**Preliminary Assessment SOW**  
**Template**

**1.0 PURPOSE, SCOPE, AND GOALS**

**1.1 PURPOSE** — The work to be performed consists of completing a preliminary assessment (PA) of buildings and facilities located at *Agency site or facility name*, to identify energy conservation measures (ECMs), water conservation measures (WCMs), provide sufficient detail for each ECM/WCM to determine which are candidates for an investment grade audit (IGA), and potentially to be installed as part of a Utility Energy Service Contract (UESC).

**1.2 SCOPE** — A PA shall be conducted for the facilities/buildings/systems identified in *Table 1 - Building and Agency Identified ECM/WCM matrix (compile table with all identified facilities/buildings/systems and insert below)*. The description of these facilities/buildings/systems may be adjusted to include additional items that are discovered during the site investigation and could result in energy or water savings and/or associated cost savings. The PA shall comply with evaluation requirements of Section 432 of the Energy Independence and Security act of 2007, codified as 42 USC § 8253 (f).

* 1. **GOALS** — The following are the primary goals for this PA.
* Investigate priority ECMs/WCMs *(list priority ECMs for the agency/site)*
* Identify other economically viable ECMs/WCMs that are in the best interest of the *government/agency/mission*
* Maximize reduction in consumption and cost savings
* Investigate all applicable incentives
* Impacts to personnel and increased maintenance requirements will be minimized
* Identify a comprehensive project that bundles both short and long payback ECMs/WCMs.

**2.0 SITE ADDRESSES & POINTS OF CONTACT**

**Utility Company Name:**

* *Utility Representative, including Address, Phone Number, and E-mail Address*
* *Second Utility Representative, including Address, Phone Number, and E-mail Address*

**Agency Point of Contact:**

* *Agency Representative, including Address, Phone Number, and E-mail Address*
* *Second Agency Representative, including Address, Phone Number, and E-mail Address*

**3.0 GENERAL REQUIREMENTS** — Specific requirements are outlined in section 7.0 of this document. General requirements of the preliminary assessment (PA) include, at a minimum, the following sections:

* ECM/WCM descriptions to include facility information, energy and water usage and utility tariff data, and implementation cost and savings estimates
* A list of ECMs/WCMs that were evaluated but not recommended pending further evaluation
* Project management plan to include a communication plan, organizational chart, key personnel, subcontract management plan, and preliminary implementation schedule
* ECM/WCM performance measurement and draft performance assurance plan methodology
* Preliminary Task Order Financial Schedules. *Note: Use of eProject Builder (ePB) is highly recommended.*

**3.1 DEFINITION OF TERMS**

**Cost effective, also life cycle cost (LCC) effective and financed LCC effective** — ECMs shall be deemed cost effective if an analysis using (1) life cycle costs; (2) net savings; (3) savings-to-investment ratio (SIR) as calculated using the methods and procedures developed pursuant to [10 CFR 436](https://www.ecfr.gov/current/title-10/chapter-II/subchapter-D/part-436), Federal Energy Management and Planning Programs, Subpart A, Methodology and Procedures for LCC Analyses; or (4) adjusted internal rate of return; show that the cost of installing the ECM is less than the cost of the baseline or the savings are greater than the investment cost. Renewable energy projects with a simple payback greater than fifteen (15) years will be evaluated using separate criteria to establish “cost effectiveness” at the discretion of the Contracting Officer.

**ECM/WCM** — A potential energy or water conservation measure that is identified during the survey as defined in 42 USC § 8259: Energy conservation measures means measures that are applied to a Federal building that improve energy efficiency and are life cycle cost effective and that involve energy conservation, cogeneration facilities, renewable energy sources, improvements in operations and maintenance efficiencies, retrofit activities, or energy consuming devices and required support structures.

**Operations, Maintenance, Repair, and Replacement (OMR&R)** — OMR&R refers to all efforts, by all sources, to operate, maintain, repair, and replace completed ECMs. The economic analysis of OMR&R costs associated with an ECM must include a comparison of ongoing operation and maintenance costs and the potential repair/replacement costs avoided with adequate maintenance. Data about current operations and maintenance activities will be provided by the Agency.

**Simple Payback Period** — The ratio of the estimated project capital cost divided by the estimated savings per year from implementing the ECM.

**4.0 APPLICABLE SPECIFICATIONS, REGULATIONS, ETC.**

ECMs shall meet or exceed all applicable codes and regulations, including, but not limited to:

* National Electrical Code (NEC)
* Uniform Building Code (UBC)
* Uniform Mechanical Code (UMC)
* Uniform Plumbing Code (UPC)
* National Fire Protection Association (NFPA) Standards
* Clean Air Act and Amendments, Title VI
* State and Local Regulations
* Specific agency and site design and construction standards will be provided as part of the Task Order requirements.

**5.0 POTENTIAL ECMs/WCMs** — Potential ECMs, including water conservation measures, commissioning, and renewable energy system opportunities shall be evaluated for cost effectiveness for each building, structure, or area surveyed at the *(site/location)*. A list of agency-identified priority ECMs/WCMs are described below *(in Table 1 – Building and Agency Identified ECM/WCM matrix)*. The *Utility* shall evaluate the agency-identified priorities along with other ECMs/WCMs identified by the *Utility* during the PA.

*Note: As applicable, include requirement to assess Laboratories and* [Data Centers](https://www.energy.gov/femp/energy-efficiency-data-centers) *with regard to the Federal Energy Management Program’s* [Smart Labs Program](https://www.energy.gov/femp/smart-labs)*.*

**5.1 RECOMMENDATIONS FOR CHANGES IN OPERATIONAL AND MAINTENANCE PROCEDURES** —

Identify all potential savings opportunities found in Section 4.1 Definition of Savings, of the [Practical Guide to Savings and Payments in FEMP ESPC Task Orders](https://www.energy.gov/femp/articles/practical-guide-savings-and-payments-femp-espc-task-orders) for Energy-Related Cost Savings. Energy-Related Cost Savings are defined as: “A reduction in expenses (other than energy cost savings) related to energy-consuming equipment, generally related to equipment operations, maintenance, renewal, replacement, or repair expenses. One-time energy-related cost savings can result from avoided expenditures of O&M or R&R funds, or from avoided capital expenditures for projects (e.g., equipment replacement) that, because of the ESPC project, will not be necessary.”

*Note that the Practical Guide to Savings is focused on ESPC but also has information applicable to UESCs.*

In each area or building where energy or water is consumed, provide recommendations for improving efficiency through operational strategies that will not cause risk to mission or operational requirements including:

* Changes to operational hours for specific equipment or systems, e.g., minimize electrical consumption and demand charges through night/off-peak run time for heavy process loads
* Changes in procedures and/or working hours having little or no impact on personnel
* Changes to existing maintenance procedures, e.g., group lamp replacement, replace failed motors with premium efficiency motors, etc.
* Modifications to existing facility use, e.g., maximizing occupancy, etc.

**6.0 PERFORMANCE ASSURANCE METHODOLOGY** —Describe *Utility’s* performance assurance methodology that will be used to support agency goals described in section 3.0. Specific components to be addressed in the PA Report include:

* Energy savings measurement and verification methodology
* Commissioning methodology
* Proposedutility and agency proposed OMR&R responsibilities
* Training Plan methodology
* Warranty Plan methodology
* Performance discrepancy resolution methodology.

**7.0 PA REPORT** — The *Utility* will provide PA results in a report that demonstrates technology applicability to all buildings and structures in a spreadsheet format such as *(Table 2 – insert sample table)*. At a minimum, the report will include the following sections:

1. Project Overview, or Executive Summary, that includes –
   1. A narrative summary of the proposed project
   2. A brief summary of the project management plan / approach
   3. A brief description of recommended and potential ECMs/WCMs
   4. A summary of ranges for energy, water and related cost savings
   5. A conceptual range of implementation price.
2. Technical Assessment, that includes –
   1. Project Management Plan.  A project management plan that provides for the efficient development of a task order proposal for a project and effectively addresses the ordering agency’s objectives depicted in the *Letter of Interest/Sources Sought Notice*.  Key recommended elements of the plan include:
      1. A communication plan
      2. Organization and key personnel, including identification of functions to be subcontracted
      3. Description of the subcontracting management plan
      4. A draft risk, responsibility, and performance matrix
      5. Expectations for ordering agency participation
      6. Preliminary ECM/WCM Project schedule.
   2. Descriptions for each recommended and potential ECM/WCM.  In addition to narrative information, each ECM/WCM description should include ranges for estimated implementation price and savings.  ECMs/WCMs are categorized by those recommended for inclusion in the task order proposal (Recommended ECMs/WCMs) and those that may be included but require additional evaluation (Potential ECMs/WCMs) as described below.
      1. Recommended ECMs/WCMs – the *Utility* is quite confident this ECM/WCM is viable for this UESC project and will be included in the task order proposal.  The *Utility* will provide narrative information and estimated implementation price and savings ranges in the format specified in the template
      2. Potential ECMs/WCMs – ECMs/WCMs the *Utility* considers worthy of evaluation, but which require evaluation and verification of field conditions in the task order proposal development phase for the *Utility* to complete a more accurate calculation to increase its confidence for inclusion in the task order proposal.  For these potential ECMs/WCMs, the *Utility* will provide a narrative description of each ECM/WCM, how the ECM/WCM may save energy and/or water for the site, and a conceptual-level estimate range of potential implementation costs, cost savings, and energy/water savings.
   3. ECM/WCM Performance Assurance.  The *Utility* will provide a general description for the performance assurance approach that will be proposed for the recommended ECMs/WCMs. The *Utility* will also provide the elements of the proposed performance assurance methodology from section 6.0 above. The performance assurance approach will also include a general description of the recommended level of government witnessing that complies with the latest version of [DOE FEMP’s Guide to Government Witnessing and Review of Measurement and Verification Activities](https://www.energy.gov/femp/articles/guide-government-witnessing-and-review-measurement-and-verification-activities).  If operation and maintenance savings are included in the PA, then the *Utility* will include a general description of the methods that comply with the latest version of [How to Determine and Verify Operating and Maintenance (O&M) Savings in Energy Savings Performance Contracts](https://www.energy.gov/sites/prod/files/2018/03/f49/om_savings_guidance.pdf).  In determining energy/water cost savings, the utility is required to comply with the latest version of FEMP’s [Guidance on Utility Rate Estimations and Weather Normalization in Performance Contracts](https://www.energy.gov/femp/articles/guidance-utility-rate-estimations-and-weather-normalization-performance-contracts). *Note: While the “How to Determine and Verify Operating and Maintenance (O&M) Savings in Energy Savings Performance Contracts” document is focused on ESPCs but also has information applicable to UESCs. DOE also highly recommends that the PA include the baseline energy/water use for the buildings/site being evaluated, and if applicable, the baselines of each ECM/WCM being recommended, as well as the utility rates used for calculations.*
   4. Preliminary Task Order Financial Schedules for all Recommended ECMs/WCMs.  *Note: Use of eProject Builder (ePB) is highly recommended.* The *Utility* may also include Summary and Annual Escalation Rates schedules.  *Note: The Task Order Schedules provide estimates of proposed energy/water and cost savings and the estimated implementation price.  The ordering agency should provide guidance to the utility on what values to use in the Task Order Schedules, such as the average of the ranges provided in the ECM/WCM descriptions.  At this stage of development, the costs and savings may be largely based on the utility’s previous experience with similar measures and other benchmarking data.  Details of savings calculation and cost build ups are not required for this phase and only need to be provided during the task order proposal phase.*