposal. The Ordering Agency may require the Contractor to present a briefing to explain the proposal to the Ordering Agency and Contracting Officer. Unless otherwise specified in the Authorization for EMS or subsequently waived by the Contracting Officer, such a proposal shall include:

a. specifications and drawings for all EMSs that involve changes to existing systems (drawings will not be required for ECMs involving only component replacement);

b. Revised technical and costs factors; and

c. List of proposed subcontractors.

A.3.D. EMS Installation – This Section A.3.D shall apply to any EMS installation work requested by an Ordering Agency and set forth in the Authorization for EMS.

After evaluation of the EMS engineering and design work, the Ordering Agency may elect to proceed with the EMS installation. An Authorization for EMS that includes EMS installation shall also include a written statement of work, schedule, and specifications for the EMS installation that has been agreed upon by the parties.

A.3.D.1. Performance of EMS Construction and Installation - If and to the extent the Ordering Agency is required to occupy the existing building during parts of or the entire period of construction, the Contractor and the Ordering Agency shall cooperate to minimize disruptions and provide for performance of the work so as not to interfere with the Ordering Agency's operations.

A.3.D.2. Pre-Work Requirements - Prior to commencement of on-site work, unless waived by the Contracting Officer, the Contractor shall submit a proposed implementation schedule indicating installation periods, time required for delivery of equipment, and completion date to the Contracting Officer and/or Contracting Officer's Representative for approval, in accordance with FAR 52.236-15.

A.3.D.3. Pre-Work Conference - Prior to on-site work, unless waived by the Contracting Officer, the Contractor shall meet with the Contracting Officer or the Contracting Officer's Representative for the purpose of discussing and developing mutual understandings regarding safety, scheduling, performance and administration of the Authorization for EMS.

A.3.D.4. Ordering Agency Technical Review - Joint technical reviews between the Ordering Agency and the Contractor may be made at agreed-upon time intervals.

A.3.D.5. As-Built Drawings - Within forty-five (45) calendar days after Acceptance of the installation of an EMS, the Contractor shall submit to the Contracting Officer As-Built drawings of the completed work in a format to be mutually agreed upon. Drawings will not be required for component replacement Drawings shall include the following:

1. The installation (*e.g.*, form, fit, and attachment details) of the interface between EMS equipment and existing Ordering Agency equipment; and

2. The location and rating of installed equipment on building floor plans or other facility plans.

A.3.D.6. Utility Interruptions - All utility interruptions in connection with work under this Authorization for EMS shall be made outside Occupied Periods whenever possible, and in no event shall such interruptions take place without the advance approval of the Contracting Officer's Representative or Facility Manager, as appropriate. The Contractor shall endeavor to keep the duration of utility interruptions to a minimum. To the extent possible, requests for utility outages shall be submitted in writing at least fourteen (14) calendar days prior to the utility interruption. The request shall be coordinated with the Contracting Officer's Representative or Facility Manager, as appropriate, and shall include the duration, date, time, and reason for the interruption. Utility interruptions include, but are not limited to, electrical, natural gas, sewer, steam, water, telephone, computer cable, and CATV.

A.3.D.7. Documentation of Compliance - As may be required in an individual Authorization for EMS, the Contractor shall provide drawings and specifications certified by a registered engineer or architect, as applicable, to assure compliance with all applicable federal, state, and local codes and regulations.

A.3.D.8. Water Conservation Measures - The Contractor shall coordinate the implementation of any EMS with the implementation of any water conservation measures being undertaken at a facility

A.3.D.9. More Efficient Equipment - The Ordering Agency reserves the right, following Acceptance, to replace equipment installed under an EMS with more efficient equipment or components, if available, at the Ordering Agency's sole expense. Such replacement will have no effect on the payments to the Contractor required by an Authorization for EMS.

A.3.D.10. Operations and Maintenance Manuals - Within forty-five (45) calendar days after Acceptance of the installation of an EMS, the Contractor shall furnish to the Ordering Agency's Contracting Officer all operation and maintenance manuals, recommended spare parts lists identifying components for the operation and maintenance of the equipment installed in the EMS, as set forth in the Authorization for EMS. The operation and maintenance manuals shall include maintenance schedules for all equipment installed in the EMS.

A.3.D.11. Training of Ordering Agency Personnel for EMSs - Any training of Ordering Agency personnel and/or agents necessary for the successful implementation of an EMS shall be undertaken by the Contractor, as set forth in the Authorization for EMS.

A.3.D.12. Performance Verification - An Authorization for EMS may require the Contractor to measure and document EMS performance following Acceptance of the EMS. This report will contain an analysis of the difference, if any, between estimated and actual energy savings.

A.3.E. Operations, Maintenance, Training and Emergency Response - Unless otherwise provided in an Authorization for EMS, the Ordering Agency shall be responsible for operation and maintenance of the EMS following Acceptance.

A.4. Title to Equipment and Risk of Loss

A.4.A. Title to Equipment - Title to equipment installed by the Contractor under an Authorization for EMS shall pass from the Contractor to the Ordering Agency at the time the work under award of the Authorization for EMS is Substantially Complete.

A.4.B. Risk of Loss - The Contractor shall bear all risk of loss or damage of any kind with respect to all or any part of a project prior to its Substantial Completion or use by the Ordering Agency, unless such loss or damage is caused by the Ordering Agency or its employees, agents, or contractors.

A.5. Warranty

A.5.A. Service Warranty - The Contractor warrants to the Ordering Agency that the services performed by the Contractor under this Authorization for EMS shall be performed in conformance with the engineering and design documents and generally accepted industry standards prevailing at the time the services are performed.

A.5.B. Pass Through of Equipment and Material Warranties - The Contractor, in procuring materials and equipment for a project, shall obtain standard vendor warranties from the supplier or subcontractor for the benefit of the Contractor and the Ordering Agency, and where practical, shall attempt to obtain warranty periods of one (1) year from the date a project is Substantially Complete. The Contractor shall pass through such warranties to the Ordering Agency, but the Contractor shall have no liability for material and equipment warranties, which shall be the sole responsibility of manufacturers and suppliers.

A.5.C. Contractor Interface – Upon the request of the Ordering Agency's Contracting Officer, the Contractor shall interface and act as a liaison with the Contractor-purchased equipment and material manufacturers and suppliers to resolve problems and pursue warranty claims on behalf of the Ordering Agency up to (1) year from the time the project is Substantially Complete.

A.5.D. Warranty Period - The warranty period for the warranties set forth in Paragraph A.8.A. shall extend, with respect to each installed project, for a period of one (1) year following when a project is Substantially Complete. The warranty period for any services performed by the Contractor hereunder

which do not result in the installation or full implementation of a project shall extend for a period of one (1) year following the date of completion of such services.

A.5.E. Remedies - The Ordering Agency's Contracting Officer shall promptly notify the Contractor in writing of the discovery during the applicable warranty period of any breach of the Contractor's warranties under this Section A.8. As the Ordering Agency's first remedy for any such breach of the Contractor's warranties, the Contractor shall, at its own cost and expense, as soon as reasonably possible following the Contractor's receipt of notice of any breach of warranty, re-perform or correct any service, which failed to conform to the above warranty.

A.5.F. Warranty Exclusions - The liabilities and obligations of the Contractor under this Section A.8 do not extend to any repairs, adjustments, alterations, replacements or maintenance which may be required as a result of abuse, neglect, misuse, failure of the Ordering Agency to provide access, modification not made in accordance with the manufacturer's specifications by anyone other than the Contractor, normal wear and tear in the operation or use of an installed project, or as a result of the Ordering Agency's failure to operate or maintain a project in accordance with the operating manuals or instructions supplied by the Contractor or the manufacturer or supplier, or in accordance with the training provided by the Contractor to the Ordering Agency's personnel.

A.5.G. No Implied Warranties - EXCEPT AS EXPRESSLY PROVIDED IN THIS SECTION A.5, THE CONTRACTOR MAKES NO FURTHER WARRANTIES OR GUARANTEES, EXPRESS OR IMPLIED, CONCERNING THE SERVICES OR ANY PROJECT, AND THE CONTRACTOR DISCLAIMS ANY WARRANTY IMPLIED BY LAW, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND IMPLIED WARRANTIES OF CUSTOM OR USAGE.

A.6. Facility Ownership - If the Ordering Agency is not the sole owner of the facility where a project is or will be undertaken under the Authorization for EMS, the Ordering Agency's Contracting Officer shall immediately notify the Contractor and secure the written consent of the owner(s) for the Contractor to perform project services prior to the commencement of such services. The Ordering Agency's Contracting Officer shall furnish the Contractor with a copy of such written consent as soon as such consent is obtained by the Ordering Agency.

Section B – Payment Terms

B.1. Price of EMSs - The price of services rendered by the Contractor pursuant to any Authorization for EMS shall be based on (i) all Contractor direct costs, such as labor, materials, costs of working capital and all subcontractor costs; plus (ii) all indirect costs, such as overheads, project management, and contract administration; plus (iii) profit.

B.2. Payment of EMSs - The Ordering Agency shall pay the Contractor the price of each EMS, as set forth in each Authorization for EMS.

B.3. Financial Incentives and Rebates – Current incentives and rebates that may be available to the Ordering Agency shall be set forth in the Authorization for EMS.

B.4. Assignment of Claims – The Contractor may assign its rights to be paid amounts due or to become due as a result of the performance of work under this Authorization of EMS in accordance with FAR 52.232-23.

B.5. Novation – The Parties agree that if, subsequent to the execution of the Authorization for EMS, it should become necessary, or desirable, to execute a "Novation Agreement," said Novation Agreement will comply with the provisions of FAR, Part 42, Subpart 42.12 and will be in the form as provided at FAR, Part 42, Subpart 42.1204.

B.6. Determination of Energy Savings - Energy savings will be determined on the basis of engineering estimates and set forth in the Authorization for EMS.

B.7. No Recourse for Unrealized Savings - The Ordering Agency acknowledges that consumption fluctuations may occur as a consequence of unanticipated factors such as weather and unexpected energy loads, and that payments to the Contractor will not change even if the estimated energy savings do not materialize, **unless performance guarantees are specifically requested and negotiated by the Ordering Agency and the Contractor and set forth in the Authorization for EMS.**

B.8. Financing of EMSs

This Section B.8 shall only apply to Contractor-financed EMSs.

B.8.A. Energy Savings and Financing – It is intended that the annual energy savings achieved from the implementation of a Contractor-financed EMS under the Authorization for EMS will produce financial savings to the Ordering Agency which are greater than the cost of implementing the EMS, including the cost of financing provided under the Authorization for EMS. The payment term shall be set forth in the Authorization for EMS.

B.8.B. Performance Guarantee – In the event an EMS is financed, in whole or in part, Contractor shall provide a performance guarantee to the Ordering Agency for all GSA facilities, which shall be supported by a measurement and verification (M&V) plan. In the event an EMS is financed, in whole or in part, for other Federal facilities, Contractor shall provide a performance guarantee to the Ordering Agency, which shall be supported by a M&V plan only if specified in the Authorization for EMS. M&V procedures will be in keeping with industry practices, such as the Federal Energy Management Program's (FEMP) M&V guidelines for federal energy projects.

B.8.C. Calculation of Financed Payment – The cost of financing, if any, for any completed EMS shall be recovered under terms and conditions set forth in the Authorization for EMS. Payments to the Contractor shall commence after the Ordering Agency takes possession of the ECM based on the mutually agreed upon financing terms and conditions included in the Authorization for EMS.

B.8.D. Buy-down – The Ordering Agency may at any time prior to final payment buy-down the outstanding financed EMS payments by giving thirty (30) days written notice to the Contractor. Upon such mutually agreed upon buy-down, the Ordering Agency shall pay Contractor in accordance with the Termination Schedule.

Section C - Environmental Protection

C.1. Compliance with Environmental Laws - In connection with the implementation of EMSs, the Contractor and the Ordering Agency shall comply with all applicable federal, state and local laws and regulations regarding environmental protection. The Contractor shall comply with the instructions of the Ordering Agency with respect to avoidance of conditions which create a nuisance or which may be hazardous to the health of persons at or near a Ordering Agency's facility.

C.2. Environmental Permits - The Ordering Agency and the Contractor shall cooperate in obtaining all required environmental permits necessary for compliance with applicable environmental protection laws prior to implementing any EMS under the Authorization for EMS.

C.3. Emission Credits - All emission credits attributable to reductions in emissions at the Ordering Agency facility incident to EMSs entered into under this Authorization for EMS shall be the property of the Ordering Agency, unless otherwise specified in the Authorization for EMS.

C.4. Ordering Agency Responsible for Existing Hazardous Materials - The Ordering Agency has an affirmative duty to inform the Contractor, prior to the start of and during the course of performing services under this Authorization for EMS in writing of the existence of any known Hazardous Materials. If, prior to performance of the service or during the course of performing the services, the Contractor becomes aware of any Hazardous Material, the Contractor shall report such matter to the Ordering Agency's

Contracting Officer immediately and before disturbing (or further disturbing) the Hazardous Material. If requested by the Ordering Agency's Contracting Officer, the Contractor shall recommend contractors who can remove the Hazardous Material or, at the Contractor's sole option, the Contractor may agree to remove the Hazardous Material for the Ordering Agency. Work in the affected areas shall be resumed only upon the written direction of the Ordering Agency's Contracting Officer when the Hazardous Material has been removed or corrected, and then only if such continuation of work shall not violate any applicable laws or permit requirements. In the event work is so suspended for longer than three months, the Contractor shall be entitled to an adjustment in the price for any increase in the cost of performance of any EMS, as set forth in FAR 52.212-12.

C.5. Contractor Responsibilities - The Contractor shall be responsible for the disposal of any Hazardous Material generated by the Contractor during the performance of services under the Authorization for EMS.

C.6. Incidents Reporting - The Ordering Agency shall be responsible for reporting all incidents of spills or release of Hazardous Materials at location(s) to the appropriate regulatory authorities; provided, however, that the Contractor shall immediately notify the Ordering Agency's Contracting Officer of and immediately clean up, in accordance with all applicable laws, all spills and/or releases of Hazardous Materials resulting from the Contractor's operations at the location(s). In the event the Contractor becomes aware of a spill and/or release of Hazardous Materials not resulting from the Contractor's operations, the Contractor shall immediately notify the Ordering Agency's Contracting Officer, but it shall not be responsible for such clean up.

Section D – Miscellaneous

D.1. Conflict Among Documents - In the event of any conflict: (i) between the Areawide Contract, Exhibit "C", these General Terms, or any other Attachment to the Areawide Contract, the Areawide Contract shall control, (ii) between these General Terms and Exhibit "C", the terms and provisions of Exhibit "C" shall control, and (iii) between the EMS Proposal, these General Terms, and any other Attachments to Exhibit "C", the EMS Proposal shall control over these General Terms and all other Attachments, and these General Terms shall control over all other Attachments. In all other cases, the document of the latest date mutually agreed upon, and signed or initialed by the Contractor and the Ordering Agency shall control.

D.2. Proof of Insurance – Any insurance obligation that may exist under the Authorization for EMS may be satisfied through self-insurance.

Appendix B

Sample Justification and Approval Form

UESC Guide: A Resource for Contracting Officers Working on UESC Projects, page 25

J&A
Sample
(Sample text is shown in italics)

1. Identification of Agency and Contracting Office: *[Name of Agency; Name of Contracting Office and Location]*

2. Nature/Description of Action: *Approval is requested to negotiate and issue an EMSA Exhibit under the terms and conditions of General Services Agency (GSA) Area Wide Contract [GS-XXX-XX-XXX-XXXX] for [Utility], a public utility company regulated by the [State Public Utilities Commission], to provide UESC (UESC) services without full and open competition. The work will be performed at [Site Location], which is within the [Utility] franchised service territory established by [State law and the Public Utilities Commission], under the terms and conditions of the AWC.*

3. Description of Supplies Services: *Subject to the provisions of the AWC and Authorization, [Utility] will provide project development and installation efforts to implement energy and water conservation projects in building(s) [List Buildings / Location(s)]. A description of the work requirements for this project is attached hereto. Implementation of this project will allow the United States Government to effectively improve the aforementioned facilities and reduce its electricity, gas and water demand. The energy and water savings will reduce the site's electricity, gas, and water allocation, resulting in utility cost avoidance and compliance with mandatory laws and statues to reduce energy and water consumption. The total estimated value of this Order to be issued pursuant to the AWC will be approximately [Estimated Dollar Value].*

4. Identification of Statutory Authority: *42 U.S.C. Section 8256 of the EPACT encouraged Government agencies to enter into agreements with electric, water, and gas utilities to design and implement cost-effective demand and conservation incentive programs in order to address the requirements and circumstances of the Government installations. The main purpose of 42 U.S.C 8256 is to authorize the Government to take advantage of the expertise, rebates, and other financial incentives offered to customers of utility service providers for reducing energy consumption (if applicable). This renewable energy project will also assist [Site / Location] in meeting the renewable energy goals as established by the EPACT. Under 42 U.S.C. 8256, the procedures and methods required by the EPACT are "procurement procedures otherwise expressly authorized by statute," and, as a consequence, are exempt from the Competition in Contracting Act requirement for full and open competition under FAR 6.302-5.*

5. Demonstration of Contractor's Unique Qualifications: *[Names of Utilities] are the only two utility companies willing and able to provide comprehensive UESC Energy Management Services (EMS) at [Site / Location] in accordance with 42 U.S.C. Section 8256. The Agency analyzed all eligible utilities interested in developing and proposing design-build services for a comprehensive energy project throughout the [Site(s)/Location(s)]. Based on evaluation and past performance, [Utility] was selected for the aforementioned services.*

6. FedBizOpps (FBO) Announcement/Potential Sources: *In accordance with FAR 5.202(a) (4), the CO has determined the contract action is expressly authorized by statute to be made from a specified source. The specified source is the regulated utility company that is participating in the UESC DSM project and the announcement will be published as a notification of intent.*

7. Determination of Fair and Reasonable Cost: *The anticipated cost to the United States Government will be fair and reasonable. The Order will be negotiated independently with the price fully substantiated as fair and reasonable. Utility will meet the requirements for open competition by selecting each of the subcontractors performing the design-build for the facilities energy improvements under the contract from a group of at least three competitors utilizing their competitive source selection process in accordance with FAR 52.244-5.*

8. Description of Market Survey: *According to the market survey, [Names of Utilities] are the only utility companies willing and able to provide UESC EMS at [Site / Location]. [Utility] was selected after a competitive selection process as discussed in paragraph 5.*

9. Any Other Supporting Facts: *[Utility] can provide all of the UESC EMS design, installation and funding as well as the timely execution of the needed services. In addition to monetary incentives approved by the [Public Utilities Commission], the associated costs for procurement, contract administration, and performance assurance being performed by [Utility] on behalf of the United States Government represent a significant savings in time and costs.*

10. Listing of Interested Sources: *Only [two] utility companies are available at [Site/Location] to provide the United States Government with the comprehensive EMS and rebates and other financial incentives required for this project. [Utility] was selected as the most competent to accomplish this specific project as discussed in Paragraph 5.*

11. Actions Taken to Remove Barriers to Competition: *The [Name of Contracting Office] team met with all utility companies providing utility services at [Site/Location] to ascertain their interest, qualifications, and experience in providing UESC EMS. Competition was completed in accordance with FAR 52.244-5 subcontractor selection process.*

12. Statement of Delivery Requirements: *The Order will be negotiated and awarded for project development, design, and installation for [Site/Location/Specific Buildings] by [Date]. See the attached scope of work for a description of the work requirements.*

13. Total Estimated Dollar Value of the Acquisition Covered by this J&A: The United States Government estimated total cost of accomplishing the work is approximately *[Dollar Value]* for a period of *[Term of Contract*].

14. Reference to the Approved Acquisition Plan (AP): *[An Acquisition Plan is not required according to Federal Acquisition Supplement (FARS) 7.103 and the Agency Acquisition Guide, since the total cost of the Order issued under this AWC will not exceed $5.5 million.]*

15. Documentation for Spare/Repair Parts Acquisition: *[As applicable*]

CERTIFICATION AND APPROVAL

TECHNICAL/REQUIREMENTS

I certify that the facts and representations under my cognizance which are included in this Justification and its supporting acquisition planning documents, except as noted herein are complete and accurate to the best of my knowledge and belief.

Technical Cognizance:

_____

Signature: Phone No. Date

LEGAL SUFFICIENT REVIEW
I have determined this Justification is legally sufficient.

_____

Signature: Phone No. Date

CO CERTIFICATION
I certify that this Justification is accurate and complete to the best of my knowledge and belief.

_____

Signature: Phone No. Date

APPROVING OFFICIAL (DEARS 906.304)
Upon the basis of the above Justification, I hereby approve the solicitation of the proposed procurement(s) described herein using other than full and open competition, pursuant to the authority of FAR 6.034 (DEARS 906.304).

_____

Signature: Date

Enclosures

Appendix C

Sample UESC Action List

Action	Responsible Party
Initial project scope	Agency (with or w/o utility)
Agency decision to implement with UESC	Agency
Letter of interest to utilities	Agency
Fair consideration of utilities	Agency (w/ utility involvement)
J&A and Utility selection letter	Agency
Task order or letter for PA	Agency
Preliminary assessment (PA)	Utility (w/ agency involvement)
Agency review of PA	Agency
Task order for IGA/FS	Agency
Investment grade audit or Feasibility study	Utility (w/ agency involvement)
Agency review of (IGA/FS)	Agency
Finalize ECM list	Agency (w/ utility involvement)
Agency develops statement of work for the project. (Include requirements for working on-site, … would be part of any construction project)	Agency
Utility finalize technical scope for firm-fixed price. ECMs sufficiently detailed to acquire competitive subcontractor bids	Utility
Utility RFP to subcontractors for ECMs	Utility
Agency completes “business clearance” or “recommendation to award”. (see business clearance sample in the Guide)	Agency
Agency request firm-fixed price	Agency
Utility provide proposal with firm-fixed price, subcontractor bids, and financing	Utility
Agency review proposal Obtain authorization to negotiate	Agency
Agency-Utility negotiate/finalize project cost	Agency and utility
Utility requests finance package	Utility
Potential lenders provide financing proposals	Utility and financiers
Utility delivers proposal w/ finance package	Utility
Agency review proposal with finance package	Agency
Final discussions/negotiations on project with financing	Agency and utility
Utility provides final proposal with final finance package	Utility
Indicate agreement to finance terms	Agency
Agency awards task order for UESC	Agency
Lender wires financing to Escrow for construction	Financier and utility

End of Document