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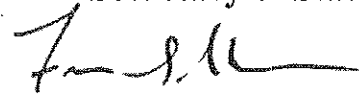
**ENERGY SAVINGS PERFORMANCE CONTRACT PROGRAM
AMENDED REGULATION**

DEPARTMENT OF STATE

No: 8682

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**Approved: Hon. Víctor A. Suárez Meléndez
Secretary of State**



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Commonwealth of Puerto Rico
Puerto Rico State Office of Energy Policy

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Energy Savings Performance Contract Program Amended Regulation

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CHAPTER ONE: GENERAL PROVISIONS

SECTION 1.01 - TITLE AND INTRODUCTION

This Regulation shall be known as the "Energy Savings Performance Contracting Program Amended Regulation."

The Puerto Rico State Office of Energy Policy (SOEP) is the lead agency in charge of implementing the public policy set forth in Act No. 19 of January 17, 2012, known as the Energy Savings Performance Contracts Act (Act 19-2012), and Act No. 57 of May 27, 2014, as amended, known as the Energy Transformation and Relief Act (Act 57-2014), which, amongst others, promote the concept of Energy Savings Performance Contracts (ESPC) as a cost-effective measure for reducing energy and water consumption and promoting efficiency in government owned buildings and installations.

Through Act 19-2012, the Government of Puerto Rico adopted ESPCs as an indispensable tool for promoting efficient energy use. Given that ESPCs provide a fiscally sound and efficient way of reducing energy and water consumption, all components of the Government of Puerto Rico are mandated by Act 19-2102 and Act 57-2014 to promote, implement and execute effective strategies to achieve energy and water efficiency and conservation in their operations. All Government Units must promote the use of ESPCs as a contractual mechanism for achieving energy and water efficiency and conservation and promoting the integration of renewable energy generation alternatives.

Act 57-2014 grants SOEP specific powers to coordinate and oversee the implementation of ESPCs by Government Units and ensure meaningful reductions in their energy and water consumption. SOEP is responsible for certifying eligible Energy Service Companies (ESCOs) and maintaining a registry of Qualified ESCOs. SOEP is also responsible for providing assistance to Government Units in relation to the development of energy and water efficiency and consumption reduction plans and strategies and providing guidance in the selection and contracting of ESCOs.

SECTION 1.02 - LEGAL BASIS

This Regulation is issued in accordance with and pursuant to the powers conferred to SOEP under Act 19-2012 and Act 57-2014 and in compliance with the provisions of Act No. 170 of August 12, 1998, as amended, known as the Uniform Administrative Procedures Act (Act 170-1988).

SECTION 1.03 – STATEMENT OF PURPOSE

The purpose of this Regulation is to provide Government Units with a standardized process for the development, implementation, measurement and verification of ESPC Projects by defining roles and responsibilities, formalizing process stages and providing standard contract documents. Project goals include: (i) reduction of energy use government owned or operated buildings; (ii) market transformation to establish performance contracting as a standard and accepted tool for implementing energy-saving projects; (iii) comprehensive project development in order to achieve

annual energy savings of at least thirty percent (30%) or more across all buildings; (iv) infrastructure improvements completed through reallocation of utility costs in order to avoid use of scarce capital dollars (capital avoidance); and (v) provide streamlined pre-approved approaches to help decision makers more effectively follow through with performance contracting projects to ensure success. Strict compliance with the parameters set-forth in this Regulation will result in the elimination of risks incidental to ESPCs and will protect the Government Unit from any potential contractual default.

SECTION 1.04 – APPLICABILITY

This Regulation shall be applicable to SOEP, all Government Units and all qualified ESCOs implementing Guaranteed Savings ESPCs as defined by Act 19-2012.

Act 19-2012 authorizes Government Units to use ESPC as a mechanism to implement large capital-investment projects that aim at energy and water conservation and efficiency and renewable energy integration. All Government Units are required to promote, implement and enforce effective strategies to achieve energy conservation and efficiency through the use of ESPCs.

The provisions of this Regulation shall be applicable only to buildings or structures for which there is reasonably reliable information about energy and water consumption of, at least, the last three (3) years of partial or total occupation thereof. Buildings and structures that do not comply with the aforementioned requirement may be eligible for an ESPC if adequate estimates of energy and water use and consumption can be generated using proven and effective methods and mechanisms. In such cases, SOEP shall evaluate and review such use and consumption estimates and determine whether such building or structure is eligible for an ESPC. This Regulation will not affect previously executed ESPCs between Government Units and a particular ESCO.

The provisions of this Regulation shall not be applicable to Shared Saving ESPCs as defined by Act 19-2012. SOEP may publish a separate Request of Qualifications (RFQ) and/or Special Guidelines to qualify ESCOs and establish requirements for Shared Saving ESPCs.

SECTION 1.05 - DEFINITIONS

Allocation of Funds – ESPCs may be extended beyond the fiscal year in which they are awarded, subject to the allocation of funds for expenses incurred in subsequent fiscal years. The allocation of funds is guaranteed for the duration of the contract. The Office of Management and Budget (OMB) and/or the corresponding Government Unit, in those cases in which the Government Unit is not subject to OMB oversight, shall allocate funds for payment of public utilities of each Government Unit in accordance with the terms and conditions set forth in the ESPC.

Conservation Measures – Refers to any Energy Conservation Measures and Water Conservations Measures, as such terms are defined herein, implemented by a Government Unit in a Public Building with the purpose of achieving meaningful reductions in energy and water consumption in compliance with this Regulation.

Contract Sum – Refers to the sum of all materials, labor, auditing, design, engineering, project construction management fees, overhead, profit, contingency, tax, bonds, and subcontracted services related to an ESPC Project.

Contract Administrator – Refers to the Professional Engineer (PE), and Certified Measurement and Verification Professional (CMVP) designated by the Government Unit to oversee an ESPC.

Energy Savings Performance Contract (ESPC) – Refers to a contract between a Government Unit and a Qualified ESCO for the evaluation, recommendation and implementation of one or more Conservation Measures.

Energy Service Company (ESCO) – Refers to an entity with the experience and technical, management and financial capabilities required for the discovery, engineering, procurement, installation, financing, savings guarantee, maintenance and monitoring of energy and water saving measures that will result in energy conservation and efficiency for the Government Unit.

Energy Conservation Measure (ECM) – Refers to any improvement, repair or alteration, equipment, fixtures, training program or strategy of any other kind implemented or used in a building, facility or on any system that consumes energy in order obtain savings related to energy consumption by reducing operational costs or increasing operational efficiency during the useful life cycle. All measures must meet or exceed applicable state building codes.

ESCO's Professional Engineer – Refers to the Puerto Rico licensed professional engineer (PE) retained by the ESCO with the purpose of ensuring that all services provided pursuant to this Regulation complies with applicable laws and regulations. The Professional Engineer (PE) must also be certified as a Certified Measurement and Verification Professional (CMVP).

Financing – Act 19-2012 allows the Government Unit to finance the improvements via third party, direct from the ESCO, or other financing mechanism available, in coordination and with the financial advice of the Government Development Bank (GDB).

Government Unit – Any agency, instrumentality, office or department of the Executive Branch authorities or political subdivisions of the Government of Puerto Rico, or any other defined or identified by the Administration.

Investment Grade Audit (IGA) – Refers to the study by the Qualified ESCO selected for a particular ESPC Project which includes detailed descriptions of the improvements recommended for the project, the estimated costs of the improvements and the utility, operations and maintenance cost savings projected to result from the recommended improvements.

Measurement and Verification (M&V) – Refers to the report, submitted once every three months during the contract period by the ESCO and validated by SOEP and the Contract Administrator regarding the cost savings achieved as a result of the efficiency measures implemented as part of the ESPC. The M&V services provide the Government Unit with assurance that all measures implemented and equipment installed as part of the ESPC are performing as required.

Notice of Interest (NOI) – Refers to the notice sent by a Government Unit to all Qualified ESCOs prior to the issuance of an RFP, requesting Qualified ESCOs to confirm whether they are interested in participating in a certain RFP. The NOI has the purpose of ensuring that ESCOs electing to participate in an RFP are aware of the nature and technical requirements of the Project and possess the skills and knowledge required to provide an adequate response to the RFP.

Operations and Management (O&M) – ESCOs must provide adequate justification for O&M cost savings by providing a detailed description of how savings are generated and detail cost savings calculations.

Payment and Performance Bond – Refers to the guarantee provided by the ESCO in order to ensure the timely and adequate completion of all construction and installation services in accordance to the terms of the ESPC.

Professional Engineer – Refers to a person duly certified to provide engineering services in Puerto Rico as a professional engineer (PE).

Procurement Process – Refers to the competitive process set forth in this Regulation through which a Government Unit selects an ESCO for the provision of Conservation Measures through the execution of an ESPC.

Project Site(s) – Refers to the buildings and installations owned, operated or leased by a Government Unit for which an ESCO shall provide ESPC services.

Public Building – Refers to any structure, building or facility, including its electrical and/or mechanical equipment, and infrastructure, owned, operated or leased by a Government Unit.

Qualified ESCO Registry – Refers to the registry kept and maintained by SOEP identifying all ESCOs which have been qualified through a qualification process as set forth in this Regulation and which are eligible for providing ESPC services to Government Units.

Savings in public utility services costs – Refers to any reduction in the cost of public utility services for a prolonged period of time due to efficiency and conservation measures that have been implemented or by reason of services rendered by a Qualified ESCO.

Savings in operational and maintenance costs – Refers to measurable reductions in operational and maintenance costs which directly result from the implementation of Conservation Measures. These savings will be calculated in comparison with the operational and maintenance costs established as the baseline for calculation.

Savings Guarantee – Refers to the guarantee made by an ESCO that the savings resulting from the Conservation Measures implemented will meet or exceed the cost, including financing costs, associated with implemented such measures.

Surety Bond – Refers to the guarantee provided by the ESCO in order to ensure Savings Guarantees set forth in the ESPC.

State Office of Energy Policy (SOEP) – Refers to the government agency created by Act 57-2014 with the purpose of promoting energy conservation throughout Government Units and overseeing the implementation of energy efficiency measures through the use of ESPCs.

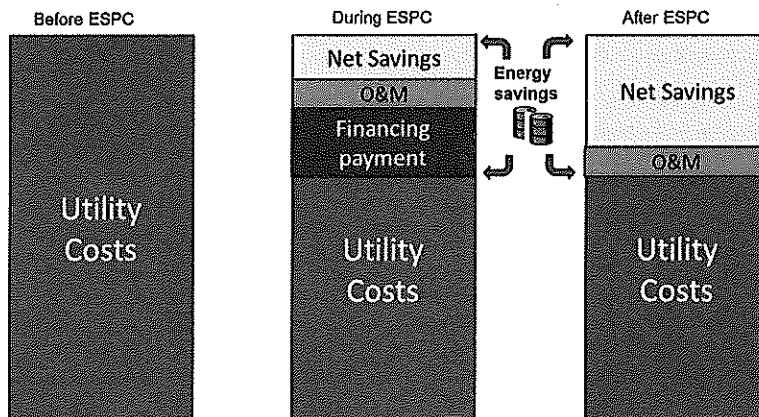
Term of the Contract – Refers to the term of the ESPC, which shall not exceed fifteen (15) years. The term allowed in the contract shall reflect the useful life of the conservation measure but shall never exceed fifteen (15) years.

Water Conservation Measures – Any improvement, modification, equipment and changes in maintenance practices or training programs designed to reduce water consumption or operating costs related to its conservation. Measures should match or exceed compliance with applicable state building codes.

CHAPTER TWO: ENERGY SAVINGS PERFORMANCE CONTRACTS OVERVIEW

SECTION 2.01 - OVERVIEW OF ENERGY SAVINGS PERFORMANCE CONTRACTS

Energy savings performance contracts (ESPC) are a methodology of financing an energy efficiency improvement project outside of a public entity's operating budget. It is a fiscally sound method to improve conditions in government facilities through reinvestments at no additional outlay for the government. ESPCs provide an efficient way to lower energy consumption while avoiding the need to incur in costs related to purchasing energy efficient equipment and renewable energy power sources. ESPCs serve as a tool for sustainability and asset modernization that establishes a guaranteed relationship that is based on mutual accountability. An ESPC constitutes a partnership between a Government Unit and an ESCO and is considered a time and cost-effective method for completing comprehensive energy upgrades.



With the execution of an ESPC, a Qualified ESCO conducts a review and audit of a Project Site with the purpose of, along with input from the Government Unit and SOEP, recommending and designing a plan for implementing Conservation Measures which shall reduce a Government Unit's overall utility consumption needs.

The costs of implementing such Conservation Measures are financed through the net savings in energy consumption achieved as a result of the Conservation Measures implemented by the ESCO. As such, ESPCs allow a Government Unit to invest in Conservation Measures without the need of allocating public funds for such purposes. After the expiration of the ESPC, the Government Unit will continue to benefit from the savings generated by the Conservation Methods through an overall reduction in costs associated to energy and water consumption.

SECTION 2.02 - ENERGY SERVICE COMPANIES (ESCOs)

An ESCO will develop and install energy and water-saving projects to improve energy and water efficiency and help reduce costs. An ESCO functions as a project developer for a wide range of tasks. ESCOs differ from other firms that offer energy efficiency improvements by taking on the savings performance risk through performance-based contracting and facilitating borrowing to pay for the project.

SECTION 2.03 - BASIC ESPC PROCESS

An ESPC allows a Government Unit to finance and install proven energy-efficient technologies and upgrade energy infrastructure at no up-front cost. The Government Unit, through a competitive process and with SOEP's assistance, selects an ESCO to complete an energy audit of the facilities and propose a project through which the financed debt service can be paid for from the utility savings. Once an ESPC is negotiated, the ESCO designs, installs and commissions Conservation Measures selected by the Government Unit from the suggested list of conservation measures prepared by the ESCO. The ESCO can be contracted to provide maintenance of the system, oversight, operations training or a combination of the aforementioned to ensure savings persist. Energy savings are measured and verified and the ESCO guarantees the savings.

SECTION 2.04 - ESPC ADVANTAGES

Among the many advantages of entering into an ESPC are:

GUARANTEED PERFORMANCE: ESCOs must provide a written guarantee of energy savings from the Conservation Measures implemented that will create cost avoidance larger than the costs incurred by the Government Unit. ESCOs install equipment that it guarantees will generate savings for the payback period of the loan.

PARTICIPATION: During contract negotiations with ESCOs, Government Units participate in design, specifications and equipment selection.

RESPONSIBILITY: ESCOs are obligated to pay in the event of an energy savings shortfall and must guarantee the energy savings. If actual savings are lower than guaranteed in any given year, the company reimburses the Government Unit for the shortfall. ESCO will have sixty (60) days to settle the shortfall.

MEASUREMENT & VERIFICATION: ESCOs shall provide a written report every three (3) months which shall be certified by the ESCO's Professional Engineer (PE) and Certified

Measurement and Verification Professional (CMVP) and which shall detail actual performance compared to the guaranteed performance. Said reports shall be reviewed by the Contract Administrator within thirty (30) days of receipt. The report is critical to ensure that savings exceed payments.

ACCOUNTABILITY: The ESCO serves as a single point of accountability.

FINANCING: Government Units are allowed to finance the improvements via a third party, directly from the ESCO or through other financing mechanism available, in coordination and with the financial advice of the Government Development Bank (GDB).

COST CERTAINTY: Project financing costs are paid from the utility cost savings, which may be guaranteed by the Surety Bond.

LOWER UTILITY COSTS: Lower energy consumption and peak electricity demand translate to lower utility bills.

PUERTO RICO ECONOMY: As the project is paid for through energy savings that would otherwise purchase foreign oil, public policy established through Act 19-2012 and Act 57-2014 is effectively implemented.

SECTION 2.05 - ESPC FINANCING

A financing mechanism must be identified early in the process to include borrowing capacity and terms available to support an ESPC Project. Some agencies may have limited capacity for funding available to support an ESPC Project while other agencies may have greater funding options. Identifying financing sources from the public and private sector will allow both the Government Unit and the ESCO to develop projects consistent with the Government Unit's business objectives and available funds. More favorable financing terms enhance the potential scope of work, the contract terms and can also reduce the overall cost of the project.

The ESPC and financing is structured so that the total savings are enough to cover for each financing payment period and all the contract sums due under the contract. Therefore, the project can be cash flow positive from the first day and the totality of the improvements is funded by the savings.

In many cases, ESCOs do not finance projects. However, ESCOs guarantee that the projected savings will meet or exceed the finance payment. A number of financing companies are knowledgeable of the ESPC approach and seek out opportunities to provide financing. An ESCO selected for a project can help bring in a financing partner.

CHAPTER THREE: ESPC PROCESS OVERVIEW

SECTION 3.01 - ASSISTANCE FOR GOVERNMENT UNITS

SOEP will offer direct performance contracting assistance during the planning process and selection of a Qualified ESCO. SOEP will also offer assistance with the other stages of the performance contracting process. SOEP will assist the Government Unit and provide performance contracting resources specific to each Government Unit's needs.

SECTION 3.02 - ASSISTANCE FOR NON-QUALIFYING ORGANIZATIONS

SOEP is an informational resource for all types of organizations that are interested in energy savings performance contracting. SOEP screens and qualifies ESCOs and offers a number of informational resources to assist Government Units throughout the performance contracting process.

SECTION 3.03 - PROJECT DEVELOPMENT OVERVIEW

Government Units seeking capital and operational improvements for their energy-consuming infrastructure systems in order to contain energy costs and reduce energy consumption must consider entering into an ESPC agreement. The ESCO will identify and evaluate energy and water-saving opportunities and then recommend and install a package of improvements that will be paid for through savings. The ESCO will guarantee that savings meet or exceed annual payments to cover all project costs over a maximum contract term of 15 years. If savings do not materialize the Government Unit can claim the difference from the ESCOs guarantee.

There are five (5) steps to successfully initiate and complete an ESPC Project:

1. Identifying a Project
2. Selecting an Energy Service Company (ESCO)
3. Contracting with the ESCO to Conduct an Investment Grade Audit (IGA)
4. Contracting with the ESCO to implement ESPC Project
5. Payments, O&M, and Measurement and Savings Verification.

CHAPTER FOUR: ESPC PROJECT DEVELOPMENT

SECTION 4.01 - UNDERSTANDING ESCO SERVICES

ESCOs offer a wide variety of services including auditing, construction management, project development, engineering design, project management, training for maintenance staff, financing assistance and long-term maintenance services. ESCOs address a wide range of energy, water and cost-saving measures, as well as opportunities to apply renewable energy technologies and system-wide approaches.

SECTION 4.02 – ESPC EVALUATION COMMITTEE

Each Government Unit shall assemble an Evaluation Committee which shall be responsible for assisting the Government Unit with the development of an ESPC Project, selection of an ESCO and implementation of an ESPC Contract. The Evaluation Committee shall be composed of those Government Unit's officers and employees appointed by the Government Unit's most senior officer. SOEP will provide required technical assistance to the Evaluation Committee. The Evaluation Committee shall be assigned to the Government Unit's Bid Board or similar administrative body.

The Evaluation Committee members, when possible, should possess knowledge and skills relevant to the ESPC process and its objectives. It is also recommended for the Evaluation Committee to include a member representing the Government Unit's senior management.

SECTION 4.03 – SELECTING PROJECT SITE(S)

The Government Unit, with assistance from SOEP, must determine if the Project Site has the potential for an ESPC Project with energy and water-saving opportunities of substantial scope which will attract an ESCO. There are a number of technical factors to consider when selecting a suitable Project Site for an ESPC Project. In general, the facility should have high annual energy and water use coupled with sufficient energy savings opportunities to generate the necessary cash flow to amortize all project cost over the Contract Term, fulfill the goal set forth in Act 19-2012 and Act 57-2014 and generate interest among ESCOs. While every situation is different, the typical factors that make a performance contract project both viable and successful include:

- Desire to improve energy efficiency through comprehensive solutions
- Aging buildings or equipment (lighting, controls, heating and cooling systems)
- Stable facility use and occupancy
- High annual utility costs
- Consistent energy use and occupancy
- Limited capital budget to fund energy improvements up front
- Too many demands on maintenance staff
- Recurring maintenance problems or high maintenance costs
- Comfort complaints

Some ESCOs are willing to implement projects for smaller facilities not necessarily satisfying all factors but they make those decisions on a case-by-case basis. In some cases, it makes economic sense to combine several facilities into a single project offering. Multiple building projects with excessive energy and water costs are usually more attractive to ESCOs and allows the Government Unit to finance and obtain greater improvements through a single procurement process.

SECTION 4.04 – SOEP'S ASSISTANCE

The Government Unit shall receive guidance and support from SOEP throughout the process. SOEP can help the Government Unit identify if an ESPC is feasible for the Project Site. This can include a general introductory discussion on ESPC with respect to a Government Unit's facilities, a review of the facility information and a potential site visit.

SECTION 4.05 – TECHNICAL ASSISTANCE AGREEMENT

All Government Units interested in procuring ESPCs are required to execute a Technical Assistance Agreement with SOEP. This Agreement will establish the terms and conditions that will govern SOEP's technical assistance services to the Government Unit throughout the entire ESPC process and the Government Unit's commitment to completing the ESPC process.

The Agreement shall also set forth the circumstances upon which SOEP shall be entitled to receive a reimbursement from the Government Unit for expenses incurred by the former in relation to the provision of technical assistance services to the latter when the latter elects to pull out of the ESPC process of its own initiative.

CHAPTER FIVE: ESCO SELECTION PROCESS

SECTION 5.01 – ESCO SELECTION OVERVIEW

The selected ESCO will be the Government Unit's partner for the term of the contract, so it is important to select an ESCO that shares the Government Unit's vision, understands its operations and is able to meet its needs. SOEP will assist the Government Unit's in the selection process.

SECTION 5.02 – ESCO QUALIFICATIONS

Act 19-2012 requires SOEP to establish and maintain a list of Qualified ESCOs capable of providing energy efficiency and conservation services to Government Units. To qualify, ESCOs must respond to a Request for Qualifications (RFQ) issued by SOEP. ESCOs are evaluated based on their qualifications and experience and eligible ESCOs are certified by SOEP and included in the Qualified ESCO Registry.¹

Qualified ESCOs are eligible to provide ESPC services to Government Units that choose to participate in the ESPC Program. Government Units cannot engage in ESPCs with ESCOs that have not been qualified by SOEP. Qualified ESCOs understand the program goals and will conform to applicable laws and regulations. The primary intent of the selection process is four-fold:

1. To increase the number of successful performance contracts in the Government of Puerto Rico as a means of implementing comprehensive energy-efficiency projects in existing buildings.
2. To provide Government Units the opportunity to procure services of qualified firms in a timely and cost-effective way.
3. To ensure minimum qualifications of ESCOs to implement successful ESPC Projects.
4. To offer qualified firms the opportunity of engaging into an ESPC agreement.

¹ SOEP issued a second RFQ in May 2015 to qualify ESCOs for as-needed ESPC services including preliminary auditing and assessment services for buildings and facilities for a three (3) year term.

An ESCO's qualified status will be effective for a three (3) year term subject to annual update of their files with SOEP. Qualified ESCOs will update their files with SOEP within the first thirty (30) days of each government fiscal year. Failure to do so will automatically eliminate the ESCO from the Registry.

SECTION 5.03 – ESCO SELECTION PROCESS

All Qualified ESCOs will be provided equal access and fair opportunity to compete for ESPCs in an open and transparent process. A step-by-step description of the ESCO selection process used to select an ESCO from the Qualified ESCO Registry is included in Section 5.04. This process demonstrates a minimal procurement requirement on a review of each ESCO's qualifications and allows a selection based on a Notice of Interest (NOI) prior to a Request for Proposal (RFP).

SECTION 5.04 – PROCUREMENT PROCESS

All Government Units are required to use SOEP's Request for Proposal (RFP) document model. . The Government Unit will have to modify the RFP document model to conform it to its own procurement process rules and particular needs.

1. Define Scope of Project

Government Units shall provide a general description of the facilities, including technical details and any other relevant information necessary (a technical facility profile) to enable the ESCO to assess and propose opportunities for a successful project. Rather than providing a pre-determining scope of work specifying the Conservation Measures that the ESCO must undertake, the Government Unit shall rely on the ESCO's technical expertise and creativity to help identify and assess energy and water saving opportunities that are most cost-effective and suitable for the ESPC Project.

The Project may incorporate all of the Government Unit's buildings and facilities into a single project, or may divide the project in "phases" so as to minimize project development time and move to reducing energy costs more quickly. In all cases, the preferred financing stream (total bond issuance, agency capital dollars, etc.) must be identified early in the process to avoid developing a project scope in excess of available financing.

At a minimum, a brief description of the premises and all major energy-using equipment should be provided. The Government Unit shall also describe the facility's energy use, equipment, operating schedules, maintenance problems and planned equipment replacements or renovation plans. Also, the Government Unit must include the utility consumption and bill history for the past three (3) years, if available.

2. Request for Proposal (RFP)

After the Government Unit enters into the Technical Assistance Agreement (TAA) with SOEP, it will be ready to initiate a Request for Proposals (RFP). The purpose of an RFP is to determine an

ESCO's suitability according to the proposed project characteristics. Respondents will be encouraged to focus on their expertise for meeting the business objectives of the project.

All Qualified ESCOS shall be eligible to participate in the RFP. Alternatively, the Government Unit may decide to send out a Notice of Interest (NOI) to all Qualified ESCOs requesting them to confirm their interest in a particular project. In this case, the RFP documents would be provided only to those ESCOs which responded to the NOI.

The RFP shall, at minimum, contain the following information:

- General project scope;
- The business objectives for the Government Unit;
- Complete Facility Profile, that identifies the facilities to be considered, their current energy use, size, and unique conditions;
- Contractual terms and conditions that will apply to the project;
- A description of the required RFP Response format and content;
- Instructions for submission and a project schedule to identify specific dates for pre-proposal meetings, site visits, evaluation, and selection;
- The evaluation criteria that will be used as the basis for selection;
- Government Unit's approval process;
- Planned method for financing and paying for the project;
- Required corporate and technical project specific qualifications to be submitted by ESCOs in their response;
- Requirement that an appropriately qualified Puerto Rico registered Professional Engineer be in charge of the project for the ESCO.

3. RFP Responses Evaluation

The Government Unit shall specify the evaluation criteria to be used for selecting an ESCO. In general terms, the evaluation criteria are grouped into six major categories:

- a) Prior Experience.
- b) Approach to Project Management.
- c) Ability to meet the business objectives and timing.
- d) Technical Capabilities & Expertise.
- e) Financial Strength or ability to secure financing.
- f) Proposed mark-ups and costs.

Based on the evaluation criteria, RFP responses will be evaluated by the ESPC Evaluation Committee established by the Government Unit, as set forth in Section 4.02, along with the assistance of SOEP. The Evaluation Committee shall issue a report and recommendation to the Government Unit's Bid Board (or similar administrative body). The Bid Board or similar administrative body shall be the entity responsible for making the final determination and selection. All notices regarding a final determination shall be made pursuant to the Bid Rules adopted by the Government Units and applicable laws.

A procurement specialist may oversee the process but not participate in the evaluation.

4. Preliminary Assessment (PA)

The Government Unit will select the three (3) highest rated ESCOs to perform a Preliminary Assessment of the Project. A PA evaluates the Project Site with the purpose of determining the likelihood that an effective ESPC Project may be implemented which will result in meaningful Conservation Measures. The PA and subsequent proposal will be used by both the ESCO and the Government Unit to ensure that the project meets the objectives and cost effectiveness criteria and addresses the facility's needs.

A proposal for an Investment Grade Audit (IGA) will be developed based upon the PA, which identifies potential cost-effective energy and water conservation measures.

The PA shall provide sufficient information, including the following key elements:

- a) A narrative summary of proposed project, including the business objectives.
- b) Description of ECMs.
- c) ESCO and Government resources and schedule requirements to complete an IGA.
- d) Estimates of proposed energy and cost savings.
- e) A general M&V approach
- f) Risk, Responsibility and Performance Matrix.

Project Site inspections may be undertaken in order to allow the ESCOs to gather all necessary information to conduct their PAs.

Scope of PA:

1. Preliminary Assessment of Needs and Opportunities

- a. Meet to discuss interests, plans, problems related to facilities and their operation.
- b. Collect data and background information on buildings, equipment and facilities operation.
- c. Perform a preliminary walk-through of facilities and interview staff and occupants to identify potential measures.
- d. Meet to explain preliminary findings and establish agreement on measures to analyze.

2. Preliminary Analysis of Measures

- a. Establish base year consumption and reconcile with end-use consumption estimates.
- b. Conduct a preliminary analysis of potential measures.
- c. Meet to present preliminary findings and establish agreement on measures to further analyze.

- d. Establish costs, schedule and government resources required to complete an IGA Report.

5. PA Evaluation

Upon submission of the written PA by the ESCOs, the Government Unit shall proceed to review the PAs and conduct interviews with each ESCO. The PA Evaluation shall be made by the ESPC Evaluation Committee, with the assistance from SOEP. The PA shall be evaluated based on the criteria set forth by the Government Unit. The evaluation criteria to be used by the Government Unit shall be provided to the ESCOs along with any other relevant information required for conducting the PA.

The Evaluation Committee shall issue a report and recommendation to the Government Unit's Bid Board (or similar administrative body). The Bid Board or similar administrative body shall be the entity responsible for making the final determination and selection. All notices issued by the Bid Board regarding a final determination shall be made pursuant to the Bid Rules adopted by the Government Units and applicable laws.

The Government Unit will select the highest rated ESCO as determined by the score received during the initial RFP evaluation and the score received as a result of the PA Evaluation. The Government Unit may, based on the information made available during the PA Evaluation, make revisions to the score awarded to an ESPC for the RFP evaluation.

Any deficiencies and/or desired changes found in the PA must be addressed by the selected ESCO in the Investment Grade Audit (IGA) and in the final proposal.

The Government Unit may, for any reason, elect not to continue the ESPC process without being liable for reimbursing any costs and expenses incurred by the ESCOs in relation to the process. All documents and information provided by the ESCOs shall become property of the Government Unit.

SECTION 5.05 – RECONSIDERATION AND JUDICIAL REVIEW

Any party adversely affected by a final determination made by a Government Unit in relation to the aforementioned procurement procedure may follow the review procedure set forth in the corresponding Government Unit's applicable regulation and/or the RFP. If, for whatever reason, the Government Unit has not set forth a procedure for the review and reconsideration of a final determination, then the party may follow the procedure set forth in Act No. 170 of August 12, 1988, as amended, known as the Puerto Rico Uniform Administrative Procedure Act, 3 L.P.R.A. §§ 2101 et seq.

CHAPTER SIX: INVESTMENT GRADE AUDIT (IGA)

SECTION 6.01 – SOEP'S MODEL IGA CONTRACT

All Government Units are required to use SOEP's Model IGA contract.

SECTION 6.02 – INVESTMENT GRADE AUDIT OVERVIEW

The selected ESCO will conduct an IGA to identify and evaluate energy, water, and related cost-saving opportunities. This will provide the Government Unit with critical information to later negotiate the ESPC.

The Contract for the IGA (Technical Energy Audit & Project Proposal) is the first of two contracts that will be procured with the selected ESCO. The ESCO will complete an investment grade technical energy audit that will include an analysis of each proposed project with projected energy and cost savings and itemized project cost.

The ESCO will also propose terms for the ESPC and present a proposal that includes recommended projects, financing term and projected annual cash-flow analysis.

The results of the audit will form the basis for a subsequent ESPC.

SECTION 6.03 - SCOPE OF WORK

The Government Unit should consider taking full advantage of the ESCO's technical expertise and SOEP's input to help identify and assess the opportunities that are most cost-effective or most valuable for the Government Unit's facilities.

a. Steps:

This will be an interactive approach, working with the Government Unit, ESCO's and SOEP following these steps:

- 1) Assessment of Needs and Opportunities
 - a) Meet to discuss interests, plans, problems, etc. related to facilities and operation of facilities.
 - b) Collect data and background information on buildings, equipment and facilities operation.
 - c) Perform a walk-through of facilities and interview staff and occupants to identify potential measures.
 - d) Meet to explain findings and establish agreement on measures to analyze.
- 2) Analysis of Measures
 - a) Establish base year consumption and reconcile with end-use consumption estimates.
 - b) Conduct a analysis of potential measures.

- c) Meet to present findings and establish agreement on measures to further analyze. Establish costs, schedule and government resources required to complete an Investment Grade Audit Report

3) Further Analysis and Audit Report.

- a. Further analyze measures.
- b. Develop a preliminary IGA Report.
- c. Meet with the Government Unit to discuss results.
- d. Prepare final IGA Report.

2. Energy Savings Performance Contract Proposal.

- a. Develop the ESPC proposal.
- b. Meet to examine results and negotiate final terms.

b. General Conditions

1. **Energy Savings Performance Contract Term.** The ESPC Term shall have a term no greater than fifteen (15) years and no greater than the cost-weighted average lifetime of the equipment.
2. **Annual Guaranteed Energy and Cost Savings.** A performance guarantee is required for the entire financing term. The guarantee is based on energy savings attributable to all conservation measures and must create cost avoidance equal or greater to all annual project costs each year during the finance period. Annual project costs include debt service, ESCO's fees, SOEP's consulting fees, maintenance services, monitoring services and other services. The Government Unit and the ESCO shall agree on the forecast unit energy costs to be used for the guarantee.
3. **SOEP's Technical Assistance Fee.** The OMB and/or the corresponding Government Unit, in those cases in which the Government Unit is not subject to OMB oversight, shall reserve a portion of the annually guaranteed savings for the Government Unit to pay for SOEP's technical assistance. The fee shall be established in the Technical Assistance Agreement and shall be established by SOEP based on the input and assistance provided to the Government Unit during the ESPC process. The fee shall never be less than 0.5% nor shall it exceed 2.50% of the annual cost savings guaranteed by the ESPC.
4. **Excess Savings.** Annual cost savings beyond the guaranteed minimum savings will be retained by the Government Unit and will not be allocated to shortfalls in other years.
5. **Annual Savings Guarantee.** The annual savings guarantee for all measures must be estimated for each year during the contract period.

6. **Allowable cost and savings factors approved for consideration.** The Government Unit will provide ESCOs with sufficient guidance to develop savings estimates.

a. Payment sources that can be incorporated:

1. Energy and water cost savings.
2. Material/commodity savings, including scheduled replacement of parts (only for years that these cost savings are applicable).
3. Outside labor cost savings, including maintenance contracts (excludes internal labor costs incurred by the Government Unit).
4. In-house labor costs.
5. Deferred maintenance cost.
6. Outside incentive funds (utility incentives, grants, etc.).
7. Any savings related to maintenance and operation of the facilities will be limited to those that can be thoroughly documented.

b. Additional factors related to establishing savings that cover all costs:

1. Escalation rates that apply to each payment source. These are rates to be used in cash flow projections for project development purposes. Federal government guidelines may be applied for utility escalation rates to ensure reasonableness.
2. Interest rates (municipal tax-exempt rates for public institutions).
3. The Government Unit's cash outlay (Institution's sole discretion).

c. Cost and Pricing for IGA Development. The rates will be used in the IGA and subsequent ESPC.

c. Data Collection

Collect data and background information from the Government Unit concerning facility operation and energy use for the most recent three (3) years from the effective date of the Contract as follows, and if available:

1. Building square footage.
2. Construction data of buildings and major additions including building envelope.
3. Utility company invoices.
4. Occupancy and usage information.
5. Description of all energy-consuming or energy-saving equipment used on the premises, as available.
6. Description of energy management procedures utilized on the premises.
7. Description of any energy-related improvements made or currently being implemented.
8. Description of any changes in the structure of the facility or energy-using or water-using equipment.
9. Description of future plans regarding building modifications.
10. Drawings, as available (may include mechanical, plumbing, electrical, building automation and temperature controls, structural, architectural, modifications and remodels).

11. Original construction submittals and factory data (specifications, pump curves, etc.), as available.
12. Operating engineer logs, maintenance work orders, etc., as available.
13. Records of maintenance expenditures on energy-using equipment, including service contracts.
14. Prior energy audits or studies, if any.
15. Operating requirements for specialty use facility, for example, required pressurization, humidity, temperature, fresh air injection/outside air turnover, levels of any other contaminants et cet.

The Government Unit will agree to work diligently to furnish the ESCO, upon request, accurate and complete data and information as available. Where information is not available from the Government Unit, the ESCO will make a diligent effort to collect such information through the facility inspection, staff interviews and utility companies. The Government Unit will make appropriately qualified staff available to witness existing conditions and certify accuracy of data collected. It is important for the ESCO to provide an estimate of the level of resources required for this task in the IGA proposal.

ESCOs will agree to work diligently to assess validity of information provided and to confirm or correct the information as needed.

d. Identify potential measures

1. Interview the facility manager, maintenance staff, subcontractors and occupants of each building regarding:
 - a. Facility operation, including energy management procedures.
 - b. Equipment maintenance problems.
 - c. Comfort problems and requirements.
 - d. Equipment reliability.
 - e. Projected equipment needs.
 - f. Occupancy and use schedules for the facility and specific equipment.
 - g. Facility improvements – past, planned and desired.
2. Survey major energy consuming equipment, including lighting (indoor and outdoor), heating and heat distribution systems, cooling systems and related equipment, automatic temperature control systems and equipment, air distribution systems and equipment, outdoor ventilation systems and equipment; exhaust systems and equipment; hot water systems, electric motors, transmission and drive systems, special systems (kitchen/dining equipment, etc.), renewable energy systems, other energy using systems and water consuming systems (restroom fixtures, water fountains, irrigation systems, etc.).
3. Perform "late-night" surveys outside of normal business hours or on weekends to confirm building system and occupancy schedules, if deemed necessary.

4. Develop a preliminary list of potential energy and water Conservation Measures. Consider the following for each system:
 - a. Comfort and maintenance problems.
 - b. Energy use, loads, proper sizing, efficiencies and hours of operation.
 - c. Current operating condition.
 - d. Remaining useful life
 - e. Feasibility of system replacement.
 - f. Hazardous materials and other environmental concerns
 - g. Institution's future plans for building renovation
 - h. Facility operation and maintenance procedures that could be affected
 - i. Capability to monitor energy performance and verify savings.

The Government Unit will allow ESCOs reasonable access to facility staff to ensure understanding of existing systems and opportunities.

ESCOs will agree to work diligently to assess validity of information provided and to confirm or correct the information as needed.

e. Establish base year consumption and reconcile with end use consumption estimates.

1. Establish base year consumption by examining utility consumption patterns and bills for the past three (3) years for electricity, gas, steam, water and others, where applicable. Present base year consumption in terms of energy units (kWh, kW, ccf, Therms, gallons, or other units used in bills), in terms of dollars and in terms of dollars per square foot. Describe the process used to determine the base year (averaging, selecting most representative contiguous twelve (12) months, etc.). Consult with facility personnel to account for any anomalous schedule or operating conditions on billings that could skew the base year representation. ESCOs will account for periods of time when equipment was broken or malfunctioning in calculating the base year.
2. Estimate loading, usage and/or hours of operation for all major end uses of total facility consumption including, but not limited to: lighting, heating, cooling, motors (fans and pumps), plug loads and other major energy and water using equipment. Where loading or usage are highly uncertain (including variable loads such as cooling), ESCOs will use its best judgment, spot measurements or short-term monitoring. ESCOs should not assume that equipment run hours equal the operating hours of the building(s) or facility staff estimates.
3. Reconcile annual end-use estimated consumption with the annual base year consumption. This reconciliation will place reasonable "real-world" limits on potential savings.
4. Propose adjustments to the baseline for energy and water saving measures that will be implemented in the future.

f. Develop a preliminary analysis of potential energy and water conservation measures.

This list shall be compiled and submitted to the Government Unit within the term agreed in the IGA Contract..

1. List all potential opportunities, whether cost-effective or not. Consider technologies in a comprehensive approach including, but not limited to: lighting systems, heating/ventilating/air conditioning equipment and distribution systems, controls systems, building envelope, motors, kitchen equipment, pools, renewable energy systems, other special equipment, irrigation systems and water saving devices.
2. Identify measures which appear likely to be cost effective and therefore warrant detailed analysis
3. For each measure, prepare a preliminary estimate of energy or water cost savings including description of analysis methodology, supporting calculations and assumptions used to estimate savings.

g. Present preliminary findings prior to thorough analysis.

Describe how the projected project economics meet the Government Unit's terms for completing the IGA and Proposal Contract. Discuss assessment of energy use, savings potential, project opportunities and potential for developing an ESPC. Develop a list of recommended measures for further analysis. The Government Unit shall have the option to reject calculations of savings, potential savings allowed or project recommendations.

h. Analyze savings and costs for each energy and water saving measure.

1. Following the methodology of ASHRAE or other appropriate nationally-recognized authority following the engineering principle(s) identified for each retrofit option.
2. Utilize assumptions, projections and baselines which best represent the true value of future energy or operational savings. Include accurate marginal costs for each unit of savings at the time the audit is performed, documentation of material and labor cost savings, adjustments to the baseline to reflect current conditions at the facility, calculations which account for the interactive effects of the recommended measures.
3. Use best judgment regarding the employment of instrumentation and recording, so as to achieve an accurate and faithful characterization of energy use.
4. Use markups and fees in all cost estimates.
5. Develop a preliminary measurement and verification plan for each measure.
6. Follow additional guidelines for analysis and reports.

7. Include cost to provide services and complete application for Energy Star Label, LEED-EB certification for Existing Buildings, or other certifications. Also include cost for EPA's Tools for Schools or other such program related to improved air quality.

i. Investment Grade Audit Report.

The report provides an engineering and economic basis for negotiating a potential ESPC between the Government Unit and the ESCO. The report shall be completed within the term agreed in the IGA Contract. The report shall include:

1. Overview

- a. Contact information.
- b. Summary table of recommended energy and water saving measures, with itemization for each measure of total design and construction cost, annual maintenance costs, the first year cost avoidance (in dollars and energy units), simple payback and equipment service life.
- c. Summary of annual energy and water use by fuel type and costs of existing or base year condition.
- d. Calculation of cost savings expected if all recommended measures are implemented, and total percentage savings of total facility energy cost.
- e. Description of the existing facility, mechanical and electrical systems.
- f. Summary description of measures, including estimated costs and savings for each as detailed above.
- g. Discussion of measures considered but not investigated in detail.
- h. Conclusions and recommendations.

2. Base year energy use

- a. Description and itemization of current billing rates, including schedules and riders.
- b. Summary of all utility bills for all fuel types and water.
- c. Identification and definition of base year consumption and description of how established.
- d. Reconciliation of estimated end use consumption (i.e. lighting, cooling, heating, fans, plug loads, etc.) with base year (include discussion of any unusual findings).

3. Full description of each energy and water saving measure including:

- a. Written description
 1. Existing conditions.
 2. Description of equipment to be installed and how it will function.
 3. Include discussion of facility operations and maintenance procedures that will be affected by installation/implementation.
 4. Present the plan for installing or implementing the recommendation.

5. Demonstration of applicability of the measure for the environment in Puerto Rico.
- b. Savings calculations
1. Base year energy use and cost.
 2. Post-retrofit energy use and cost.
 3. Savings estimates including analysis methodology, supporting calculations and assumptions used.
 4. Annual savings estimates. The cost savings for all energy saving measures must be estimated for each year during the contract period. Savings must be able to be achieved each year (cannot report average annual savings over the term of the contract).
 5. Savings estimates must be limited to savings allowed by the Government Unit.
 6. Percent cost-avoidance projected.
 7. Description and calculations for any proposed rate changes.
 8. Explanation of how savings interactions between retrofit options are accounted for in calculations.
 9. Operation and maintenance savings, including detailed calculations and description. Ensure that maintenance savings are only applied in the applicable years and only during the lifetime of the particular equipment.
 10. If computer simulation is used, short description and key input data shall be provided. If requested by the Government Unit, access will be provided to the program and all assumptions and inputs used, and/or printouts shall be provided of all input files and important output files and included in the Investment Grade Audit with documentation that explains how the final savings figures are derived from the simulation program output printouts.
 11. If manual calculations are employed, formulas, assumptions and key data shall be stated.
 12. Conclusions, observations, caveats.
- c. Cost estimate – detailed scope of the construction work needed, suitable for cost estimating. Include all anticipated costs associated with installation and implementation. Provide specifications for major mechanical components as well as detailed lighting and water fixture counts.
1. Engineering/design costs.
 2. ESCO/vendor estimates for labor, materials, and equipment; include special provisions, overtime, etc., as needed to accomplish the work with minimum disruption to the operations of the facilities.
 3. Permit costs and applicable taxes.
 4. Construction management fees.
 5. Environmental costs or benefits (disposal, avoided emissions, handling of hazardous materials, etc.).

6. All markups and fees stated in the IGA Contract shall be used in the cost estimates, unless otherwise documented and justified due to change in scope or size of project or other unforeseen circumstances.
7. Conclusions, observations, caveats.

d. Other considerations

1. Estimate of average useful service life of equipment.
2. Preliminary commissioning plan.
3. Preliminary measurement and verification plan, following the International Performance Measurement and Verification Protocol (IPMVP), explaining how savings from each measure is to be measured and verified.
4. Discussion of impacts that facility would incur after contract ends. Consider operation and maintenance impacts, staffing impacts, budget impacts, etc., and identify who is responsible for maintenance.
5. Compatibility with existing systems. Include the name of the existing controls system, if new controls systems will have to be compatible with an existing brand of controls. Also note if a sole-source vendor is established for controls systems.
6. Complete appendices that document the data used to prepare the analyses. Describe how data were collected.
7. Certification by a Puerto Rico registered Professional Engineer (PE) and a Certified Measurement and Verification Professional (CMVP) that commonly accepted principles have been applied to the measurements, design, and calculations presented in the IGA and that the estimates appear reasonable.
8. An estimate of the Government Unit resources, and schedule, required to support implementation, operations and maintenance of the measures.

j. Review Recommendations

Review the recommendations, savings calculations and impact of the measures on the operations of the facility. Describe how the projected savings meet the Institution's terms for completing the IGA and Performance Contract Proposal. Discuss the willingness and capability of the Government to make capital contributions to improve the economics of the overall project.

k. Revise Audit as directed by the Government Unit

Review the IGA report under the guidance of the Contract Administrator and/or Evaluation Committee. The Contract Administrator and/or Evaluation Committee will generate recommendations addressed to the ESCO before proceeding with the ESPC Proposal.

l. Prepare an Energy Savings Performance Contract Proposal (Term Sheet).

In anticipation of the ESCO and the Government Unit entering into an ESPC to design, install and monitor the energy and water saving measures proposed in the IGA Report, the ESCO shall prepare a proposal for terms to be incorporated in an ESPC to include:

1. Project Price. The total amount the Government Unit will pay for the ESCO's services. Costs may include but are not limited to: engineering, designing, packaging, procuring, installing (from IGA Report results); performance/payment bond costs; construction management fees; commissioning costs; maintenance fees; monitoring fees; training fees; legal services; overhead and profit; other markups.
2. Include a List of Services that will be provided as related to each cost.
3. Expected term of the ESPC.
4. Description of how the project will be financed including available interest rates and financing terms, based on interest rates likely available to the Government Unit at this time and based on a 30-day, 60-day and 90-day lock option.
5. Explanation of how the savings will be calculated and adjusted due to weather (such as heating and cooling degree days), occupancy or other factors. Monitoring and verification methods must be consistent with the latest version of the International Performance Monitoring and Verification Protocol.
6. Analysis of annual cash flow for the Government during the contract term.

m. Portfolio Manager rating and energy performance target score estimate.

For each eligible building, the ESCO shall provide a pre-retrofit Energy Performance Rating using EPA ENERGY STAR's Portfolio Manager, the weather normalized energy intensity in Btu/SF, and an estimated post-retrofit Energy Performance Rating. If the building type is not eligible for rating in Portfolio Manager, then the normalized source Energy Use Intensity will suffice. The ESCO shall provide a completed Cash Flow Opportunity Calculator (CFO Calculator) for the project, with variables inserted that represent the most likely options available to the customer.

This will enable the ESCO and the Government Unit to have an agreed-upon format for discussing project financing options and the potential costs of project delays. The CFO Calculator will be provided in both hard copy and electronic format, so that the Government Unit, in coordination with GDB can run its own analyses on financing options in the agreed format. The ESCO will submit a completed Cash Flow Opportunity spreadsheet using the Cash Flow Opportunity Calculator (CFO Calculator) for the total project which shall include all facilities to be improved.

SECTION 6.04 - NOTICE OF ACCEPTANCE OF INVESTMENT GRADE AUDIT REPORT

If applicable, the Government Unit will provide the ESCO with a Notice accepting the IGA Report and ESPC Proposal after discussions with SOEP.

SECTION 6.05 - PRELIMINARY MEASUREMENT AND VERIFICATION (M&V) PLAN

An M&V plan will be developed as a deliverable in the IGA in coordination with SOEP. The ESCO shall complete a "Risk, Responsibility and Performance Matrix" detailing the ESCO's suggested approach and allocation of responsibility for key items related to M&V, including: (1) Financial Matters (Interest rates, Construction costs, Project Savings Verification Methodology, Energy Related Cost Savings, Delays, Major changes in facility use); (2) Operational Matters (Operating hours, Equipment loads, Weather, User participation); (3) Performance Matters (Equipment performance, Operations, Preventive Maintenance, Equipment Repair and Replacement).

The M&V Plan will be further refined as an essential component of the ESPC.

SECTION 6.06 - PAYMENT FOR INVESTMENT GRADE AUDIT (IGA)

The audit cost will be proposed in the ESCOs response to the RFP. Once the ESPC is executed, the cost of the IGA will be rolled into the overall project cost and paid for from the proceeds of the financing. The IGA is a stand-alone contract. The Government Unit will be required to have funds obligated to pay for the cost of the audit in the event the Government Unit elects not to proceed with an ESPC and the IGA demonstrates a project that can meet the business objectives.

Conversely, the Government Unit shall not be required to pay for the IGA if (i) the proposal does not contain a package of energy and water conservation measures which will provide the Government Unit with cash savings sufficient to fund the payments of all costs and fees associated with the ESPC or (ii) the proposal is not acceptable to the Government Unit.

CHAPTER SEVEN: CONTRACT WITH ESCO TO IMPLEMENT ESPC PROJECT

SECTION 7.01-- SOEP'S MODEL ENERGY SAVINGS PERFORMANCE CONTRACT

The ESPC is for design, construction, guaranteed savings and maintenance of the measures proposed in the Final Proposal. The ESPC will be a road map for implementing and tracking the project over the term of the agreement. It must clearly define roles and responsibilities and explicitly state how savings are determined and how the savings performance guarantee will function. All Government Units are required to use SOEP's Model contract. The Government Unit may modify the model document to conform it to its own contracting rules.

SECTION 7.02 – EQUIPMENT TO BE INSTALLED BY ESCO

The ESPC will include a Schedule that will specify all of the newly installed equipment including manufacturer, quantity, location and warranties. This schedule will also describe any modifications that may have been made to existing equipment, if applicable.

SECTION 7.03 – DESCRIPTION OF PROJECT SITE(S); PRE-EXISTING EQUIPMENT INVENTORY

The ESPC will include a Schedule that will contain basic information about the condition of the Project Site at the time of contract execution. Such information will include facility square footage, building construction, use, occupancy, hours of operation and any other conditions or special conditions that may exist.

The inventory is important to include for the purpose of identifying what equipment was in place and how it was configured at the time of contract execution. This schedule is important to the accurate establishment of baseline, savings measurement and may need to be referred to in the later years of the contract.

SECTION 7.04 – ENERGY SAVINGS GUARANTEE; SURETY BOND

The ESPC will include a Schedule that will fully describe all provisions and conditions of the energy saving guarantee provided by the ESCO. The guarantee will be defined in units of energy to be saved for the duration of the contract term. Reference to the annual reconciliation of achieved vs. guaranteed savings will be included.

As a condition for granting an ESPC and in order to ensure compliance with savings guarantees set forth in the ESPC, the ESCO shall provide a Surety Bond in favor of the Government Unit and SOEP. The Surety Bond's face value shall be equivalent to the total estimated savings, in US dollars, achieved by the Government Unit as a result of the Conservation Measures implemented through the ESPC for each year of the Contract Term. The Surety Bond shall guarantee the estimated cost savings for each year of the Contract Term. The bond shall be renewed on a yearly basis no later than fifteen days before the beginning of each contract year. The Surety Bond may be provided through one of the following mechanisms:

- a. Payment to the Government Unit of the bond amount for the specific year by certified check, cash or electronic transfer. In such cases, the bond amount shall be deposited in an escrow account and any withdrawal or disbursement of funds shall be subject to a bond agreement to be executed between the Government Unit and the ESCO.
- b. Bond certificate issued by an insurer duly authorized to do insurance business in the Commonwealth of Puerto Rico by the Puerto Rico Insurance Commissioner with, at least, a financial strength rating of A- and financial size category of V by AM Best.

SECTION 7.05 – COMPENSATION TO ESCO FOR ANNUAL SERVICES

The ESPC will include a Schedule that will contain the amount and frequency of any payments that may be made to the ESCO for maintenance or other services negotiated as part of the ESPC. It will contain information about how the compensation is calculated (e.g. percentage of savings above the guarantee, flat fee etc.) and if an annual inflation index is to be used to escalate fees over the duration of the contract term. An hourly fee structure will also likely be included to cover the ESCO's costs for any services provided beyond the scope agreed to at the time of contract execution.

SECTION 7.06 – BASELINE ENERGY CONSUMPTION

The baseline energy consumption is the "yardstick" by which all savings achieved by the installed project will be measured. The ESPC will include a Schedule that will detail the methodology and all supporting documentation used to calculate the baseline, including unit consumption and current utility rates for each fuel type. This schedule will also include baseline documentation regarding other cost savings such as material savings (e.g. bulbs, ballasts, filters, chemicals etc.), and cost savings associated with the elimination of outside maintenance contracts. Baseline documentation must include evidence of Government Unit witnessing of the baseline conditions. Government Unit names, signatures, time and date on audit sheets, consumption records, photographs are a recommended minimum.

SECTION 7.07 – SAVINGS MEASUREMENT AND VERIFICATION PLAN; METHODOLOGY TO ADJUST BASELINE

The ESPC will include a Schedule that will contain a description of the utility savings measurements, monitoring and calculation procedures used to verify and compute the savings performance of the installed equipment. This calculation will include a method to compare the level of consumption without the project (referred to as the "Baseline") with the level of consumption during a specific time period (monthly, quarterly, etc.). All methods of measuring savings including engineered calculations, metering, equipment run times, pre- and post-installation measurements, etc. will be explicitly described for all equipment installed. Periodically (at least on an annual basis), the baseline will be adjusted to account for the prevailing conditions (e.g., weather, billing days, occupancy, etc.) during the measurement period. All methodologies used to account for any adjustments to the baseline will be clearly defined in this schedule.

SECTION 7.08 – CONSTRUCTION AND INSTALLATION; PAYMENT AND PERFORMANCE BOND

The ESPC will include a Construction and Installation Schedule that will contain the timetables and milestones for project construction and installation. If required by the Government Unit, documentation of required insurance and subcontractor lists may be included in this schedule or broken out into a separate schedule. The construction/installation phase of the project will be treated in compliance with individual Government Unit requirements and the appropriate governing statutes. This may require evidence to demonstrate appropriate levels of competition in the ESCO's procurement for materials and subcontractors for the project. Since construction is just one component of the overall project, a separate construction contract may be desirable and in some cases necessary. The construction contract would then be referred to in the body of the contract and attached as an exhibit, appendix or other type of attachment. Another approach would be to consolidate the appropriate construction language for inclusion in the body of the final contract. This will need to be decided as appropriate on a case-by-case basis.

As a condition for granting an ESPC and in order to ensure completion of the Construction and Installation Schedule set forth in the ESPC, the ESCO shall provide a Payment and Performance Bond in favor of the Government Unit and SOEP. The Payment and Performance Bond amount shall equal the total construction and installation costs incurred by the ESCO pursuant to the ESPC.

The Payment and Performance Bond must be issued by an insurer duly authorized to do business in the Commonwealth of Puerto Rico by the Puerto Rico Insurance Commissioner with, at least, a financial strength rating of A- and financial size category of V by AM Best.

SECTION 7.09 – SYSTEMS START-UP AND COMMISSIONING OF EQUIPMENT; OPERATING PARAMETERS OF INSTALLED EQUIPMENT

The ESPC will include a Schedule that will specify the performance testing procedures that will be used for start-up and for the commissioning of the installed equipment and total system. The schedule will also provide for the Government Unit to be notified of, and present, during all commissioning procedures. This schedule will contain a provision for the documentation of the Government Unit's attendance at the various tests, and their approval that the tests followed the specified procedures, and met or exceeded the expected results.

The operating parameters will contain any specified parameters for the operation of the installed equipment such as temperature setbacks, equipment run times, load controlling specifications and other conditions for the operation of the equipment.

SECTION 7.10 – STANDARDS OF COMFORT

The ESPC will include a Schedule that will describe the standards of comfort to be maintained for heating, cooling, lighting levels, hot water temperatures, humidity levels and/or any special conditions for occupied and unoccupied areas of the facilities. The standards of comfort shall be determined and approved by the Government Unit.

SECTION 7.11 – ESCO'S MAINTENANCE RESPONSIBILITIES

The ESPC may include a Schedule that will provide a complete description of the ESCO's specific O&M responsibilities along with the time intervals for their performance of the stated O&M activities.

SECTION 7.12 – GOVERNMENT UNIT'S MAINTENANCE RESPONSIBILITIES

The ESPC may include a Schedule that will describe the O&M responsibilities that may be assigned to Government Unit's staff as agreed to by both parties. This Schedule will contain a description of routine O&M currently being performed on existing energy and water consuming equipment in the facilities.

SECTION 7.13 – FACILITY MAINTENANCE CHECKLIST

The ESPC will include a checklist as a method by which the ESCO may record and track the Government Unit's compliance with any of the maintenance procedures being performed by facility personnel. The checklist typically specifies simple list of tasks and the corresponding schedule for the performance of the prescribed procedures. Facility staff will complete the checklist and forward it to the ESCO on a monthly basis.

SECTION 7.14 – ESCO'S TRAINING RESPONSIBILITIES

The ESPC will include a Schedule that will describe the ESCO's training program or sessions for Government Unit personnel, including the duration and frequency of the specified training. Any provisions for on-going training, commitments to train newly hired facility personnel and training with respect to possible future equipment or software upgrades will also be described. Any fees associated with the client's request for training beyond what the ESCO is contractually bound to provide will also be specified.

SECTION 7.15 – PAYMENT SCHEDULE

The ESPC will include a detailed Payment Schedule.

SECTION 7.16 – ALTERNATIVE DISPUTE RESOLUTION

The ESPC will include a Schedule that will describe methods for resolving disputes or claims relating to construction or the contract, wherein the parties agree to exercise good faith efforts (e.g., mediation, dispute resolution board) and to only use litigation as a last resort. This schedule is included as an alternative to costly binding arbitration and litigation. If no dispute resolution is reached, parties agree to submit to the adjudicative proceedings available at SOEP.

SECTION 7.17 – ANNUAL REPORTING REQUIREMENTS

The ESPC will include a Schedule that will summarize the project and contain the energy, water and operational cost savings (in dollars and MMBTUs) for each year. Annually, the ESCO is required to submit a summary of performance for the year and reconciliation against the performance guarantee. In addition, annual emission reductions and ENERGY STAR rating (if applicable) are also located in this schedule. This summary information is useful for tracking and reporting on annual project performance.

SECTION 7.18 – PRE-EXISTING SERVICE CONTRACTS

The ESPC may include a Schedule detailing information regarding the scope and cost of pre-existing equipment service contracts, including how and when the existing equipment is being serviced. If the ESCO is credited with any maintenance savings or is taking over any existing service contracts, the scopes and costs of such contracts will be useful in tracking the performance of the ESCO in providing the required services and documenting any attributable cost savings.

SECTION 7.19 – ENERGY SAVINGS PROJECTIONS

The ESPC will include a Schedule containing the projected energy savings in units for each year of the contract. Oftentimes these projections are broken down on a measure by measure basis although some measures may be aggregated into general categories such as lighting or HVAC. If there are several buildings involved in the project, this schedule will contain projections for each facility even though they may all be covered under a single guarantee.

SECTION 7.20 – FACILITY CHANGES CHECKLIST

A "Facility Changes Checklist" or other method may be provided by the ESCO for the Government Unit to notify the ESCO of any changes in the facility that could have an impact on energy consumption (e.g. occupancy, new equipment acquisition and hours of use). This checklist is generally submitted on a monthly or quarterly basis.

SECTION 7.21 – CURRENT AND KNOWN CAPITAL PROJECTS AT FACILITY

The ESPC will include a Schedule containing any current or planned capital projects to be implemented in the facility. This information could prove to be very useful in the out-years of the contract in order to avoid potential disputes over long term energy savings performance, overall facility energy consumption and costs.

SECTION 7.22 – ESCO's PROFESSIONAL ENGINEER

The ESPC will include a requirement that a qualified Puerto Rico registered Professional Engineer be retained by the ESCO to ensure the project is fit for the purpose intended. The ESCO's Professional Engineer shall also be certified as a Certified Measurement and Verification Professional.

SECTION 7.23 – GOVERNMENT UNIT'S PROFESSIONAL ENGINEER

The Government Unit and/or SOEP shall be required to retain a qualified Puerto Rico registered Professional Engineer, and Certified Measurement and Verification Professional, who shall act as Contract Administrator.

CHAPTER EIGHT: MEASUREMENT AND SAVINGS VERIFICATION

SECTION 8.01 - ECM-SPECIFIC M&V PLAN AND SAVINGS CALCULATION METHODS

Follow-up measurement and verification enables the Government Unit to ensure that it is getting full value from its ESPC. The success of the M&V effort depends on the level of detail provided in the contract.

At least once every three (3) months per contract year, the ESCO shall submit a report of cost savings (corroborate the results of the measures of conservation and energy efficiency). This report must be prepared and certified by the ESCOs Professional Engineer and reviewed and approved by the Government Unit's Contract Administrator. The ESCO shall:

1. Summarize the scope of work, location, and how cost savings are generated. Describe source of all savings including energy, water, O&M, and other (if applicable).
2. Work in conjunction with SOEP to specify the M&V guideline, and the option used from the International Performance Measurement and Verification Protocol (IPMVP).

3. Provide an overview of savings calculation methods for ECM. Provide a general description of analysis methods used for savings calculations.

SECTION 8.02 - PROPOSED ENERGY AND WATER SAVINGS CALCULATIONS AND METHODOLOGY

ESCO must provide a detailed description of measurement analysis methodology used. Including, but not limited to:

1. Detail of any data analysis that was conducted prior to applying savings calculations.
2. Detail of all assumptions and sources of data, including all stipulated values used in calculations.
3. Include equations and technical details of all calculations made.
4. Detail any savings or baseline adjustments that may be required.
5. Detail energy and water rates used to calculate cost savings. Provide post-acceptance performance period energy and water rate adjustment factors.
6. Detail proposed savings for this energy conservation measure for post-acceptance performance period.
7. Methods for handling bad, or missing, data.

SECTION 8.03 - OPERATIONS AND MAINTENANCE (O&M) COST SAVINGS

ESCO must provide adequate justification for O&M cost savings, including, but not limited to:

1. Detailed description of how savings are generated and detail cost savings calculations.
2. Provide post-acceptance performance period other cost savings adjustment factors.
3. Provide justification for cost savings.
4. Provide post-acceptance performance period other cost savings adjustment factors.

SECTION 8.04 - POST-INSTALLATION M&V ACTIVITIES

ESCO must describe the intent of post-installation verification activities, including what will be verified, and must, in coordination with SOEP:

1. Describe variables affecting post-installation energy or water use. Include variables such as weather, operating hours, set point changes, etc. Describe how each variable will be

quantified, i.e., measurements, monitoring, assumptions, manufacturer data, maintenance logs, engineering resources, etc.

2. Define key system performance factors characterizing the post-installation conditions such as lighting intensities, temperature set points, etc.
3. Define requirements for the Government Unit to witness the measurements obtained, if different than the project data requirements.
4. Provide details of post-installation data to be collected, including: Parameters to be monitored; Details of equipment to be monitored (location, type, model, quantity, etc.); Sampling plan, including details of usage groups and sample sizes; Duration, frequency, interval, and seasonal or other requirements of measurements; Monitoring equipment to be used; Installation requirements for monitoring equipment; Calibration requirements/procedures; Expected accuracy of measurements/monitoring equipment; Quality control procedures to be used.
5. Detail data analysis to be performed.

SECTION 8.05 - POST-ACCEPTANCE PERFORMANCE PERIOD VERIFICATION ACTIVITIES

In order to be able to responsibly monitor and verify the Energy and Water Conservation Measures proposed in the IGA Report, SOEP and the Government Unit shall, in coordination with the ESCO, that must:

1. Describe variables affecting post-acceptance performance period energy or water use. Include variables such as weather, operating hours, set point changes, etc. Describe how each variable will be quantified, i.e., measurements, monitoring, assumptions, manufacturer data, maintenance logs, engineering resources, etc.
2. Define key system performance factors characterizing the post-acceptance performance period conditions. Include factors such as comfort conditions, lighting intensities, temperature set points, etc.
3. Describe the intent of post-acceptance performance period verification activities.
4. Provide detailed schedule of post-acceptance performance period verification activities and inspections.
5. Define requirements for the Government Unit witnessing of measurements if different than whole project data requirements.
6. Provide details of post-acceptance performance period data to be collected, including, but not limited to: Parameters to be monitored; Details of equipment to be monitored (location, type, model, quantity, etc.); Sampling plan, including details of usage groups and sample

sizes, Duration, frequency, interval, and seasonal or other requirements of measurements; Monitoring equipment to be used; Installation requirements for monitoring equipment; Calibration requirements/procedures; Expected accuracy of measurements/monitoring equipment; Quality control procedures to be used; Form of data to be collected (.xls, .cvs, etc.), among others.

7. Detail data analysis to be performed.
8. Define O&M and repair reporting requirements. Detail verification activities and reporting responsibilities of the Government and contractor on operations and maintenance items. Define reporting schedule.

CHAPTER NINE - ADDITIONAL PROVISIONS

SECTION 9.01 - APPLICABILITY

The requirements of this Regulation are applicable to all Government Units, SOEP and all ESCOs that have been qualified by SOEP. All ESCOs who have contracted with Government Units prior to the adoption of this Regulation will be exempt from the provisions of this Regulation.

SECTION 9.02 - OVERLAPPING OR CONTRADICTORY PROVISIONS

In the event that a requirement established by any provision of this Regulation is either more restrictive than a requirement established by any other part of this Regulation or by any other law, regulation, standard or limit established by any duly constituted government authority having jurisdiction, the more restrictive requirement shall prevail.

SECTION 9.03 - SEVERABILITY

Should any section, subsection, clause, paragraph or any part of this Regulation be declared unconstitutional or void by a court with jurisdiction over them, said decision shall not affect or invalidate the remaining sections, subsection, clauses, paragraphs or parts.

SECTION 9.04 - DISCREPANCY BETWEEN ENGLISH AND SPANISH VERSIONS

In the event of a discrepancy between the English and the Spanish versions of this Regulation, the English version shall prevail.

SECTION 9.05 - EFFECTIVENESS

This Regulation shall enter into effect thirty (30) days after it has been filed at the Puerto Rico Department of State. This Regulation supersedes Regulation No. 8247 of August 28th, 2012.

Approved in San Juan, Puerto Rico on December 24, 2015.



José G. Maeso González
Executive Director