

Woodbridge Board of Education
Woodbridge Board of Education Special
Meeting
Monday, November 5, 2012 7:00 PM

Woodbridge Board of Education Special
Meeting January 4, 2010 7:00 PM Library
Media Center Beecher Road School

Agenda

- I. **Call to Order**
- II. **Beecher Road School Update**
- III. **BRS Building Project Update**
- IV. **Adjourn**



**Connecticut
Light & Power**

The Northeast Utilities System



The United Illuminating Company



The Northeast Utilities System

Best Practices Guide For Energy Savings Performance Contracting (ESPC)

In the Municipal, University, School, and Hospital Markets

Final

September 30, 2011

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Introduction

This document has been prepared in response to an order by the Connecticut Department of Public Utilities Control (DPUC), now doing business as the Public Utility Regulatory Authority (PURA) as a subsidiary of the Department of Energy and Environmental Protection <http://www.ct.gov/dpuc/site/default.asp>. The intent is to develop Best Practices Recommendations for energy savings performance contracting (ESPC) in the Municipal, University, School, and Hospital (MUSH) market in the State. The inclusion of State buildings was initially considered, but because of the State’s centralized management structure, it is recommended that the State use this document as a base framework and modify it to fit its own specific procedural and technical requirements. This effort has been facilitated by the two main Electrical Distribution Companies (EDCs), Connecticut Light & Power (CL&P) and the United Illuminating Company (UIC), who have organized an ESPC Best Practices Working Group to provide expert support for the project. The EDCs in turn hired Celtic Energy, Inc., a nationally known consultant with considerable expertise in the ESPC market, to assist in managing the technical content and deliverables of the Working Group. This report is a result of the efforts of that Working Group.

The EDC Project Managers in collaboration with many existing players in the energy marketplace invited over a dozen ‘stakeholders’ to be part of the working group process. They included representatives from State government, several officials from cities and towns who had implemented ESPC projects, as well as volunteer members of municipal energy task forces, non-governmental organizations like Clean Water Action and Environment Northeast, the Clean Energy Finance Center, several ESCOs, and monitors from the Energy Efficiency Board. A list of the contributors is in the Appendix.

At the initial workshop meeting the objectives of the Working Group were explained. The Working Group was divided into sub-groups that generally followed the ESPC process as shown below.

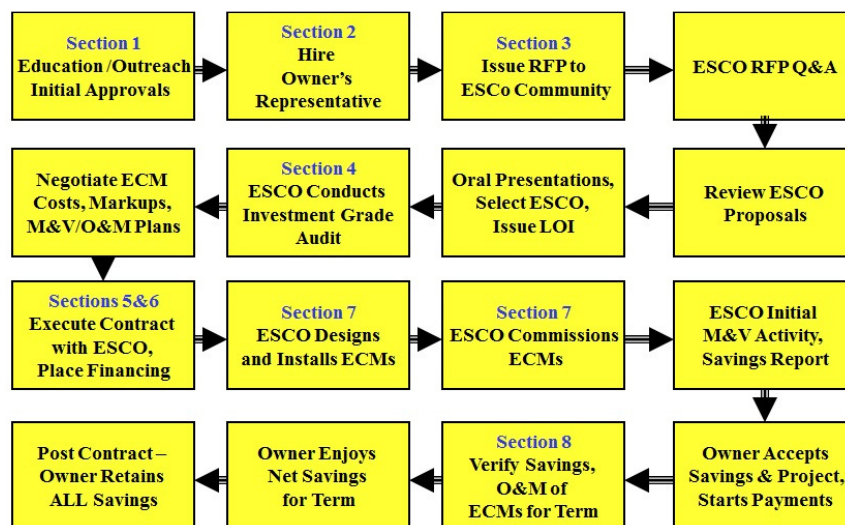


Figure 1 – Typical ESPC Process Flow Diagram ©Celtic Energy-2011

The process elements were consolidated into several categories. The Working Group formed several subgroups, allowing each subgroup to focus their efforts in a smaller, more manageable approach. Subgroups consisted of:

- A. Education/Communication/Outreach/Local or State agency approval to proceed;
- B. Hire Owner’s Representative/Consultant/Licensed PE, etc.
- C. ESCO RFP and Selection Process
- D. Investment Grade Audit Process
- E. Financing & Funding/ Measurement and Verification
- F. Energy Services Agreement Contract development
- G. Design, Construction and Commissioning
- H. Measurement and Verification of savings initially and over time

Weekly conference calls were held to monitor progress, and two follow up working meetings were held to discuss the various topics and gain consensus on the deliverables. The following document is a summary of the subgroup efforts, recommendations and selected references.

Setting the stage

The CT Clean Energy Fund’s Clean Energy Communities program supports holistic approaches to energy that reduce energy waste through efficiency and meet remaining energy needs through the use of renewable sources. Energy savings performance contracts can serve as an important tool to integrate clean energy and energy efficiency and thereby provide both short and long-term cost savings to a town.

FAQs

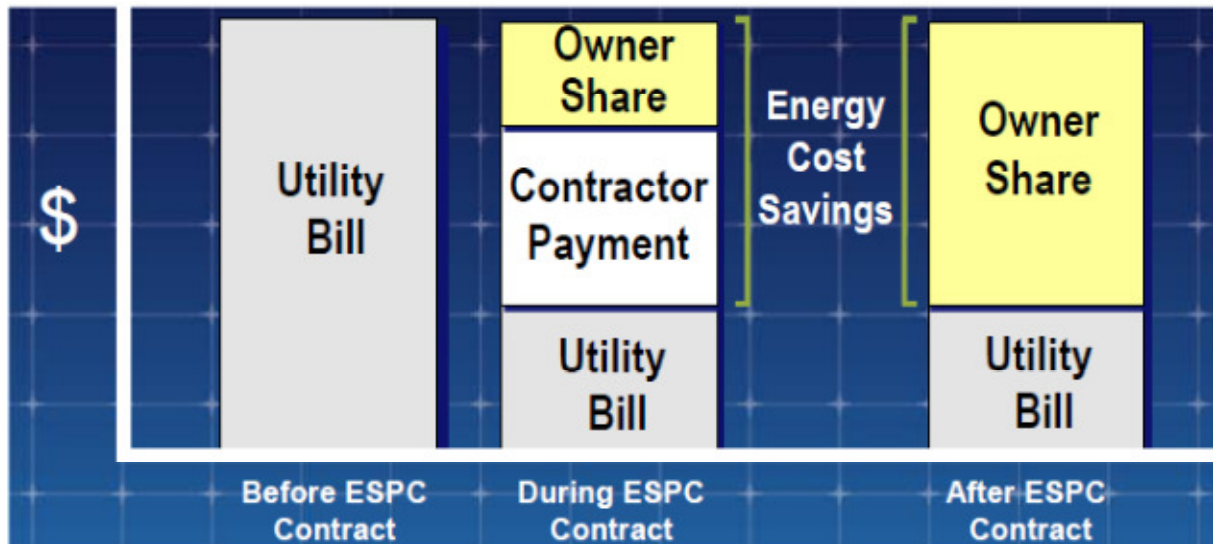
Q: What is an energy savings performance contract (ESPC)?

A: Energy savings performance contracting is an established tool for providing comprehensive energy (and water) upgrades to clients that do not have the energy project management experience or internal capital to carry out such projects themselves. Under a performance contract, energy-saving retrofits are funded out

Interesting Facts about ESPC

- \$40B in projects since 1990
- \$50B savings – guaranteed and verified
- 330,000 person-years of direct employment
- \$25 billion of infrastructure improvements
- 420 million tons of CO2 savings at no additional cost

of energy savings produced over the term of the contract. These costs would have been part of the yearly operations budget to purchase electricity, heating fuels, and water. Through a performance contract, they are redirected into the purchase and installation of equipment which saves energy. As developer of the Energy Star cash flow calculator, Neil Zobler (CT Municipal Climate Summit 2010) stated, “You can either pay the utility or invest in the facility.” The money will be spent either way. The difference is that with a performance contract, once the contract expires, the improved equipment and future energy savings are kept by the client.



How Does It Work?

Figure 2 Illustration of costs: Department of Business, Economic Development, & Tourism, HI

Hundreds of performance contracts have been implemented in Federal, State and Local Government buildings, educational and health care institutions, etc. since the 1980s.

ESPC according to the Energy Services Coalition (ESC) Website–

<http://www.energyservicescoalition.org/espc/tools/practice08/whatis.htm>

Q: Are there different kinds of performance contracts?

A: While there are a number of different ways to structure a performance contract, the model most commonly used is the "guaranteed savings" contract. In a guaranteed savings contract, all of the costs of the project are repaid annually out of the energy savings as they accrue. The contract length is usually chosen such that all of the project costs are paid out by the end of the contract period.

Q: How does ESPC work?? (simplified version, See Figure 1 above)

A:

- Community/organization educates itself on the ESPC process
- Hire Owner’s Rep
- develop concept & RFP for ESCO services
- select ESCO partner

- ESCO performs audits, identifies savings opportunities
- Develop & finalize ESCO contract
- Implement project
- ESCO arranges financing, guarantees savings, net positive cash flow for term of contract
- ESCO pays any shortfalls

Q: How long is the typical contract?

A: Performance contracts typically run from 10 to 20 years, dependent upon the complexity of the project, the amount of savings to be achieved, and the types of measures to be implemented. Oftentimes contracts can be extended as business and facility owners look to do additional energy efficiency upgrades.

Q: What are the benefits of performance contracting?

A: Energy savings performance contracts are fully customizable, giving Owners the freedom to retrofit buildings according to their own specific goals and needs. By working with experienced energy service companies (known as ESCOs) to determine potential savings and cost-benefit analyses, performance contracting allows clients to set the parameters for effective energy savings projects and have expert help fill in the specifics.

These are typically comprehensive projects. This means that the quick payback of retrofits such as lighting can be used to offset longer-term energy savings retrofits (such as boilers, chillers, and windows). Rather than waiting for old and inefficient equipment to fail (and costing more to run in the meantime), performance contracting allows for facility improvements to be budgeted out of future utilities savings. Bringing in an ESCO to run your energy efficiency retrofit project means reducing the Owner's burden of direct project management, akin to hiring a general contractor to oversee specialist firms working on a construction project. There is still a need for the Owners to allocate staff to work directly and oversee the ESCO. Many municipalities hire specialized third parties, known as ESPC Owner's Representatives to serve as their agent in overseeing the ESCO on a day-to-day basis. The ESCO also provides expertise based on its experience in the field and a network of vendor relationships from similar projects elsewhere. This can make the whole process run smoother, from energy auditing to equipment procurement to installation, all the way through verifying energy savings. Most importantly, the savings are guaranteed by the ESCO through the contract. If the contract language is crafted properly, this can virtually eliminate the financial risk of equipment failing to perform as promised.

ESPC Benefits

Streamlined Best Value Approach

Interest of Owner and ESCO are aligned over the long term

Guaranteed, Measured Savings

Fixed Price, No Change Orders

Facility Wide, Integrated Approach- ESCO considers all systems

O&M staff becomes invested in process

High quality design, construction, Cx

In addition, working closely with your local electric and gas utility companies during the development of an ESPC can result in significant incentives. In fact, several programs sponsored by the Connecticut Energy Efficiency Fund <http://ctsavesenergy.org/> provide bonus payments for comprehensive retrofit projects.

Q: Is performance contracting the right tool for your Town/Institution?

A: Generally, performance contracting is ideal for buildings that have not had recent energy overhauls, (including upgrades of quick payback measures like lighting in the past two years), are not otherwise scheduled for major remodeling in the near future, are uncomfortable, have few resources dedicated for improvements, and use a lot of energy. Performance contracts typically start at a minimum of \$500,000-\$1,000,000 in construction costs, but different numbers are used in different places. This threshold can be met by aggregating buildings together into a larger project. Other factors which may make performance contracting more attractive are whether or not there is a need to improve ventilation and indoor air quality, if the town's own energy management team has limited expertise or is understaffed, and the presence of obsolete equipment needing replacement.

The comprehensive nature of performance contracts means that they need to incorporate improvements with both long and short-term paybacks to be attractive to both the building owner and the ESCO. Installing only less expensive, high-return retrofits before a contract begins eliminates measures that are critical in balancing the cost of other important items that have longer returns. This balance is needed to ensure net dollar savings from the start of the contract and a reasonable contract length. Therefore, if considering an ESPC, do not go ahead with these types of retrofits beforehand. It is important to be cognizant of the fact that rushing into smaller projects will dilute the overall benefits of the performance contract. There may be enticing incentives and financing from entities like the CT Energy Efficiency Fund for installing high-return lighting and controls upgrades, however, even greater incentives may be available by implementing more comprehensive projects through an ESPC process.

For Owners with the means to self-finance energy projects through debt, the political will to make long-term (multi-year) energy investments, the will to reinvest energy savings into additional upgrades, and experienced energy professionals on staff, performance contracting may be a less attractive option.

With this combination of capital, leadership, and know-how, the primary added benefit from performance contracting is that energy savings are guaranteed. If the Owner is willing to accept the risk and responsibility to make sure equipment is well-chosen and properly installed and operated, which is inordinately difficult to do under typical public procurement rules, they can execute their own projects and retain all energy savings, rather than sharing savings with an ESCO during the contract term.

The bottom line when it comes to considering performance contracting is that Owners will be spending the money regardless. You can decide whether to keep paying for energy or investing that same money in your facilities and obtaining savings in the long run. To evaluate the potential financial benefits of performance contracting, first enter your building data into the free EnergyStar Portfolio Manager benchmarking tool to rate your buildings' level of efficiency has already been done, and then use financial evaluation tools from the Department of Energy including their cash flow opportunity

calculator to start for estimating the potential benefits of performance contracting.

Go to

http://www.energystar.gov/index.cfm?c=tools_resources.bus_energy_management_tools_resources

Q: What do you hope to gain?

A: The first step in the performance contracting process is to reach internal consensus in your town regarding defining goals and a scope for the intended project. Meeting informally with energy service companies (ESCOs) is one way to assess the possible applications for energy retrofits specific to your municipality.

Q: What are the goals of Performance Contracting?

A: Performance contracting is used to achieve a number of different goals depending on your circumstance. Chiefly, it offers an affordable mechanism for funding renovations out of resources *already budgeted* for energy usage. This means operating under existing operational budgets and not competing with capital funding needed for other projects.

Performance contracting can also be used to use efficiency savings to finance the incorporation of renewable energy (particularly solar power), sustainable materials, general repairs, code compliance and sustainable operations in municipal buildings. If considering solar panels, for example, and your first assess your building's roof age, strength, orientation and available unshaded space, and then consider including solar in the scope of services to be provided.

Q: What is the typical size and duration of a Performance Contracting project?

A: Performance contracts span a wide range of costs and contract durations, but the contract duration can never be longer than the life of the installed equipment. The U.S. Department of Energy has stated that performance contracts may not be viable for projects under \$500,000.

Most Owners can expect an ESCO to develop a project worth two to five times the amount of their annual utility expense. So, if your MUSH facility spends \$2 million per year on all electric, oil, gas, water, and sewer, you can expect a project in the \$4-\$10 million range.

In order for an ESCO to be able to develop an ESPC project of a minimum size, there must be at least 100,000-200,000 square feet of conditioned space available for evaluation.

In Connecticut:

- Naugatuck spent \$12.6 million for improvements to borough and school buildings.
- Windham undertook an ESPC project worth \$5.2 million on its public K-12 school buildings from 2007-2009.
- Regional School District #19 completed an energy performance contract for only \$246,000.

The financial scope of the project is determined by the number and combined cost of renovations coming from a wide variety of energy savings categories. These improvements differ in expense, energy savings, and payback period. Different financing strategies and combining renovations with both short

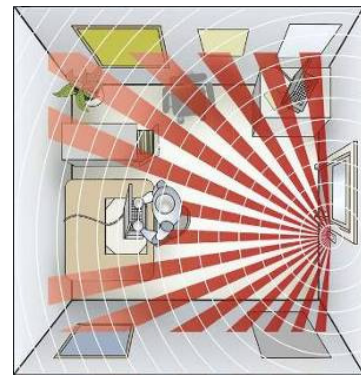
and long term paybacks determines the length of the ESPC.

It is also important during this initial stage of the process to begin considering financing options with internal (or external) financial staff.

Q: What are some typical energy conservation measures?

A: This is a selected list, many projects use other technologies as well

- Lighting upgrades
- Lighting controls
- HVAC
- Controls (energy management systems)
- Motors & VFDs
- Building Envelop Measures
- Water Conservation
- Cogeneration
- Heat recovery
- Demand Response
- Street & Traffic Lighting



Q: What if my project is too small for a performance contract?

A: As the Owner, you have many options in the event that your energy efficiency project is deemed to be too small for a performance contract. An Owners Representative can provide you with the expertise you need to make retrofits that will improve one or more aspects of your facility's operation. On the other hand, consider aggregating a number of smaller efficiency projects, perhaps with nearby Towns and other MUSH facilities so that you can capitalize on the benefits of taking an integrated approach to energy efficiency.

There are also resources available at the following sites: [CEEF](#), [DEEP](#), [CEFIA](#), and [Institute for Sustainable Energy](#)

Q: Where can I find Case Studies on successful projects?

A: There are several places case studies can be found.

[Windham Public Schools](#) in Windham, CT

[U.S. Department of Energy Website](#)- Success stories from [Nevada](#), Washington, [Pennsylvania](#), Utah, Colorado, Massachusetts, and Hawaii

Energy Services Coalition (ESC) Website - [Case Study Database](#)

Q: Where can I find additional legal information?

A: There are several places more legal information can be found.

[State of CT Public Act 11-80](#) – An Act Concerning the Establishment of the Department of Energy and Environmental Protection and Planning for Connecticut’s Energy Future.

[Oak Ridge National Laboratory Website](#) – Relevant Connecticut Statutes

Q: What are some other States doing with Performance Contracting?

A: The Energy Services Coalition manages a survey of what is going on in the ESPC industry by State at: <http://www.energyservicescoalition.org/>

A few States have their own sites, including the following:

Recharge Colorado

http://rechargecolorado.com/index.php/commercial_and_public/public_buildings/performance_contracting/how_performance_contracting_works

Mississippi Development Authority

<http://www.mississippi.org/energy/financial-tools/energy-performance-contracting-rfps.html>

Acronyms and Abbreviations

AEE = Association of Energy Engineers
AIA= American Institute of Architects
ASHRAE= American Society of Heating Refrigeration and Air Conditioning Engineers
CEM = A person who has an AEE Certified Energy Managers certification
Cx = Commissioning
ECM = Energy Conservation Measure
EDC = Electric Distribution Company
EEB = Energy Efficiency Board
EMS = Energy Management System (aka BMS)
ESCO = Energy Service Company
ESPC = Energy Saving Performance Contracting
EUI = Energy Utilization Index
EVO = Efficiency Valuation Organization
FEMP = Federal Energy Management Program
FPT = Functional Performance Test
HVAC = Heating Ventilation and Air Conditioning
IGA = Investment Grade Audit
IPMVP = International Performance Measurement and Verification Protocol
ISO = Independent System Operator
kW = kilowatts
kWh = kilowatt-hours
M&V = Measurement and Verification
OAT = Owner's Acceptance Test
O&M = Operations and Maintenance
Owners/Customers = Municipalities, institutions, commercial and industrial entities, and others who may choose to utilize an ESPC project
Owner's/Customer's Representative = a technically qualified independent 3rd Party consultant overseeing development & implementation of an ESPC on behalf of the Owner
PE = A person who has a Professional Engineering license
PFT = Pre-functional Test
QA = Quality Assurance
RFP = Request for Proposal
RFQ= Request for Qualifications

Section 1 – Education and Outreach

1.1 Introduction



According to the [US Department of Energy](#), “Energy Savings Performance

Contracting (ESPC) is a method for developing and implementing a comprehensive project, which may include energy efficiency, renewable energy, distributed generation, cogeneration or combined heat and power, and/or water efficiency measures.” An ESPC Project is monitored by a third-party consultant Owner’s Representative and delivered by an Energy Service Company (ESCO). The ESCO will arrange to finance the project, upgrade the equipment, and then guarantee that the subsequent energy savings will be sufficient to repay the project capital costs. The Owner’s Representative can develop an ESCO RFP, and then assist in the selection of ESCO. They can also monitor the development of the Investment Grade Audit by the selected ESCO, ensuring the measurement and verification the guaranteed energy savings, commissioning, training, and contract language are transparent, robust, and in the best interest of the Owner; serving as an independent, objective resource for the organization involved.

Education and outreach are essential to ensure the success of ESPC as a critical tool for the State of Connecticut to meet its energy goals. Two main challenges exist with respect to education and outreach around ESPC in Connecticut -- the process to effectively conduct outreach to key stakeholders and the general public, and the educational content itself. ESPCs are complex tools, and there are many misconceptions and misunderstandings about them, including in particular the legal authority of Towns to enter into such contracts. Connecticut’s legislation regarding performance contracting can be found at the [Oak Ridge National Laboratory](#) and the [State of Connecticut](#) websites. There is a considerable need for information from a trusted, impartial source to explain and provide support to municipalities that are considering entering into such a contract.

FAQs

Q: If we are thinking of entering into an ESPC contract, why is it important to educate ourselves and our constituents?

A: An ESPC contract is not a familiar project delivery mechanism concept to most people. There are a number of stories about this concept not working well for owners. A number of early ESPC contracts were implemented badly and some did not include guaranteed savings contracts. More recently, the process of ESPC project development, contracting and energy guarantees has been refined with many success stories and case studies available to document these benefits. The investment of resources and time to educate the decision-makers and others whose support is necessary to move the ESPC project ahead is well worth it and will contribute to a greater probability of success. Often times there are concerns regarding the cost of an ESPC project. It is important to highlight the benefits that will be

gained by redirecting excess utility cost energy dollars currently spent to pay for the energy inefficiency of the facilities to help pay for upgrades to equipment and systems and controls that will help preserve the value of the organization's assets.

Q: Is it necessary to form an ESPC Working Group to get our project started?

A: Forming a working group offers many benefits to municipal and corporate communities and entities who are interested in using an ESPC to update their facilities and achieve greater energy efficiency. A working group can identify key members of the community who support will be necessary to get the project approved. Many organizations find themselves in a position where staffing has been reduced to the minimum levels to operate and it may be unreasonable to think that a single person or persons within an organization would have the free time and expertise to pull together an ESPC in all its complexity. By having representatives of every stakeholder department, division or unit will allow this process to evolve with the specific interests and concerns of those units accounted for and discussed along the way. An ESPC works best if it is a collaborative process from the beginning for an organization.

Q: If an ESPC is such a complex process, would be necessary to develop the project quietly without notice so as not to confuse others?

A: Once a working group has been identified to pursue development of an ESPC project, it is important that there be continuous communication to the larger organization about its progress and accomplishments. In this way, the larger community will be kept informed as project development proceeds through the 16 steps shown in the Figure 1 flow diagram. Good communication will foster education and understanding that will contribute to the potential success of the process. Greater “ownership” within the organization of the overall project may result.

1.2 Building a team and successful outreach: overview

The experience from the members of this committee is that introducing ESPC to municipalities, universities, schools, and hospitals requires attention and care in order to be successful. In particular, it is not only important to communicate clear and useful information to stakeholders, but also to reach out early to other Town and community leaders who may have an interest in the process, anticipating and addressing their concerns before they arise.

ESPC provides many benefits to these communities, but it should not be taken for granted that those benefits are obvious or understood. The first step in introducing ESPC to municipalities, universities, schools and hospitals should be to identify key town/university officials, administrators, energy task force members or community leaders -- local "champions" -- who can take leadership on the process in their Town and push the process forward and to ensure that they understand the process and can communicate its benefits. Local champions should have a strong drive to see the project through, but don't necessarily need to be the people in positions of power to approve the project. Champions will work in the next step to gain the support and commitment of these officials.

Once a local champion or champions have been established, the next step for this team is to build internal consensus within their target community, be it a town, university, school or hospital. This step requires strategic thinking to identify potential allies with your target community, and to reach out to them and gain their support. Examples of useful allies include town officials, local selectmen or women, university administrators, members of the board of education, prominent community leaders and leaders of faith communities. These allies should be approached in way that encourages them to "take ownership" of the project, and that ensures that they understand the benefits of performance contracting and can speak about it to their colleagues and other community members. This is often a one-on-one process of identifying and networking with other individual allies who will support the project.

The next step, which is often overlooked in the process of introducing ESPC to municipalities/universities/hospitals/schools, is to build *public* consensus around the project through outreach to town stakeholders, and to anticipate any questions, objections or individuals that may slow down or halt the process. This is most often where ESPC projects are stopped, often unnecessarily. If a local stakeholder has not been engaged early, asked for their thoughts on the project and had their questions and objections addressed, it is likely that they will slow or halt the process as it proceeds. Particularly important in this local stakeholder category are board of education members, prominent selectmen/women and ranking administrators, though community members of any background can put a halt to an ESPC project (often after a significant investment of time) if they are motivated enough. For this reason, it is crucial that many or most of these stakeholders be reached early in the process in order to gain their support and address their concerns.

Throughout the process of proposing and arranging performance contracts, these local stakeholders should be kept apprised of progress and included in discussions of the project. Doing so will minimize the all-too-common roadblocks to successful ESPC projects that arise when particularly vocal local leaders object to the project before they have been approached and offered authoritative information about it.

Examples for reference:

- <http://www.coloradoefficiencyguide.com/performance/faq.htm>
- [NAESCO - Donald Gilligan Presentation](#) Overview of ESCO & ESPC
- [Clean Water Fund Guide to ESPC](#)
- [Build America Bonds to fund ESPC projects](#) from Energy Services Coalition
- [Ernest Orlando Lawrence Berkeley National Laboratory - Performance Contracting and Energy Efficiency in the State Government Market](#) - November 2008
- [Financing in this New Economic Climate](#) - ESC Presentation from Karen Keeler
- DOE Case Study: Douglas County Schools:
<http://www1.eere.energy.gov/wip/solutioncenter/pdfs/douglascountyschooldistrictprojectsummary.pdf>

Section 2 – Hiring an ESPC Owner's Representative

2.1 Introduction

An ESPC project is an innovative and complex process requiring great attention



to detail for its successful implementation. The time-consuming complexities of an ESPC project will generally justify the use of a Third-Party ESPC Consultant to serve as the Owners Representative (O.R.) for the development and implementation of the project. The use of an OR will support the ESPC process by providing the technical expertise required for the ESPC project development. They will also be able to provide the focused attention to project development that would otherwise fall to the operations and management (O&M) staff who are generally fully involved in the day-to-day management of their facilities. Although the use of an OR is not required by PA 11-80, the US Department of Energy requires their use on all ESPC projects, as do many States. Recent Federal Inspector General (IG) and Government Accounting Office (GAO) audits of DOE's SuperESPC program showed that third party expert facilitation resulted in higher quality projects, and a greater degree of success achieving savings targets. Thus DOE started to require their use on all Federal projects. It seems to be evolving into a trend to provide more quality control and transparency into the ESPC process.

Please note: For the purpose of this document, the term "Owners" shall refer to municipalities, universities, schools, and hospitals, and others, who may choose to utilize an ESPC project to address energy efficiency improvements and deferred maintenance issues for their facilities.

It is important that the O.R. be hired at the very beginning of the process to work on behalf of the Owner. If the O.R. is not involved until after the ESCO's Investment Grade Audit is completed, serious issues can arise as many opportunities to properly address important M&V and other technical issues will be missed. This consultant should be knowledgeable and experienced in managing an ESPC project and possess a high degree of technical expertise in order to provide critical engineering oversight and understanding to the project. This is important to ensure that the ESPC project runs smoothly and efficiently, the engineering calculations and methodologies are reasonable and accurate, and that the Measurement and Verification (M&V) methods used are reasonable and consistent with International Performance Measurement and Verification Protocol (IPMVP) standards. This is the best way to ensure that the Owner will realize the proposed project savings. Early involvement of the O.R. will also enable the owner to take advantage of the consultant's expertise to help with the public education and support creation essential for development of an ESPC project.

FAQs

Q: When exactly should an Owner hire a 3rd Party Owner's Rep?

A: Ideally, the O.R. should be hired as soon as an Owner has decided that ESPC will be the alternative funding vehicle for their project. The next best time is before an ESCO RFP is issued, so the OR can help ensure the document will garner comprehensive responses from the ESCO market. If you've already issued the RFP, an OR can be very helpful in the proposal review, and ESCO selection aspect.

Q: How does an Owner solicit for and hire an O.R.?

The current Best Practice for hiring an O.R. is to issue a Request for Qualifications to the pre-qualified list DEEP is working on. If your institution proceeds with an ESPC project prior to DEEP's pre-qualified list being available, the Owner can issue an RFQ directly to the open market through normal solicitation channels such as Demand Star, BidSync, etc. Selection should be based on qualifications as this firm acts in a very important oversight role. ***A sample RFQ and Professional Services Agreement are attached in Appendix 2.*** Once the O.R. is selected, and scope items are agreed to, the Owner should request a Price Proposal. Supporting information should be included, and a fair price negotiated between the two parties for the pre-screening and ESCO selection phase. Once the project is better defined, pricing for further phases can be developed that are commensurate with the complexity and duration of the project. Some Owners have fallen into the trap of asking for pricing for all phases of an ESPC project when the project has not been defined. This usually results in either gross overpricing or underpricing, rarely yielding in Best Value for the Owner.

Q: Why does the O.R. do an initial site assessment and utility analysis?

A: It is important for the O.R. to understand the technical aspects of the site(s) so they can justify an ESCO's proposed ECMs, engineering methodologies, associated project costs, and overall approach to the project at hand. Pertinent questions and concerns can also be brought to attention during the ESCO proposal review process. Preliminary utility analyses given to the ESCO will also ensure that costs are consistent throughout each proposal to prevent savings from being inflated or deflated between each ESCO's proposals. The process is also streamlined because ESCOs do not have to spend what little time they have on detailed existing conditions and equipment inventories.

Q: Ultimately, who has final say in the ESCO selection process, the Owner or Consultant?

A: Although the O.R. reviews the proposals in great detail, aids in the ESCO interview process, and can make specific recommendations to the Owner, it is the responsibility of the Owner to select the ESCO that they feel has the best overall project. O.R. staff should never be voting members of Owner's Selection Committees.

Q: What does the O.R. do if issues are not resolved during each IGA phase?

A: The O.R. works for and represents the Owner; therefore if the ESCO performing the IGA does not submit acceptable resolutions to issues that arise during IGA development, the O.R. will not allow the project to commence until resolutions are accepted.

Q: If an Owner executes an ESA after a successful IGA, is the O.R. retained?

A: Though strongly recommended, it is entirely at the Owner's discretion whether or not the O.R. will be a part of this phase of the project. This is an additional service that will be offered by the 3rd Party, in which the Owner can accept or not.

Q: If the 3rd Party is hired to review annual M&V reports, how many years does this occur?

A: This service is negotiated as a separate fee and added scope between the Owner and 3rd Party and may be performed as many years as the contract term allows (up to 20 years).

2.1 Recommended Owner's Representative Qualifications

Recommended O.R. minimum qualifications for ESPC Consulting Services:

1. Demonstrated experience and working knowledge of ESPC Process
 - a. Actively engaged in the Connecticut ESPC market
 - b. Intimately familiar with the processes, statutes, and codes that govern the CT ESPC program
2. Have on staff at least one (1) licensed Connecticut Professional Engineer and one (1) Certified Energy Manager (CEM) (This is not required, but strongly recommended). A Certified Measurement & Verification Professional (CMVP) can also be very beneficial. The engineering team(s) should be Connecticut based and local to the project site.
3. Building and Energy systems engineering analysis experience including energy auditing, lighting, HVAC, controls assessment, and utility rate analysis.
4. Demonstrated minimum level of fiscal and programmatic management and controls
 - a. Meet all federal and state required regulations regarding cash management, fiscal/programmatic reporting, and proper Owner functioning.
5. Intimate knowledge and experience with the US/DOE energy efficiency and sustainability programs.
6. At least three (3) references of successfully completed ESPC projects.

It is also extremely important that the O.R. is not an officer or employee of the qualified provider for the ESPC project under review, and is not otherwise associated with the ESPC provider. The O.R. should not be receiving compensation from any ESCOs in order to avoid any conflict of interest. The O.R. shall maintain the confidentiality of any proprietary information.

The financial and technical capability of the O.R. should also be verified by requesting information such as the consultant's Dun and Bradstreet number, a listing of key Owner company personnel with descriptions of their roles/responsibilities, qualifications, and experience.

2.2 Overview of O.R. Duties

The primary goals and objectives for an OR are to assist the Owner in the procurement, management, and implementation of an ESPC to ensure that the Owner is getting the very best overall value for their investment. The ESPC process can be broken into four primary phases. A summary of the phases and associated elements are as follows:

1. **Stakeholder Education/ESCO Selection** -During the first phase, the Third-Party Consultant educates the Owner/Stakeholders on the performance contracting process. They will jointly develop an RFP for ESCO services and its technical appendices with the decision-makers for the Owner, staff representatives of the Owners Facilities Management group, legal, financial, procurement departments and others as appropriate. This phase includes preliminary site walk-throughs and assessments of the buildings to be included in the program. A scoping exercise will be conducted to develop an energy use index (EUI) for each building documenting the energy use and cost per square foot of the facility for the most recent year. The consultant also assists the Owner during the bid period, reviews the ESCO's proposals, and aids in the ESCO selection process.
2. **Quality Control of ESCO IGA** - During the second phase, the technical aspects of the project are developed in greater depth as the ESCO begins to shift into their detailed energy assessments of the buildings included in the initial analysis. The tasks for the OR will include the negotiation of the investment grade energy audit (IGA) agreement, quality control over the IGA development, establishment of the project baseline energy use and utility budget, ESCO contract execution, design and implementation oversight, and detailed reviews of the commissioning and M&V plans and activities.
3. **Project Implementation Assistance** - Assist Owner negotiate and execute the Energy Services Agreement (ESA). Assist Owner/ESCO secure grants for the energy conservation program. Provide supporting quality assurance (QA) services during the project design phase as well as general project oversight services during construction to ensure that the project is designed and built as desired by the Owner. Perform periodic monitoring of the work progress to ensure that milestones are met and the installed equipment meets performance specifications and the necessary reports are completed. Ensure the ESCo prepares and presents a series of custom training sessions for Owner personnel on the exact technologies that are installed as part of the project. Assist Owner with Project Acceptance and Periodic Measurement & Verification of Energy Savings.
4. **Performance Period M&V Services:** Assist Owner with post project implementation annual reviews of the ESCo's M&V Reports, with baseline adjustments (if warranted), or with other performance contract issue for the term, up to 20 years, of the contract period.

2.3 Phase 1 Details – ESCO Selection

As described in summary above, the Third-Party Consultant provides services to aid the Owner in all aspects of the ESPC process. These services shall be in accordance with the Owner's procurement policies and practices, and concurrent with the progress of its performance contracting project development. The following tasks will typically be performed by the Third-Party Consultant:

1. Work with the Owner's Facility Management staff, O&M staff, and Procurement department to outline and set the goals and commitments of the ESPC project.
2. Assist the Owner in the selection of initial candidate facilities for the ESCO competition to be included in the program. This step should include a screening process to ensure the energy conservation potential of the facilities chosen for initial analysis.
3. Assist in the preparation of a Request for Proposal (RFP) and its technical appendices. Details of this task may include modifications to the Owner's current RFP for the future project if a previous ESPC project has been performed, initial assessments of facilities, defining a minimum list of mandatory ECMs and O&M measures for the ESCO to include, and assembling facility data for use in the RFP.
 - a. Appendix to include as-builts, specifications, existing facility reports, major energy using equipment cut sheets, utility data including copies of at least one original utility bill for each building, and O&M data and practices.
4. Help educate the Owner's project team and other stakeholders by explaining the technical and financial aspects of Performance Contracting, and be able to discuss possible incentives and grants that are available from State and Federal Agencies.
5. Educate the Owner on M&V concepts, approaches, and methodologies, how they relate to ECMs, and assist with M&V protocol selection and acceptance.
6. Maintain direct and frequent communication with the Owner during RFP development.
 - a. This includes any conference calls, email correspondence, and/or site visits.
7. Assist with and monitor the release of the RFP by the Owner.
8. Organize and attend the initial ESCO site visit and pre-bid meeting.
9. Answer technical questions that may arise during the bidding period.
10. Review each ESCO's proposal submitted and compile an analysis of each initial proposal.
 - a. Create a comparison summary matrix of each proposal's energy savings and economics.
 - b. Submit narrative comments pertaining to each proposal's strengths and weaknesses.
 - c. Prepare an ESCO scoring sheet containing objective selection criteria as described in the RFP. This will aid the Owner in the ESCO selection process.
11. Attend all ESCO presentations.
 - a. Consultant should be prepared to ask pertinent questions and address important issues to aid in the selection process.
12. Participate in the review and selection process and make a recommendation to the Owner of an ESCO that will be the best choice to meet the Owners goals and objectives for the ESPC project.

Is it important to note that the Phase 1 OR fees to perform the ESPC services described above shall be incorporated into the ESCO contract, so the Owner can be reimbursed for all of the OR's fees during the ESCO contract execution.

2.4 Phase 2 Details – IGA Development Assistance

The O.R.'s services for Phase 2 of the ESPC project shall be targeted at providing education and outreach services on behalf of the Owner, as well as technical oversight and quality control over the selected ESCO's development and implementation of the Investment Grade Audit (IGA). The main tasks for the O.R. during Phase 2 of the ESPC project are to:

1. Utilize their extensive experience in the energy industry and performance contracting to provide objective counsel on the issues that face the Owner during development and implementation of an energy and water conservation performance contract.
2. Protect the interests of the Owner while facilitating the execution of a successful cost savings contract and the resulting project.

The O.R shall provide consulting services concurrent with the progress of the Owner's project development. The following tasks shall be completed by the O.R.:

3. Assist in the negotiation of the IGA Agreement.
 - a. The agreement is to allow the selected ESCO to conduct an Investment Grade Audit. The IGA confirms the information presented in their initial proposal and refines the analysis and implementation cost of the ECMs. The Third-Party Consultant assists the Owner to ensure that the ESCO complies with the requirements of the IGA, as set out in the RFP and IGA agreement.
 - b. Review the proposed IGA agreement and assist in any changes to the scope of work, including addition of buildings, change of work schedules, changes in IGA fees, and/or incorporation of ECMs from losing proposals.
 - c. Aid in the preparation of agenda briefings and meet with the Owner's "Champions" and stakeholders to help secure approval of contracts.
4. Prepare for and attend the IGA Kick-Off Meeting to discuss ECMs, M&V, and logistics.
 - a. The O.R. shall assist the Owner in planning and facilitating the IGA Kick-Off Meeting. The purpose of this meeting is to introduce staff of the ESCO and Owner, defined building access and coordination logistics, to review any changes to the scope of the Project (such as expanding to include additional buildings), discuss the Owner and the ESCO's requirements and procedures for the IGA, and to establish timelines and milestones for project development.
5. Facilitate Bi-weekly Conference Calls to Review IGA progress.

The O.R. shall track the progress of the IGA through Bi-weekly calls and meetings. The O.R. also reviews ESCO's proposed scope of work, energy savings calculations, and M&V

strategies. The details of the M&V strategies should be discussed in detail as well as the establishment of an energy baseline to use for measurement of savings and for meeting the contract requirements.

6. Attend interim review meetings for the 30%, 60%, 90%, and Final IGA completion.

It is important for the O.R. to attend several interim review meetings to evaluate the progress of the ESCO's IGA development. The meetings cover baseline energy use and budget development, review of proposed technology, input from operations and maintenance staff, and other pertinent information pertaining to project development.

7. Review of the Draft and Final IGA.

- a. Perform a detailed analysis of the 30%, 60%, and 90% Draft IGAs once they are completed. The O.R. shall prepare a list of questions, concerns, and/or clarifications to submit to the ESCO so they may be addressed. The Owner's comments will also be reviewed and combined with those of the Consultant. The ESCO shall maintain an Issues Tracking Log to capture all relevant comments, issues and their resolution to ensure that all questions and concerns have been answered to the satisfaction of the Owner and the O.R.
- b. The Consultant shall also check and independently run the ESCO's energy simulation models for the Baseline and ECM savings to verify their accuracy.
- c. A Professional Engineer shall review the parameters and measurement strategies of the M&V plan to determine if they are in line with appropriate measurement and verification protocols and guidelines as defined by the IPMVP for each piece of equipment and/or system, without unnecessarily burdening the project with extra costs. Specifically, the Consultant should evaluate the performance measurement strategies to ensure that the appropriate level of rigor and accuracy is used to protect the Owner and fulfill the intent of the contractual requirements.

Note: The development of a valid energy baseline and an appropriate M&V strategy is fundamental and paramount to the overall viability of the ESPC project.

- d. Evaluate the risk and cost of the performance measurement strategies according to the methodology described in the M&V guidelines.
- e. A brief analysis of the Final IGA shall be conducted to ensure all questions and clarifications from the Draft were addressed.

This point is a natural break in the ESPC project process. If the Owner does not proceed to contract with the ESCO, the OR's services would end at this point. If the Owner moves forward with a successful IGA to executing an Energy Services Agreement (ESA), the OR shall offer additional services to the existing contract which are outlined below.

2.5 Phase 3 Details – Assistance during Implementation

1. Assist the Owner in negotiating and executing the ESA by negotiating final price and contract with the ESCO, review proposed ESA, assist in making any final changes due to negotiations, and help prepare agenda briefs and meet with stakeholders.
2. Assist the Owner and the ESCO to secure grants for the energy conservation program.
3. Engineering and Economic Analysis and reviews or inspections during project design and construction phases.
 - a. The Consultant shall provide supporting quality assurance (QA) services during the project design phase as well as general project oversight services during construction to ensure that the project is designed and built as desired by the Owner. The submittals of designs, equipment, performance specifications and installation plans should carefully be reviewed to ensure compliance with the ESCO proposal and State requirements.
 - b. Assist in developing an agenda for the Post-Award Conference. Objectives will be to establish roles, responsibilities, expectations, timelines, communication and site access protocols, and the submittal review process. At the Post-Award Conference the Third-Party Consultant will ensure that proper arrangements have been made for regular inspections, commissioning, testing, balancing, training, acceptance criteria, O&M requirements, and that M&V guidelines are met.
 - c. Assist the Owner in the development of the format for construction reports such as progress, inspection, commissioning, and testing and balancing reports. Also, acceptance reports and a punch-list that is specifically related to performance contracting issues during the construction process. During construction, periodic monitoring of the work progress should be performed to ensure that milestones are met, the installed equipment meets performance specifications, and the necessary reports are completed. In addition, the Consultant will assist with the review of change orders and modifications to the specifications that are in the best interest of the Owner.
 - d. Act as an objective Third-Party to make unbiased recommendations for fast and fair resolution to any project related issues that might arise during the design and/or construction phase. Work closely in assisting the Owner and construction teams to ensure that the project is completed on time and within budget.
4. Review Operations and Maintenance Strategies to ensure persistence of savings.
 - a. Assist in ensuring that the ESCO develop an O&M manual that integrates equipment manufacturer's recommended O&M requirements for warranty with the ESCO's O&M requirements for performance. Proper training of O&M manuals should also be conducted to ensure that the necessary parties are qualified to perform proper procedures.
 - b. Assist in ensuring the ESCO prepares and presents a series of custom training sessions for personnel on the exact technologies that are installed as part of the project. The Third-Party Consultant should recommend that these sessions occur near completion of the project, preferably during the project's commissioning process, then again after 90 days of operation, then at least two more times during the first three years after project

implementation. Facility engineers, system operators and maintenance staff should attend these sessions. It should also be recommended that a representative from the equipment manufacturers and the ESCO be present to answer questions and provide appropriate technical support.

5. Project Acceptance and Periodic Measurement & Verification
 - a. Assist in performing the verification inspection of the equipment, operation, construction closeout reports, and final submittals to ensure compliance with the contract and with the Owner's requirements.
 - b. Assist in the preparation of any final punch lists; in review of the final M&V plan, the facility use, and energy baseline; in the examination of the M&V monitoring equipment to determine if it has been installed, calibrated, and is operating as required; and to accurately measure and report energy use parameters. Once project systems and equipment are online, the O.R. should review the monitored data during the first month of operation to ensure that all systems are operating as expected and the necessary M&V parameters are being generated and logged.
 - c. During the first year of operating, the Consultant shall review the quarterly performance and/or M&V reports and ESCO invoices to ensure that the energy savings persist. If there are issues, they need to be identified early on for resolution.

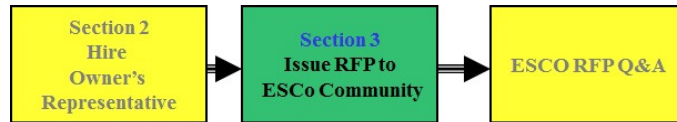
Note: If the annual reconciliation of the guaranteed energy cost savings reveals a shortfall, it is of paramount important that the O.R. remind the ESCO that they are bound under contract to make payment to the Owner in the amount of the shortfall. If the reconciliation reveals an excess in annual cost savings, the excess savings shall remain with the Owner and shall not be used to cover potential energy cost savings shortages in previous or subsequent years of the contract.

2.6 Phase 4 Details – Review ESCO's Annual M&V Reports

1. The O.R. should also propose to assist the Owner with post project implementation annual reviews of the ESCO's M&V Reports, with baseline adjustments (if warranted), or with other performance contract issues for the term, up to 20 years of the contract period, in addition to the O.R.'s base services. This should be presented as a separate fee proposal towards the end of the IGA development phase, when the final composition of the full scope of work, ECMs, and M&V Plans in effect are understood more completely. This method will protect both the Owner and the O.R. from over or under-estimating the value of these important services at an early stage of the project.

Section 3 – ESCO RFP and Selection

3.1 Introduction



Now that your institution has decided that they are a good fit for an ESPC program, has done a comprehensive Education and Outreach initiative, and hired an O.R., the next step is to develop and issue the Request for Proposal (RFP). Developing/issuing the RFP, and selecting an ESCO is one of the most important and difficult aspects of the ESPC process. The use of an O.R. is recommended. The following section contains information on what the ESCO section RFP should contain and how selection of an ESCO occurs. **A Model ESCO RFP is included in Appendix 3.**

FAQs

Q: Why do I need to issue a competitive RFP?

A: Issuing an open and competitive RFP is considered a best practice in virtually all areas of general procurement. This ensures that the Owner sees what the marketplace has to offer, and eliminates the occurrence of sole sourcing a very large, important project. There are several organizations in Connecticut which offer this “One stop shopping” premise, but the Owner does not receive objective advice, and never sees any competitive offers using this method, which is not considered a best practice.

Q: Who should be represented on the Owner’s Selection Committee?

A: There are many examples of ESPC projects which almost made it to implementation, but one or two key players in the Owner’s organization were left out of the decision making process. It is imperative that the ESCO Selection Committee include representatives from the following departments:

- Facilities/Physical Plant/Engineering
- Legal
- Financial/Business Affairs
- Budget Office/Treasury
- Operations and Maintenance

All of these stakeholders should be thoroughly briefed on the ESPC process and have involvement in the development of the RFP, review of the ESCO proposals, and selection of the winning ESCO.

3.2 Recommendations

The passage of Public Act 11-80 (section 123) has helped to standardize the process of ESPC. <http://www.cga.ct.gov/2011/act/pa/pdf/2011PA-00080-R00SB-01243-PA.pdf>

As stated in Public Act No. 11-80, section 123, the agency should issue a legal notice per the agency's normal practice. This Request for Proposals (RFP) should include:

Standard Instructions to Proposers

This section containing Introduction, Contract Terms, Key Dates, State Laws, etc. is catered specifically to the Agency putting out the RFP and is developed with the help of the Owners Representative. Please review this section in the sample RFP reference document to further understand the content of this section.

Specifications

A list of required project-specific services should be compiled to ensure that only well-qualified ESCOs submit RFP responses. Services may include performance of IGA, M&V, Cx, engineering design, application for Energy Star Label, etc. In addition, the contractor should have the technical capability to address a broad range of systems including mechanical systems, lighting systems, building envelope, etc.

The following information, at a minimum, should be provided:

- A list of all facilities (with associated square footages) that will be included in the RFP
- A partial map of the general area (town, city, etc.) indicating approximate building locations
- A few simple Energy Conservation Measures (ECMs) that are required to be performed by the ESCO based on the Owner's recommendations and the consultant's own walk-throughs. Required ECMs are necessary to ensure some degree of similitude among the ESCO responses for a more meaningful quantitative comparison. ESCOs should be encouraged to be as creative and innovative for all other ECMs.

Insurance Requirements

This section is dependent on State or Agency insurance requirements and is developed with the help of the Owners Representative and Agency.

Proposal Form

Required disclosures; Contractor should attest to any Occupational Safety and Health Law Violations, Disputes, Civil/Criminal Findings, Ethics Violations, etc.

Proposer's Legal Status Disclosure

Contractor should affirm that they have a permanent place of business in the Owner's area

Proposer's Certification of Affirmative Action Program

Contractor should affirm that they are in compliance with State and local law regarding equal opportunity employment.

Proposer's Non Collusion Affidavit

Contractor should affirm that there is no direct or indirect conflict of interest

Attachment A: Special Contract Terms and Conditions

This Attachment, which contains items such as Open Book Pricing, Contingency, Construction Period and Excess Savings, Funding Sources, etc., can be found in the sample RFP reference document.

Attachment B: Proposed Project Schedule

Based on recommendations from the agency, appropriate time intervals should be allocated for each project phase; RFP phase, IGA phase, ESPC phase and Commissioning/M&V phase. Due to the long-term nature of the project, the schedule is somewhat variable.

Attachment C: Contractor Response

This attachment should dictate the format of the ESCO RFP response and the information it contains. This ensures that all required information is included in each ESCO response and facilitates comparison. See sample RFP in Reference section for minimum requirements.

Attachment D: Evaluation Criteria

To ensure a fair and balanced comparison of the proposed projects, clearly defined quantitative criteria should be established. This list should include aspects of project management, technical approach, financial approach and other (i.e. non-tangible) benefits to the agency. The criteria should be used to determine a short list of responders who should then be interviewed by a selection committee consisting of representative Agency stake holders. The selection committee should review the results of the interview and, based on the previous criteria and the oral interview, make a final selection. The committee should identify the apparent awardee and then contact references to complete the evaluation. With quality references, the apparent awardee should be notified of selection; otherwise, the same process should be used with the second-ranked Contractor.

Attachment E: Technical Facility Profile

As was mentioned previously, a quantity of buildings should be chosen for inclusion in the RFP that represent a cross section, but small fraction of the total square footage of all agency facilities. The following information, at a minimum, should be provided in Attachment E for each sample facility:

- A brief facility description detailing building construction, occupancy and all energy consuming equipment
- Photographs of the building and pertinent energy-using systems
- A current floor plan showing any additions
- Electronic copies of applicable MEP drawings
- Three years of all utility data (electricity, natural gas, water/sewer, etc.), including monthly utility cost and consumption
- A sample bill for each utility account (for purposes of rate verification)

The following information, at a minimum, should be provided in Attachment E for all sample facilities:

- A utility summary of all buildings including gross square footage, Energy Use Index (EUI, Btu/ft²) and Energy Cost Index (ECI, total cost/ft²)
- Any previously completed engineering or energy studies

The following should also be included in Attachment E:

- A list of all facilities (with associated square footages) that will be included in the full ESPC
- The agency's federal tax exemption number, if applicable

Attachment F: Model Investment Grade Audit and Project Proposal Contract

This IGA & Project Proposal Contract is the first of two contracts with the selected ESCO. The ESCO will complete an IGA that will include an analysis of each proposed project with projected energy and cost savings and itemized project cost. The results of the audit will form the basis for a subsequent ESPC. ***A Model Contract is included in Appendix 3 of this document.***

Attachment G: Model Energy Services Agreement

This Contract is for design, construction, guarantee, and follow-up monitoring of energy-saving projects. An energy audit should have been previously completed to identify the costs and savings of each project. The audit provides the basis to develop and negotiate the ESPC contract. ***A Model Contract is included in Appendix 4 of this document.***

Attachment H: Financing Solicitation Package

The financing agreement is a stand-alone agreement, separate from the ESPC, between the Owner and a financial organization and signed by the Owner at the same time as the performance contract. The two agreements are linked through the payment schedules and the savings guarantee provided by the ESCO that the annual guaranteed savings meet the annual debt service (plus any other related expenses imposed by the performance contract such as monitoring and verification).

Financing is typically provided by a financial organization which specializes, or has experience, in performance contracting projects. The financing instrument is typically a tax-exempt, municipal lease-purchase agreement as this instrument delivers the lowest finance rates.

This Financing Solicitation Package enables and authorizes the ESCO to seek competitive financing on behalf of the Owner. The ESCO can provide the necessary information to solicit competitive rates and can evaluate the full package of rates and services, recommending the best package for the Owner's consideration and final decision. This eliminates the Owner's need to issue a separate RFP for financing, and positions the financing as an integral part of the performance contracting approach.

As an alternative, the Owner can provide other funds or financing mechanisms to fully fund or finance the project.

3.3 ESCO RFP and Selection Best Practices:

1. Based on the Owner's recommendations and the Owner Representative's own walk-throughs, a quantity of buildings should be chosen for inclusion in the RFP that represent approximately 30% of the total square footage of all agency facilities. The chosen buildings should be a representative sample of all Owner facilities. The selected ESCO will be awarded all buildings once an IGA agreement is signed.
2. To avoid a conflict of interest the Owners Representative should not be a voting member of the ESCO selection committee, they should act as a resource to clarify RFP requirements, selection criteria, etc.

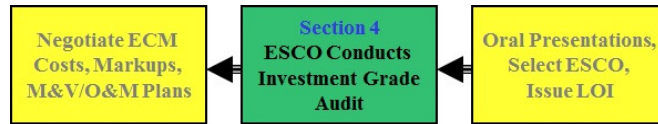
Section 4 - Investment Grade Audit (IGA)

4.1 Introduction

Prior to commencement of the IGA there is a Pre-IGA screening process that needs to

occur to confirm this will be a successful project, consisting of a [D]etermination and verification whether the inventories of buildings are of appropriate size and condition to justify ESPC. It is advised to carry out a preliminary scoping audit of facilities to determine if they are a good fit for ESPC

If the results of the preliminary scoping audit prove the inventory of buildings to be a good fit for ESPC then use the following section to understand what the IGA should consist of. An Owner's Representative can provide these services at a reasonable cost.



FAQs

Q: What is the most important part of the IGA?

A: The most important part of any IGA is the performance guarantee, M&V. If the energy savings guarantee is based on poor engineering practice and verification then it has no value.

Q: What is the difference between an Investment Grade Audit (IGA) and Financial Grade Audit (FGA)?

A: These two types of energy audits are both the same. Some organizations such as State and some Federal government agencies refer to an IGA as FGA. Just remember that an IGA should involve assessing a building's energy cost and efficiency by analyzing energy bills, a detailed survey of the building, accompanied by the building operator. It will have a breakdown of energy use in the building. It identifies and provides a savings and cost analysis of all practical low-cost/no-cost and capital improvement measures that meet the owner's constraints and economic criteria. This cost and savings information is provided at a level of confidence high enough for major capital investment. It also includes a discussion of any effect on operation and maintenance procedures.

4.2 Investment Grade Audit (IGA)

The investment-grade energy audit is conducted to analyze all cost-effective ECMs for systems such as lighting, HVAC equipment, building envelope, steam, chilled water, domestic hot water and other water using systems, building controls, energy generation and distribution, and waste management systems. The purpose of the IGA is to provide all information other than the terms and conditions of the contract that will become a part of the final agreement, with significant detail to understand the project scope and benefits, both technical and financial so as to be able to track the savings or lack thereof throughout the life of the project.

Connecticut State Senate recently passed Senate Bill #1243, Public Act #11-80, which defines in Section 123 (10) an Investment-grade energy audit as “A study by the qualified energy services provider selected for a particular energy-savings performance contract project which includes detailed descriptions of the improvements recommended for the project, the estimated costs of the improvements, and the utility and operations and maintenance cost savings projected to result from the recommended improvements.”

This IGA should also mirror the requirements of an ASHRAE level III audit, described below:

4.3 Level III Energy Audit: Detailed Analysis of Capital-Intensive Modifications

This level energy audit involves assessing a building’s energy cost and efficiency by analyzing energy bills, a detailed survey of the building, accompanied by the building operator. A breakdown of energy use in the building should be provided. It identifies and provides a savings and cost analysis of all practical low-cost/no-cost and capital improvement measures that meet the owner’s constraints and economic criteria. This cost and savings information is provided at a level of confidence high enough for major capital investment. It also includes a discussion of any effect on operation and maintenance procedures.

This outline below is a suggested description of what should be included in the IGA. Additional information can be found at www.ASHRAE.org

IGA Outline

- 1) Executive Summary
- 2) Relevant facilities description
 - a) Condition
 - i) Systems Status
 - ii) Maintenance status
 - b) Occupants wants and needs from Energy Savings Performance Contract
- 3) Baseline of energy consumption
 - a) Analysis of utility bills, rate structures, meters
 - i) Graphed to depict anomalies
 - b) Complete analysis of usage over 25 month period
 - c) Percent consumption per major system
 - d) Occupancy schedules
 - i) Days of the year, holidays, weekends
 - ii) Hours of the day, start and stop
 - e) Occupancy Comfort conditions (with appropriate air changes)
 - i) What is the range of temperatures for occupied times within the facilities
 - ii) What is the range of temperatures for unoccupied times within the facilities
 - iii) What is the range of temperatures for maintenance only
 - iv) What is the range of temperatures for holiday shutdowns (as applicable)
 - v) What are the times when these temperature should be achieved
 - f) Number of occupants in spaces during baseline period
- 4) Proposed Retrofits
 - a) Technologies applied

- i) Description of each retrofit and its benefit over existing condition
 - ii) Projected Savings to be gained
 - (1) How the savings was calculated
 - (2) What will be measured to illustrate existing energy consumption
 - (3) What will be measured to illustrate post retrofit energy consumption
 - (a) Which International Performance Measurement and Verification Protocol is being followed
 - (4) What assumptions will be made to complete the projection of savings
 - (5) How will this retrofit savings be reconciled to the post retrofit utility bill
 - (6) What could affect the savings being achieved
 - (a) How will the baseline be adjusted to reflect the changes that occur and still prove that the savings of the retrofit are being accomplished
 - b) Post-construction conditions
 - i) Percent consumption per major system
 - ii) Occupancy schedules
 - (1) Days of the year, holidays, weekends
 - (2) Hours of the day – new start stop
 - iii) Occupancy Comfort conditions
 - (1) Occupied times
 - (2) Unoccupied times
 - (3) Maintenance and Holiday times
- 5) Firm Fixed Price
- a) How it is obtained - validation that the pricing lines up with the RFP methodologies
 - b) What does it contain
 - c) What is reasonable to exclude
 - d) What is unreasonable to exclude
 - e) How will contingencies be managed
 - f) How will allowances be managed
- 6) Savings
- a) Roll up of all retrofit savings individually
 - b) Illustration of the interaction of savings between energy conservation measures
 - c) Impact on utility rate structure if any
 - d) Impact on utility bill anticipated
 - e) Consideration of future rate escalations IF ANY
 - i) Description of rate escalation impacts (both increase and decrease)
 - (1) Source for rate escalation “prediction”
 - f) Display of energy conservation measure energy savings projected
 - g) Display of per energy conservation measure operational savings projected
 - i) How pre-construction costs were determined
 - ii) How post-construction costs are projected
 - h) Display of per energy conservation measure maintenance savings projected
 - i) How pre-construction costs were determined
 - ii) How post-construction costs are projected
 - i) Illustration of simple payback per measure
 - j) Illustration of simple payback for the project
- 7) Finance
- a) Finance resources considered and investigated

- i) Leases
- ii) Bonds
- iii) Incentives
- iv) Grants
- v) Other
- b) Description of finance recommendations
 - i) Method of selecting final financial provider
 - (1) Qualifications as financial advisor
 - (2) Actual proforma indicating table of repayment from savings
 - (a) Illustration of net effective rate (includes all costs; finance, legal, bond counsel, filing fees, etc.
 - (b) Level payments, balloon payments, seasonal payments (to meet with facility use)
 - c) Clearly illustrate all conditions, early payment options, penalties
 - d) Attach sample instrument
- 8) Construction
 - a) Implementation Plan
 - b) Gantt Chart
 - c) Unseen circumstances and how they'll be managed
 - i) Hazardous materials
 - d) Commissioning Plan
 - e) Maintenance Checklist/Matrix
- 9) Risk Matrix
- 10) Measurement and Verification Reporting
 - a) Frequency and format
 - b) Reconciling to future utility bills
 - i) Explanation in primary math
- 11) Shortfall resolution plan
 - a) Primary dispute resolution
 - b) Secondary dispute resolution

4.5 IGA Development Process

The IGA should be submitted to the building Owner and Owner's Representative in multiple phases in order to show progress. This method also allows the owner to make interim decisions about scoping and other items related to the development of a comprehensive ESPC project. Typically it is submitted when 30%, 60%, 90% and 100% complete. Each submission is reviewed and comments are made regarding any potential issues. Comments and the ESCO responses are all then resolved to the Owner's satisfaction prior to moving on to the next phase. This process has shown to be a good "paper trail" for the development of the project.

The 30% submission should include a description of the baseline conditions (including facility description, hours of operation, quantity of occupants, etc), an anticipated list of ECMs should be provided, Metering plan (data logging to confirm baseline conditions) and preliminary Measurement & Verification (M&V).

The 60% submission should include initial ECM development, Metering results, preliminary cost and savings and M&V outline.

The 90% submission should include complete ECM development, firm cost and savings, detailed M&V, Commissioning (Cx), training and Operations and Maintenance (O&M)

At the 100% submission the IGA should be complete and all responses to comments that have been brought up by reviewers should be complete and accepted as sufficient. For more details of the Scope of Work see reference document Attachment F (Investment Grade Audit & Project Proposal Contract), Exhibit A (Scope of Work).

4.6 Conclusion

The Investment Grade Audit should present a detailed account of the current condition of facilities, how they are used and the energy and water they consume the proposed changes in those systems and devices, what they cost, what they'll save and how that savings will be proven. In addition a plan to construct and an identification of the project capitalization and repayment plan. Audits that are complete and comprehensive illustrate this information serve as the basis for a successful Energy Savings Performance Contract. Any and all assumptions made to project the savings and perform calculations should be fully disclosed within the audit. Investment Grade Audits that are complete and easily understood will serve to illustrate the technical precepts that form the basis of energy savings projections and lead to successful Energy Savings Performance Contracts.

IGA Best Practices:

1. Typically, the minimum size project that will carry the transaction costs associated with this complex process is \$500,000 to \$1,000,000. If there is not enough energy savings to support a project of this size or greater, it will rarely be successful.
2. At least one calendar year of facility baseline energy consumption needs to be provided, however three years are optimal to take into account weather anomalies. The baseline data is used to calculate the energy savings and determine the methodology for measuring and verifying the savings. The baseline data also is used to determine the cost of energy that will be used in the calculation of energy cost savings. If water savings or maintenance savings are included in the project, the baseline data also includes water cost and consumption as well as maintenance costs and frequency.
3. A very accurate description of the existing building conditions is imperative to ensure the ESCO truly understands the operational baseline.
4. When this document is developed a reasonable utility and labor cost escalation rate should be 2% to 3%. The escalation rate should be conservative, as it will compound each year of the contract term.
5. ESCOs shall include ECMs that were considered for installation but were disqualified because of cost or other constraints. The client may use this information for future projects or for alternative financing beyond that offered by the ESCO.

6. An IGA should contain a detailed schedule for project completion, including client facility schedules that affect the times that are available or not available for construction activity.
7. Services that the ESCO will be performing or will have performed during the course of the project. These services may include but not be limited to: engineering design, construction management, preparation of operations and maintenance procedures, training of facility personnel on new equipment or procedures, project commissioning, warranty services and equipment maintenance. These services will be tailored to the project, the needs of the facility, the capabilities of the client's maintenance staff and the chosen financing methods.
8. Standards of comfort, such as summer/winter, unoccupied/occupied temperature and humidity for the client's facility need to be clearly stated and agreed on.
9. It is important that the ESCO states in the IGA what the cost of the audit is (walk away fee) should the client decide not to proceed with construction.
10. ESCO shall reserve up to 5% of annually guaranteed savings for the Agency to hire an independent owner's representative to review the ESCO's measurement and verification reports and advise the Agency of compliance in measurement and verifying savings.

Section 5 – Financing and Funding

5.1 Introduction

A primary feature of an ESPC is the ability to finance energy savings measures to ensure that finance payments are equal to or less than the monetary savings gained from the measures. Therefore, the way in which ESPC projects are financed will play a key role in determining which energy savings measures to pursue. Every building owner will have its own financial, environmental, operational, and political factors to consider when determining the best way to finance an ESPC project. Most state agencies and municipalities do not have the ability to use much, if any, internal capital to pay for ESPC projects, particularly in these times of tight budgets, so financing will be required in almost all cases.



Financing for ESPC projects can come from a variety of sources. There are two main categories of financing vehicles: 1) those that involve some type of borrowing with interest payments, and 2) grants, incentives, rebates or tax credits which supply cash without the need to pay back the funds. The key sources of ESP financing are discussed in the section below.

It is important to understand and consider financing options very early on in the process of exploring the feasibility of an ESPC project. Some of the key factors to consider in evaluating financing options are whether the financing vehicle is considered a debt obligation or an operational expense, and the length of the payback period. Under Connecticut law (Public Act 11-80), the maximum term of an ESPC project is 20 years. However, in most cases, the longer the loan term, the more difficult it is to obtain attractive interest rates. A typical, well-balanced ESPC project will include retrofits with both short-term paybacks (such as lighting) and longer-term paybacks (such as HVAC). The retrofits with shorter paybacks help finance the retrofits with longer paybacks. The mix of these measures will play a part in determining what the total length of the project term.

FAQs

Q: Do ESPC projects require that financing be provided by an ESCO?

A: No. Many years ago, ESCOs themselves used to provide a significant amount of financing for ESPC projects, but it is now rare for an ESCO to provide the financing. The main role ESCOs now play in financing is to help building owners identify options and arrange for financing. There are also finance professionals who specialize in ESPC financing that can provide excellent guidance.

Q: Can ESPC projects be funded through multiple financing sources?

A: Yes. A building owner can raise funding from several sources for a given ESPC project. Different parts of a project can be financed from different sources, depending on the particular timing and needs of the various parts of the project. For example, the same project could be financed through a combination of a lease, bond funds, incentives provided through the Connecticut Energy Efficiency Fund, the Clean Energy Finance and Investment Authority, and potentially other sources.

Q: If a municipality uses a tax-free municipal lease, the payment obligation is not considered debt, so could default on payment potentially affect the municipality's credit rating?

Note to reviewers: the answer below excerpted from the document Energy Performance Contracting Financing Options, Clinton Climate Initiative.

A: Yes. Auditors will consider the impact of an ESPC project on an agency's credit rating if they deem the required financing amount as "material" in comparison to the agency's overall budget or income. As a frame of reference, an item is often considered "material" when it is equal to or greater than 5% of the total operating budget, though this metric is a rule of thumb rather than an enforceable standard. Moody's or Standard and Poor's may treat lease obligations as debt when they evaluate an agency's credit rating. The way in which auditors assess the credit impact of borrowing to finance an ESPC project is difficult to predict, and depends largely on the characteristics and circumstances of a particular agency (e.g., how close the agency is to its debt limit, the size of the project lease payment in proportion to its overall operating budget or net income).

Q: Since bonds generally offer lower interest rates than other types of financing, why should other forms of financing with higher interest rates be pursued?

A: The main advantage of bond financing is the lower interest rates. However, there is a major disadvantage to the use of bond financing, particularly at the municipal level: general obligation bonds and revenue bonds will usually require a public referendum for approval, and that process can significantly delay a project. It turns out that for an ESPC project, there are real costs of delay, particularly in a state like Connecticut in which energy efficiency retrofits have significant financial benefits due to the state's high electricity prices. So, in many instances, it might be financially preferable to move ahead more quickly with financing that carries higher interest rates in order to start realizing energy cost savings as soon as possible. The U.S. EPA/U.S. DOE's Energy Star Program has developed a tool called the Cash Flow Opportunity Calculator to help building owners ask the following key questions:

- 1) How much new energy efficiency equipment can be purchased from anticipated savings?
- 2) Should this equipment purchase be financed now, or is it better to wait and use cash from a future budget?
- 3) Is money being lost by waiting for a lower interest rate?

Municipalities commonly have the idea that an ESPC must be financed through the ESCO; however, this is not necessarily the case. A municipality can pay for the project entirely without financing or they can finance any way they choose.

Q: Who is responsible for securing potential energy efficiency and renewable energy and water financial incentives?

A: This is highly dependent on how the ESCO solicitation is worded and crafted. Typically; the ESCO, with their extensive dealings in the ESPC market is best capable and most incentivized (directly or indirectly) to bring any available 'free' monies to the deal. This helps maximize ROR, fosters client goodwill, and allows for greater cost leveraging.

Q: How can tax-exempt entities (Owner) maximize project return via Tax Credits?

A: Only through non-ownership of assets – assigning equipment ownership directly to the ESCO (if allowable).

Q: How are performance contract projects financed?

A: Energy-efficiency measures installed under a performance contract may be financed in one of three ways: by the Owner itself, by a loan from a financial institution, or by the energy service company. If the ESCO provides the financing, it is termed "off balance sheet"; the Owner has no debt, and its only obligation is to pay the contractor all or a share of the savings during the contract period. If the Owner finances the investment, either on its own or through a financial institution, it can accrue debt (depending on the opinion of the Bond Counsel), but the ESCO will typically guarantee that the savings will provide the cash flow necessary to repay the loan, and if not, make up the difference.

Q: Is it true that an ESPC project must be financed through the ESCO? Our municipality has an excellent credit rating and would like to take advantage of it.

A: No, this is a common misconception, the agency taking part in the ESPC project can finance the project any way they would like. The ESCO will only help facilitate financing for the agency. ***However, the ESPC methodology is still probably one of the best options for developing and implementing energy savings projects. As described in earlier sections, the Owner can avoid many of the pitfalls the typical public project based on low bid procurement methods.***

Q: How should we decide on a contract term for an ESPC project?

A: Usually the municipality/customer will set the upper limit at 15 to 20 years. ***PA 11-80 set the maximum term at 20 years in Connecticut.*** If the upper limit is too high then equipment will begin to fail and not be able to produce energy savings that is guaranteed. On the contrary if the limit is set too low then the project may be excluding many potential ECMs, such as renewable energy and infrastructure improvements, or there may not be enough ECMs to carry the added costs associated with an ESPC project such as M&V, commissioning and training costs.

The USEPA produces a financial tool that Owners may find helpful. The Cash Flow Opportunity Calculator can be accessed at: http://www.energystar.gov/index.cfm?c=assess_value.financial_tools

This is another issue the Owner's Representative can assist the Owner think through and make informed decisions. For instance, the development team can perform sensitivity analyses that change several variables in the cash flow, including contract term, energy escalation rates, costs for M&V/O&M, etc. that can help make decisions regarding the acceptable terms for the financial deal.

Q: Are there incentives to support the deployment of onsite renewable energy to coincide with energy efficiency?

A: Yes. A public agency pursuing an ESPC project can include both energy efficiency and onsite renewable energy as part of the project. A new program available to municipalities in CT is through the

State's new zero emissions and low emissions renewable energy credit ("ZREC" and "LREC") policy. Municipalities can compete for over \$1 billion of incentives for behind-the-meter onsite clean energy generation. A municipality can improve their competitiveness for these incentives by combining an ESPC for energy efficiency with a long-term ZREC or LREC contract. For more information on the ZREC/LREC program, and to learn about other opportunities and incentives to integrate renewable energy into an ESPC project, contact the CT Department of Energy and Environmental Protection.

Financing Options

The following is a brief discussion of various financing options typically used in ESPC projects. It is not meant to be all inclusive nor authoritative. Each Owner should investigate many financing sources and use those that best fit their particular needs, risk profile, debt management practices, etc.

Tax-exempt Lease Purchase

The use of tax-exempt lease financing has been the most common method used by public agencies to finance ESPC projects over the last several years. The interest rates associated with tax-exempt lease financing are significantly lower than commercial lease-purchase interest rates because the interest payments are tax-exempt income to the investor. A tax-exempt lease typically does not require public approval or constitute a long-term debt obligation for the agency, and thus payback is treated as an operational expense that can directly replace previous electric utility payments. This type of financing also allows the agency to retain the equipment title with an equipment security interest held by the investors. The ESCO industry and financial institutions typically accept lease payments subject to annual appropriations with a standard non-appropriations provision included in the lease agreement.

Although tax-exempt leases have historically been the most popular form of financing for ESPC projects in public agencies, recently there has been a shift in how auditors are treating tax-exempt leases. In the past, municipal leases were always treated as an operational expense and not as debt. However, many auditors are starting to treat tax-exempt leases as debt, and so recently many state agencies and municipalities have been moving away from tax-exempt leases. Instead, they are pursuing what are called "Energy Savings Agreements" or "Shared Savings Agreements," which are clearly not treated as debt. Under these arrangements, a third-party owner takes on the bulk of the risk if energy savings do not meet projections. So, the public agency only pays the provider of the financing if energy savings meet projections. The ESCO is still responsible for making up shortfalls, but instead of paying the public agency (as it would under a lease) it pays the third-party owner. Since this shift away from tax-exempt leases is a very recent trend, it is important to seek the advice of an ESPC financing expert who is aware of this trend when considering a lease or one of these newer arrangements.

Conventional Bank Financing

A conventional installment-payment loan obtained from a local bank or financial institution can be used to finance an ESPC project. Depending upon the agency's relationship with the bank, interest rates and contract terms could be negotiated to make this an attractive and economical means of project financing. Under an installment payment loan, the bank retains title to the equipment for the loan term. At the conclusion of the loan, the title is turned over to the agency subject to the agreed-upon

terms. This type of financing is considered a long-term debt obligation and is credited against the agency's outstanding debt limitation.

Municipal General Obligation (G.O.) Bonds (tax-exempt)

These are typically the least expensive source of funds available for agencies with the authority to issue G.O. bonds. These bonds are attractive to the financial market because they are backed by the full-faith and credit of the issuer. This means that the issuer pledges its authority to tax, raise, and collect sufficient funds to satisfy the bond obligations. There have been a number of instances in which energy projects have been financed as a part of a larger G.O. bond issue that included other capital projects. In those cases, the project costs were paid outright and the energy performance contract was structured to provide a guarantee that corresponds to the bond retirement schedule agreed to by both parties. While general obligation bonds offer the lowest interest rates, there are statutory debt restrictions that limit their availability. Approval to issue the bonds must be obtained by the state legislature or by public referendum. This can impose project implementation delays. Also, the financing of capital energy projects must compete with the financing of other essential government services and capital project needs.

Municipal Revenue Bonds (tax-exempt)

Revenue bonds are another option for energy project financing. They carry attractive interest rates, although the rates are slightly higher than the rates of G.O. bonds. Also, revenue bonds are not backed by the full faith and credit of the institution and are therefore considered a method of "off-budget" financing. In addition, revenue bonds require the identification and availability of a dedicated revenue source to retire the bond debt. While guaranteed savings would appear to fulfill that requirement, energy savings are not considered actual revenue by the financial markets. Appropriated payments dedicated specifically to revenue bond retirement have to be secured to fulfill the revenue obligation. Approval by the state legislature or public referendum often is required prior to issuing revenue bonds; however, there is rarely a statutory limitation on the use of such bonds for public use. Similar to G.O. bonds, the performance contract would guarantee the retirement of the revenue bonds on a schedule agreed to by both parties.

Federal Financing Programs

Qualified Energy Conservation Bonds (QECCBs)

QECCBs are federal bonds that can be used to finance energy efficiency and other clean energy projects. The federal government provides a 70% subsidy on the interest, providing a tax credit to the bondholder. In 2009, as part of the American Recovery and Reinvestment Act (ARRA), the federal government authorized \$3.2 billion of QECCBs, and every state received an allocation. CT's allocation was \$36 million, of which approximately \$26 million has been committed. Contact the CT Department of Community & Economic Development or the CT Development Authority for more information on the availability of these bonds.

In addition to the QECCB program, the ARRA included a program called the Energy Efficiency Conservation Block Grant program that provided a total of \$3.2 billion in grants to states to support energy efficiency retrofit projects. Connecticut received \$24.5 million. Nearly all these funds have already been allocated or expended. Contact the CT Department of Community & Economic

Development <http://www.ct.gov/ecd/site/default.asp> or the CT Development Authority <http://www.ctcda.com/> for more information on the availability of these bonds.

ESCO Financing (Commercial Leases, Internal Corporate Funds or Credit Lines)

ESCO financing is generally the most expensive financing available for ESPC projects, particularly for tax-exempt public agencies. Since ESCOs do not have direct access to tax-exempt financing sources, they must use commercial sources or their own internal funds or credit lines. Commercial credit lines carry higher interest rates. And, using an ESCO's internal corporate fund is subject to required rates of return for corporate shareholders. Additional financial risk premiums also may be charged to the project in exchange for the ESCO bearing all the financial risks associated with project repayment. The high cost of ESCO financing can impose limitations on the technical scope of the project and may place restrictive conditions on the terms of the energy performance contract.

Internal Capital

If a public institution has the capital available (from an internal energy savings fund or another source) to finance an ESPC project, it should seriously consider doing so. By avoiding interest rates, financing fees, and long-term payback schedules, an institution will start to benefit from energy savings sooner. Under such circumstances, it is still important to include a performance guarantee into the contract for an agreed upon length of time after installation is completed.

Incentives and Rebates

Utility Incentives and Financing

It is important to research all possible sources of incentives and rebates, as these sources of funding help lower the cost of financing and/or allow for more energy savings measures to be implemented. An ESCO can be helpful in identifying these options. Through the Connecticut Energy Efficiency Fund <http://ctsavesenergy.org/> Connecticut Light & Power (CL&P) and United Illuminating (UI) offer incentives and financing that can support ESPC projects in municipalities and state agencies.

Connecticut's small electric cooperatives also offer some incentives. The incentive programs provide cash payments for retrofit projects to help lower the total amount that needs to be financed. The total incentive amount depends on the scope and size of the project as well as other factors. In some cases, smaller municipal projects may be eligible for low interest loans. As with the cash incentives, the loan amount depends on variety of factors. Regardless of the project size, contact CL&P or UI to find out what utility incentives might be available for a given ESPC project.

State Financing Programs

In June of 2011, Public Act 11-80 established two new state energy agencies that might offer ESPC financing in the future:

- 1) The Clean Energy Finance and Investment Authority (CEFIA), the successor to the CT Clean Energy Fund, is a quasi-governmental organization that was established to provide low-cost financing for energy efficiency retrofits and other clean energy projects. Since the CEFIA is a newly created agency, it is still in the early stages of identifying and planning its programs. As funds become available to the agency, some of those funds might be made available for ESPC financing.

2) The Department of Energy and Environmental Protection (DEEP) combined the Department of Environmental Protection with the Department of Public Utility Control (now called the Public Utilities Regulatory Authority). The DEEP is exploring all methods to maximize efficiency in State and government buildings.

Energy Savings Insurance

Many insurance companies offer an insurance product to ESCOs that will cover an ESCO's liability in the event of a shortfall in the guaranteed energy savings of an ESPC project. You might consider whether or not an ESCO uses this type of insurance product when hiring an ESCO.

Additional Resources and Example Documents Provided in [Box.net](#) folders

- ESPC Financing Options, Toolkit for Higher Education (Clinton Climate Initiative)
- ESPC Financing Solicitation Package (Energy Services Coalition)
- Statewide Procurement of Master Lease Financing for ESPC Projects (Energy Services Coalition)
- Sample Equipment Lease Purchase Agreement for municipalities
- Examples of ESPC Projects that Combined Private and Public Sector Financing (Clean Energy Finance Center)
- ESPC Funding Vehicles - PowerPoint overview (Robinson & Cole, LLP)

Section 6 – Energy Services Agreement

6.1 Introduction

This Energy Services Agreement (ESA) is for the design, construction, guarantee, and follow-up monitoring of energy-saving projects. An energy audit was previously completed that identified the costs and savings of each project. The audit provides the basis to develop and negotiate this Energy Services Agreement.



The ESA is provided as Attachment G to the ESCO RFP, included in Appendix 3 of this document. It is a model document only and does not attempt to identify or address all circumstances or conditions you may encounter or desire. Consult with your Owner’s Representative, legal counsel and procurement staff to adapt it to meet your needs.

FAQs

Q: Is the ESA important to the ESPC process?

A: Negotiation of the ESA is one of the most important parts of the ESPC process. The ESA defines the legal contract between the organization and the ESCO. This contract should include the full scope of work developed from the IGA and include all the financial details of the project including financing terms and conditions, costs for all ECM implementation including markups, overhead and profit for the ESCO, the measurement and verification (M&V) plan to ensure project performance, and the savings guarantee from the ESCO provided for the savings identified. This document will be the legal instrument that defines the responsibilities and commitments for all parties to the agreement.

Q: Is it all right to use the Energy Service Agreement provided by the ESCO?

A: The model agreement included in this document is based on the Energy Services Coalition model agreements, which have been vetted by the major ESCOs as well as State Energy Officers from many other states (Not CT as of the time of this writing). Therefore, it is recommended that you use the agreement in the appendix of this document. ESCO contracts tend to be less favorable to an Owner. This will be a good starting point but it will be important, in the interests of due diligence, to have your own purchasing, finance and legal counsel staff review the terms and conditions to ensure a fair balance of risk and reward for both parties. As mentioned above, critical elements of this agreement include the financing details, M&V plan and guarantees. If sufficient in-house expertise is unavailable to help with these matters, it may be appropriate to procure outside professional services to represent your interests prior to entering into this important agreement.

Q: What is different about an ESA than the regular AIA contract documents we have been using for years on our construction projects?

A: Although the AIA has assembled an excellent set of contract documents for typical new construction projects they are not well suited for an ESPC contract. The main issue is that the product of an ESPC is “performance” and “savings”, while an AIA contract deliverable is a built structure. The risk allocation and profile of an ESPC project is totally different than that of a construction project. The model ESA provided in this document will give an Owner much more control over contract deliverables, and real recourse if any problems arise.

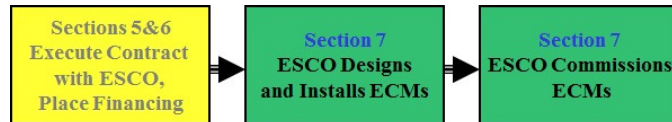
6.2 Best Practices

1. Ensure the entire IGA is incorporated into the ESA by reference. If sections are removed and added as schedules the chance of mistakes is increased.
2. Enlist the assistance of your legal counsel, finance staff, and facilities personnel from the beginning of the ESPC development process to avoid delays at the ESA stage.

Section 7 – Design, Construction, and Commissioning

7.1 Introduction

This section includes a brief description of how these items are handled in an ESPC project, and then lists some recommended Best Practices.



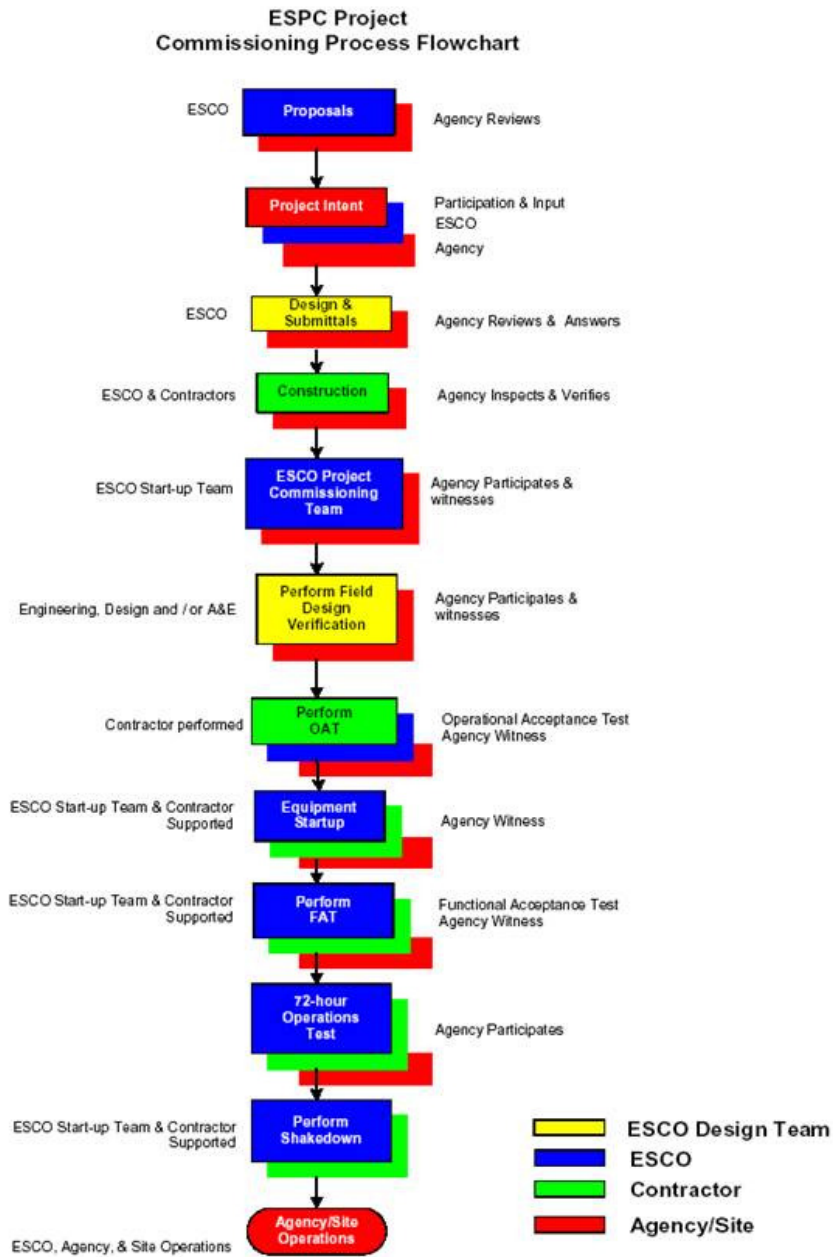
FAQs

Q: If an ESCO plans on installing a new (unfamiliar) piece of equipment, what should I commonly expect? A: It should be made the ESCOs responsibility to describe in detail how training for each ECM will be provided (to the Owner). The ESCOs approach should depend on the level of O&M responsibility to be assumed by the Owner (with respect to the new equipment). Though the ESCO is responsible for assuring ECM performance; the Owner will typically bear O&M responsibilities and as such be trained in a manner sufficient to perform the prescribed activities.

Q: Why should the Owner be concerned or place an emphasis on commissioning?

A: The intent of Commissioning is to ensure that all of the installed equipment and affected systems are operating as desired by the Owner, the Owner’s Representative, and the ESPC vendor to achieve the greatest levels of energy savings and system performance. See the chart below illustrating a typical commissioning process in an ESPC project.

Figure 3 - Commissioning Process



7.2 Design

Since the IGA has defined the scope of work in enough detail for the ESCO to secure ‘not to exceed’ pricing from subcontractors, ‘schematic’ design typically begins during the final measure development phase. This is necessary in order to obtain relative construction pricing assurance. The remaining design activities necessary to obtain building permits will immediately commence once the Energy Services Agreement (ESA) has been executed. These activities, along with the implementation of less technically challenging measure opportunities, initiate the formal construction phase of the project activity. As part

of the ESPC approach, the ESCO serves as both the professional engineer and the general contractor. Overlapping measure development and preliminary design as well as final design with implementation (construction) minimizes the project risk for the client and reduces the delivery schedule. During the final design phase, the Owner, along with his independent Owner's Representative (OR), and the ESCO work together to determine what methods and materials will maximize the owner's value – without compromising performance metrics. The process also allows the owner more opportunity, through design review, to make adjustments without having to rebid. Pricing will be maintained if the prescribed changes are minimal. Once designs are approved, the ESCO finalizes equipment/system selection, and furnishes equipment submittals to the Owner and OR.

7.3 Construction

The guaranteed maximum construction costs are based on the total project – not on a measure-by-measure basis. Major construction parameters (i.e., working hours, timelines, and required owner support, etc.) are all well-defined prior to actual construction. The transition into implementation should be seamless. Some measures, based on the level of complexity, can transition into the implementation phase in almost a continuous fashion; submittals and associated functions notwithstanding. Though continuous, the implementation of the ECMs will be a multi-phase process. Measures requiring little or no additional design, such as lighting and motor retrofits, can be initiated and completed prior to measures with extensive design elements and/or long lead times due to product procurement cycles, such as boiler and window replacements. Construction efforts with appropriate and diligent pre-planning will experience less time delays and allow the owner to reap energy savings more quickly while, at the same time, mitigate construction interest charges.

7.4 Commissioning (Cx)

The process of ensuring that systems are designed, installed, functionally tested and capable of being operated and maintained to perform in conformity with the project intent is the hallmark of the Cx process. As such, a Cx Plan (*final*) must be developed, and specifically tailored to the equipment selections, that will demonstrate both the project intent as well as the functionality of individual system performance and the capability to delivering the guaranteed level of project savings. A preliminary Cx Plan will be made part of the IGA. This plan, lacking specific equipment selections (in part), may be illustrative in process flow rather than provide explicit procedures. The Final Cx Plan will be formalized once all design details are known and submittals have been approved by the owner and the OR.

7.5 Design, Construction, and Commissioning Best Practices:

- 7.5.1** The ESCO should manage the selection of contractors and equipment suppliers after consultation with the Owner regarding responsible and acceptable bidders.
- 7.5.2** The ESCO, working with the OR, should maintain contact with the utility to maximize utility incentives. Further, the ESCO should involve the utility company to the extent necessary to verify energy efficiency improvements consistent with the utility's conservation program requirements – inclusive of pre-construction (baseline) verification.

- 7.5.3** Once design activities have been completed; the ESCO should develop and submit a detailed Cx Plan based on the design specifics of the project.
- 7.5.4** The design should match the intent of the IGA and be technically capable of delivering the guaranteed savings identified.
- 7.5.5** Prior to commencement of implementation; ESCO should deliver any required submittals to the owner for approval. The submittals should match the items included as basis for the design. This prevents the accidental purchase of less energy efficient equipment that may not achieve the guaranteed savings.
- 7.5.6** The ESCO should conduct (and allow for) design and construction meetings. Furthermore, the ESCO should issue meeting minutes within 3 business days of the meeting. Meeting minutes should include all identified issues of concern, identification of those responsible for resolving these issues, and the time period expected for resolution. Unresolved items should remain open from meeting to meeting until closed or resolved.
- 7.5.7** The ESCO should include appropriate line items in its schedule to account for CX and M&V planning, activities with Owner witnessing opportunities, and follow up report preparation, review and approval.
- 7.5.8** Payments (drawdowns) from the Financing Source during construction should follow industry standards; schedules of values should be submitted by the ESCO (for owner approval) based on the pricing guidelines set forth in the IGA. As with any construction effort, a mutually pre-defined level of retainage should be factored into the process. These monies are held in reserve to address any punchlist items that may arise.
- 7.5.9** Operation of all systems and equipment that are modified or installed as a result of the ESCO project should be verified (inspected, witnessed, etc.) by a qualified 'commissioning agent'.
- 7.5.10** The commissioning agent's plans, activities, and reports should be reviewed by the Owner and the OR to ensure compliance with the contract requirements.
- 7.5.11** System verification process should include pre-functional performance test (PFPT) and functional performance test (FPT) protocols, submitted by ESCO for approval once all submittals have been approved. The protocols should be witnessed by the owner as a condition to Cx approval.
- 7.5.12** Following Cx, but prior to project closeout, the ESCO shall develop and deliver a Final Cx Report documenting all Cx activities and results, to the owner for approval.
- 7.5.13** At project closeout; the ESCO should schedule a final inspection of the project with the owner and their OR. The utility may be invited as appropriate (or may be done as a separate activity). If the final inspection identifies items that are not completed or that requires correction, a 'punch list' (afore-mentioned) should be developed. The punch list should only contain minor items and nothing of a significant nature. If the final inspection confirms that the project is complete, the substantial completion date can be set for the warranty period.
- 7.5.14** The following chart details a recap of the best practice cycle for the Design, Construction and Cx phase of the project (from Commissioning Guidance Document for DOE Super ESPC's, 4/29/04):

7.6 Other Resources

More information is available at: http://www1.eere.energy.gov/femp/pdfs/comm_guide_espc.pdf

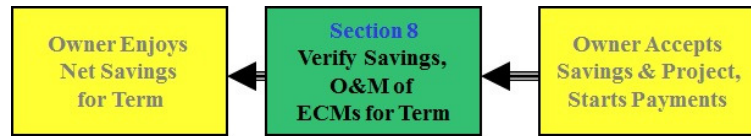
- 7.6.1** Continuous Commissioning - Implementing and committing to a continuous commissioning schedule is the surest means of mitigating the risk of energy savings degradation. The goal of continuous commissioning is to eliminate the risk of a much improved and now effectively performing building returning to a business as usual method of operating. Initial commissioning should be part of the ESCO's scope of work in a responsible ESPC, but beyond the term of the ESPC, sustaining energy savings is an issue of utmost importance for all facilities managers and other client stakeholders. Therefore, it is essential that owners strategically plan and adequately budget for on-going investments after an ESPC project's completion. For more resources on continuous commissioning, see FEMP Guide to Continuous Commissioning:

<http://eber.ed.ornl.gov/commercialproducts/contcx.html>

Section 8 – Measurement and Verification of Savings

8.1 Introduction

The measurement and verification of energy savings is the most important metric of an ESPC project.



According to *Efficiency Valuation Organization (EVO)* (provide a footnote here; briefly describe this organization, provide a web link), “Measurement & Verification (M&V) is the process of using measurement to reliably determine actual savings created within an individual facility by an energy management, energy conservation or energy efficiency project or program. As savings cannot be directly measured, the savings can be determined by comparing measured use before and after implementation of a project, making appropriate adjustments for changes in conditions.”

M&V of energy savings, generated through building systems retrofit and upgrades, requires diligent planning as well as unique energy engineering practices. Although several common practices exist for M&V of energy savings, the industry standard for formulating such practices are found within the International Performance Measurement and Verification Protocol (IPMVP) published by EVO. The IPMVP allows owners, ESCOs, and financiers of energy efficiency projects to quantify savings performance of ECMs. It provides an overview of current best practice techniques available for verifying savings from both traditionally funded and third-party financed energy and water efficiency projects.

According to EVO “The fundamental principles of good M&V practice are described below, in alphabetical order. Where is end of the quotation?

1. **Accurate** M&V reports should be as accurate as the M&V budget will allow. M&V costs should normally be small relative to the monetary value of the savings being evaluated. M&V expenditures should also be consistent with the financial implications of over- or under-reporting of a project’s performance. Accuracy tradeoffs should be accompanied by increased conservativeness in any estimates and judgments.
2. **Complete** The reporting of energy savings should consider all effects of a project. M&V activities should use measurements to quantify the significant effects, while estimating all others.
3. **Conservative** Where judgments are made about uncertain quantities, M&V procedures should be designed to under-estimate savings.
4. **Consistent** The reporting of a project’s energy effectiveness should be consistent between:
 - different types of energy efficiency projects;
 - different energy management professionals for any one project;
 - different periods of time for the same project; and
 - energy efficiency projects and new energy supply projects.

‘Consistent’ does not mean ‘identical,’ since it is recognized that any empirically derived report

involves judgments which may not be made identically by all reporters. By identifying key areas of judgment, IPMVP helps to avoid inconsistencies arising from lack of consideration of important dimensions.

5. **Relevant** The determination of savings should measure the performance parameters of concern, or least well known, while other less critical or predictable parameters may be estimated.
6. **Transparent** All M&V activities should be clearly and fully disclosed. Full disclosure should include presentation of all of the elements defined in Chapters 5 and 6 of the IPMVP Volume III for the contents of an M&V Plan and a savings report, respectively.

FAQs

Q: Can't I just use my utility meter to measure savings after an ESPC project implementation?

A: Most often, an ESPC project is comprehensive in nature and involves multiple conservation measures. There may be interactions between the savings created by one ECM that affects the energy use of other equipment and systems. There may also be changes to the overall baseline energy use of a building or campus caused by changes in building use, hours of operation and weather. If the savings created by one ECM affect the performance of other systems and equipment, it is important that the M&V plan identifies these variables and define their treatment and adjustment so that these effects can be taken into account during the performance period of the project. “Just looking at the utility bills” doesn’t always show an exact identification of the savings, as they are really cost avoidance.

Q: The M&V plan compares energy savings to the baseline energy use of the facility. How is this baseline established?

A: The total energy use of the facility can be benchmarked from two or three years of utility use data prior to the beginning of construction for the project. Specific ECMs may require short-term monitoring to document conditions of use that cannot be determined from the building meter data. Examples of this include data logging of the hours of operation for lighting in spaces of a similar occupancy type such as corridors, classrooms and offices. For measures involving equipment replacement to gain higher efficiency operation, it may be necessary to data log the equipment run-time for several days or weeks to understand its performance under different load conditions. An example would include replacement of an existing chiller with a higher efficiency model. A performance baseline could be established by monitoring the chiller electrical demand along with the temperature and relative humidity for a typical performance. ***In all cases, it is critical that the baseline monitoring be performed prior to the start of construction.***

Q: When does the M & V performance period began and how long does it last?

A: The performance period should begin when all the construction work is complete including all controls programming and seasonal commissioning of equipment. The ESCO contract should detail the definition of when the performance period begins. The performance period will depend on the

measures agreed-upon and the duration of testing to demonstrate performance achievement that are outlined in the contract. Generally, the performance period is dependent on the term of the contract, but is usually at least 12 months although for a specific piece of equipment, the performance period could begin after load testing demonstrates the expected efficiency level guaranteed by the ESCO.

8.2 M&V Best Practices

1. Incorporate latest IPMVP guidelines in M&V planning and practice: <http://www.evo-world.org/>.
2. Additional guidelines include: ASHRAE Guideline 14-2002, Measurement of Energy and Demand Savings, developed by ASHRAE to provide guidance on the acceptable level of M&V of energy and demand savings for commercial transactions. Please note: ASHRAE Guideline 14 does not address water efficiency projects. Provide a web link to ASHRAE, ASHRAE guidelines
3. All parties (ESCO, Owner, and Owner's Representative) should agree on the method for establishing an energy baseline data as well as M&V activities during development of the IGA.
4. Baseline development:
 - 4.3 The key to successful coordination b/w Owner-ESCO for a sustainable contract
 - 4.3.1 The basis for managing risk for all parties involved
 - 4.3.2 Need to modify Baselines to account for current conditions, on-going needs
 - 4.3.3 Best for both parties to adjust Baseline based on upfront understanding of Baseline and sources of adjustments over time.
5. Energy, water or demand savings cannot be directly measured, since savings represent the absence of energy/water use or demand. Instead, savings are determined by comparing measured use or demand before and after implementation of a program, making suitable adjustments for changes in conditions. The following example from EVO is illustrative.

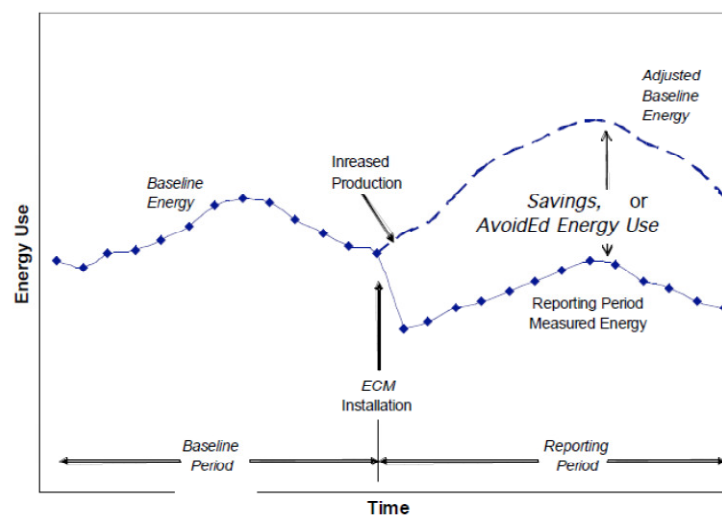


Figure 3 - Example Energy History

As an example of savings determination process, Figure 3 shows the energy-usage history of an industrial boiler before and after the addition of an *energy conservation measure (ECM)* to recover heat from its flue gases. At about the time of *ECM* installation, plant production also increased. To properly document the impact of the *ECM*, its energy effect must be separated from the energy effect of the increased production. The “*baseline energy*” use pattern before *ECM* installation was studied to determine the relationship between energy use and production. Following *ECM* installation, this *baseline* relationship was used to estimate how much energy the plant would have used each month if there had been no *ECM* (called the “*adjusted-baseline energy*”). The *savings*, or ‘*avoided energy use*’ is the difference between the *adjusted-baseline energy* and the energy that was actually metered during the *reporting period*. Without the adjustment for the change in production, the difference between *baseline energy* and *reporting period* energy would have been much lower, under-reporting the effect of the heat recovery. It is necessary to segregate the *energy* effects of a *savings* program from the effects of other simultaneous changes affecting the *energy* using systems. The comparison of before and after energy use or demand should be made on a consistent basis, using the following general Equation:

$$\text{Savings} = (\text{Baseline-Period Use or Demand} - \text{Reporting-Period Use or Demand}) \pm \text{Adjustments}$$

The "Adjustments" term in this general equation is used to re-state the use or demand of the *baseline* and *reporting periods* under a common set of conditions. This adjustments term distinguishes proper *savings* reports from a simple comparison of cost or usage before and after implementation of an *energy conservation measure (ECM)*. Simple comparisons of utility costs without such adjustments report only cost changes and fail to report the true performance of a project. To properly report “*savings*,” adjustments must account for the differences in conditions between the *baseline* and *reporting periods*.

6. Other Baseline changes: occupancy, hours of use, equipment changes, building use changes, etc. Conditions and equipment can and will change over time.
 - 6.1 Need to identify these variables upfront. (e.g., outside-air is usually too low, need to adjust baseline)
7. The M&V Plan should include the following elements:
 - 7.1 A description of the ECM and its intended result.
 - 7.2 An overview of the intended IPMVP option to be used.
 - 7.3 Measurement methods and equipment to be used.
 - 7.4 Cx of newly installed ECMs.
 - 7.5 Documentation of post ECM energy and operating data (Reconciliation Report).
 - 7.6 Savings report.
 - 7.7 Costs of M&V operations and equipment.
 - 7.8 Performance period M&V activities, with frequency and duration.
 - 7.9 Specify how the ESCO will reimburse the owner for the difference between verified savings and the guaranteed level of savings. Further, specify the timing of when the ESCO will make reimbursement to the owner.

8. The Contract should include a provision for a Post-Installation M&V Report, which should be delivered to the owner within 30 days of the end of the Commissioning phase for review and acceptance. This report will be able to forecast whether the installed ECMs will achieve the guaranteed energy savings, or not. The Owner and OR should thoroughly review the report, and comment as appropriate, the ESCO responds to the comments, and the report is finalized. Once the Post-Installation report is approved, the Owner should accept the project, and begin making payments.
9. During the performance period, periodic M&V reporting should be conducted to verify persistence of savings. The frequency of reporting can vary depending on the needs of the owner or project. It is recommended that Annual M&V reports be submitted every year for the length of the contract term, and that they be reviewed by an M&V expert to ensure compliance with the contract. If the Owner is interested in reducing costs during the out years of the contract, the M&V report can be eliminated. However, the recommended minimum length of M&V is 2-3 years, if not defined by statute.
10. Performance period M&V reports should include the following elements:
 - 10.1 An executive summary that gives a brief description of the ECMs installed and whether the guaranteed savings were achieved.
 - 10.2 The body of the report should contain:
 - 10.2.1 Calculation of the energy savings verified for each measure.
 - 10.2.2 Brief description of any changes to the facilities identified. If these changes have an impact on the verified savings, and the resultant (calculated) impact on the savings.
 - 10.3 Any other agreed to deliverables that were proposed, such as greenhouse reduction metrics or building energy performance benchmarks.
 - 10.4 All physical measurements that were performed (e.g., boiler combustion test results, motor runtime logs, etc.) If necessary these can be attached via appendix to the main report, including any metered printout results.
 - 10.5 The guaranteed minimum energy savings (identified in the IGA) and verified actual energy savings should be identified in tabular form for easy reference by the owner and his third-party consultant. Furthermore, the energy savings should be:
 - 10.5.1 Identified in the native unit of measure for each utility commodity, such as kWh or Therms, for both guaranteed and verified.
 - 10.5.2 Translated into utility bill dollar savings; and
 - 10.5.3 Denoted in dollars, using the appropriate pre-defined escalation factors effecting performance period savings (e.g., utility and labor escalations) should be factored as required.
 - 10.6 If the report indicates guaranteed savings (aggregate) are not being met, the ESCO should provide proposed remedies to correct the deficiencies. The ESCO should detail and specify whether and by when the physical aspects of the project that led to the loss of savings will be corrected.
11. Based on the importance of M&V, the Owner should rank M&V quality control experience and expertise in high regard when soliciting for an independent third-party Owner's Representative.

Appendix 1-Working Group Participants

Connecticut Light & Power, United Illuminating Company, and Celtic Energy would like to thank the following people for participating in this important and complex initiative. It could not have been accomplished without the sacrifices everyone made to spend their own time and effort on a pro bono basis.

List of Participants & Observers to the Energy Savings Performance Contracting Initiative				
Last	First	Organization	Phone Number	E-mail Address
Active Participants				
Bleuher	Chris	Schneider Electric	860-329-3748	Chris.Bleuher@buildings.schneider-electric.com
Boman	Ed	Town of Fairfield	203-256-3010	eboman@town.fairfield.ct.us
Daylor	James	Ameresco	508-598-3035	jdaylor@ameresco.com
Diamond	Craig	Clean Energy Finance Center	860-904-2734	craig@cleanenergyfinancecenter.org
Fare	Eric	Schneider Electric	817-988-0916	eric.fare@schneider-electric.com
Gorham	Jonathan	Gorham Associates	203-376-2871	jon@jongorham.com
Guinan	Mary Phil	Guinan Associates	860-241-8990	mpguinan@snet.net
Haaheim	Justin	Clean Water Action	860-232-6232	jhaaheim@cleanwater.org
Hahs	Dale	Energy Services Coalition	918-851-1323	dhahs@energyservicescoalition.org
Halpin	Chris	Celtic Energy	860-882-1515	Chris@celticenergy.com
Murphy	Stephen	DPW	860-713-5703	stephen.murphy@ct.gov
Nathanson	Ken	Con Edison Solutions	781-203-2705	nathansonk@conedsolutions.com
Reavey	Patrick	UI	203-499-2028	patrick.reavey@uinet.com
Ruckes	John	DEEP		john.ruckes@po.state.ct.us
Scricca	John	NU	860-665-5567	scricjj@nu.com
Smith	Roger	Clean Water Action	860-232-6232	rsmith@cleanwater.org
Walsh	Mike	Town of East Hartford	860-291-7240	mw Walsh@easthartfordct.gov
Wertheimer	Mike	Attorney General's Office	860-827-2620	michael.wertheimer@ct.gov
Observers or Simply Copied on Communications				
Brockway	Rebecca	Guinan Associates	860-241-8990	guinan@snet.net
Cole	Tim	Energy Efficiency Board	860-874-7134	tim@westwindconsulting.net
Gaudiosi	Jeff	Manufacturing Alliance of CT	203-596-1900	jgaudiosi@mact.org
Haller	Roy	UI	203-499-2025	roy.haller@uinet.com
Howland	Jamie	Environment Northeast	860-246-7121	jhowland@env-ne.org
Jacobs	Cindy	DEEP/PURA	860-827-2853	cindy.jacobs@po.state.ct.us
Motta	Jim	NU	860-665-3098	mottaj@nu.com
Popinchalk	Paul	Celtic Energy	860-882-1515	Paul@CelticEnergy.com
Rodrigue	Rick	DEEP	860-424-3429	Richard.Rodrigue@ct.gov
Simmonds	Tim	NU	860.665-4518	simmotv@nu.com
Steeves	Rich	OCC	860-827-2912	richard.steeves@ct.gov
Tine	David	Celtic Energy	860-882-1515	david@celticenergy.com
Tumidaj	Les	Strategic Energy Group	503-914-4184	les@strategicenergygroup.com
Volkman	Jim	Strategic Energy Group	503-914-4175	jim@strategicenergygroup.com

Appendix 2 – Model Owners Representative RFQ and Agreement

Request for Qualifications

for

OWNER'S REPRESENTATIVE FOR PERFORMANCE CONTRACTING

For all Town of _____ Buildings

Town and School

Release Date: **June 20, 20XX**

Deadline for Submission: **July 13, 20XX**

Contact Information

For additional information:

XXXXX

YYYY

Anytown, CT

energymanager@town.ct.us

1. OVERVIEW OF PROJECT

The Town of _____ (the Town) is seeking a “Third Party Owner’s Representative” (the Vendor) to assist the Town in the procurement, management, and implementation of Performance Contracts (PC) for multiple, municipal energy conservation projects.

The Town anticipates awarding a contract to the selected vendor for Phase I with an option to award an additional contract for Phase II if it is determined to be in the best interest of the Town.

Phase I Services

The selected Vendor will perform some or all of the following basic services:

1. Evaluate all Municipal facilities for performance contracting projects.
2. Assist the Town in the preparation of a Request for Proposal for an Energy Services Company (ESCO).
3. Compile and organize existing utilities information.
4. Compile and organize related Municipal background information such as building drawings, reports, operations and maintenance issues, etc.
5. ESCO RFP Advisement: Assist in review of the ESCO RFP prior to publication.
6. Assist in the scheduling of and participate in ESCO pre-proposal conference
7. Assist in the preparation of Energy Services Company (ESCO) Municipal tours.
8. Assist as necessary in answering technical questions during bid period.
9. ESCO Evaluation: Participate in an advisory capacity in the evaluation of RFP responses, the preparation of ESCO selection committee, and the interview of the short-listed ESCOs.

Phase II Services

Upon completion of Phase I the Town may request the following services from the Vendor:

10. Investment Grade Audit Agreement (IGAA) Review: Assist in the negotiation of the IGA agreement with the ESCO.
11. IGA Review: Including baseline calculations, energy model review, price reasonableness review, review of energy and operating cost saving measures including commissioning and training provisions proposed by the ESCO and make recommendations.
12. Contract Negotiations and Contract Review: Act in an advisory role in contract negotiations, review the draft contract and make recommendations.
13. Measurement and Verification (M&V): Assist in quality control of ESCO M&V services. Assist in development of M&V protocol in conjunction with ESCO and Town to ensure each project meets its goals over the entire contract term.
14. Additional ESCO-PC Assistance: Provide additional assistance in the design, contractual structure, implementation, and management of ESCO-PC, per requests from the Town.

*MINIMUM QUALIFICATIONS***In order to be considered for selection by the Town, Vendors must:**

- 1 Demonstrate a working knowledge of the ESCO -PC process.
- 2 Have a licensed CT P.E. on staff, and at least one of the following on staff; an Association of Energy Engineers Certified Energy Manager (CEM) or Certified Measurement & Verification Professional (CMVP).
- 3 Must have a minimum of five (5) years professional consulting experience in the development of energy performance contracts, including but not limited to ESCO RFPs, M&V, IGAs, Energy Surveys, etc.
- 4 Must demonstrate a minimum level of fiscal and programmatic infrastructure available to meet all federal and state required regulations regarding cash management, fiscal/programmatic reporting and proper agency functioning.

In order to fulfill these requirements, all responses should include the following:

1. A listing of key Vendor personnel, with descriptions of their roles and responsibilities, qualifications and experience within the firm's operating structure.
2. Vendors must state a willingness to work closely with the Town to help the Town refine its performance contracting process.
3. Vendors must include a statement that no conflict of interest issues would exist if contracted to perform these services while under contract for these services.

COMPANY BACKGROUND**PRIMARY VENDOR INFORMATION**

Vendors must provide a company profile. Information submitted shall include:

- Company ownership structure (sole proprietor, partnership, etc).
- Incorporated companies must identify the state in which the company is incorporated and the date of incorporation.
- Dun and Bradstreet number.
- Federal Tax Identification Number.
- Disclosure of any significant prior or ongoing contract failures (actual or alleged), contract breaches, any civil or criminal litigation or investigation pending which involves the Vendor or in which the Vendor has been judged guilty or liable.
- Location(s) of company offices and location of the office that will provide the services described in this RFQ.

- Number of employees both locally and nationally.
- Location(s) from which employees will be assigned for this contract.
- Name, address and telephone number of the vendor's point of contact for a contract resulting from this RFQ.
- Company background/history and why vendor is qualified to provide the services described in this RFQ.
- Length of time vendor has been providing services described in this RFQ to the public and/or private sector. Please provide a brief description.
- Whether the vendor ever been engaged under contract by any Town agency? Please provide a brief description.
- A list of all proposed persons including subcontractors working on this project that are currently employed or have been employed by the Town.
- Resumes of the key staff who will be responsible for performance of any contract resulting from this RFQ.

REFERENCES

Vendors must provide a minimum of three (3) references for similar projects preferably performed for, state and/or local government clients within the last three years. Please include:

- Client name
- Project description
- Project dates (starting and ending)
- Staff assigned to reference engagement that will be designated for work per this RFQ.
- Client project manager name, telephone number, fax number and e-mail address.

SUBCONTRACTOR INFORMATION

Submissions to this RFQ must identify any potential subcontractors and include the following information:

- Outline the contractual relationship between the awarded vendor and each subcontractor.
- An official of each proposed subcontractor must sign a statement to the effect that the subcontractor has read and will agree to abide by the awarded vendor's obligations.
- Identify specific subcontractors and the specific requirements of this RFQ for which each proposed subcontractor will perform services.
- Provide the same information and any requisite licensure for any proposed subcontractors as requested in the Primary Vendor Information section.

- References as specified above must be provided for any proposed subcontractors.
- The Town may require that the awarded vendor provide proof of payment to any subcontractors used for this project. Responses should include a plan by which, at the Town’s request, the Town will be notified of such payments.
- Primary vendor shall not allow any subcontractor to commence work until all insurance required of the subcontractor is provided to the Town.
- Primary vendor must notify the Town of the intended use of any subcontractors not identified within their response and receive Town approval prior to subcontractor commencing work.

SUBMITTAL INSTRUCTIONS

The Town will accept questions and in writing, either by mail, facsimile or e-mail regarding this RFQ June 26, 20XX. All questions must be in writing and be sent to the Director of Facilities. Please provide company name, address, phone number, fax number, e-mail address and contact person when submitting questions.

RFQ TIMELINE

<u>TASK</u>	<u>DATE/TIME</u>
Deadline for submitting questions	6/26/20XX 4:30 p.m.
Answers to all questions submitted available by	7/6/20XX 4:30 p.m.
Deadline for RFQ submission	7/13/20XX 2:00 p.m.

These dates represent a tentative schedule of events. The Town reserves the right to modify these dates at any time, with appropriate notice to prospective vendors. The Town reserves the right to invite vendors in for interviews. It is solely at the Town’s discretion as to which qualifying vendors and how many are chosen to be interviewed.

RFQ SUBMISSION REQUIRMENTS:

- Provide one (1) signed original, three (3) identical hard copies and one electronic version.
- Submission must be submitted to the Town in one sealed package and be clearly marked:
- Response to “RFQ for PERFORMANCE CONTRACT OWNER’S REPRESENTATIVE”.

- Responses must be received at the address referenced below no later than date and time referenced above. Vendors may submit their responses any time prior to the deadline.
- Submissions that arrive after the time and date referenced above or are submitted to an office other than the one indicated below WILL NOT BE ACCEPTED by the Town.
- Responses shall be submitted to:

XXXXX

YYYY Street

Anytown, CT

energymanager@town.ct.us

- The Town will not be held responsible for envelopes mishandled as a result of it not being properly prepared. Responses may be modified by written notice provided such notice is received prior to the RFQ submission deadline.
- Responses are to be prepared in such a way as to provide a straightforward, concise delineation of capabilities to satisfy the requirements of this RFQ. Emphasis should be concentrated on conformance to the RFQ instructions, responsiveness to the RFQ requirements, and on completeness and clarity of content.
- Responses must be signed by an individual(s) legally authorized to bind the vendor.

EVALUATION AND AWARD PROCESS

- The evaluation of submissions will be performed by a committee consisting of Town employees or their designees.
- The committee shall select three (3) firms from the proposals submitted and rank those three firms in priority order based on qualification selection procedures. The Town shall then contact the first ranked vendor to request in writing a detailed fee proposal for Phase I services.
- The Town will attempt to negotiate a fair and equitable fee consistent with the project program and the professional services required for the specific project. In the event a fee cannot be agreed upon, the Town shall terminate the negotiations and shall repeat the notification and

negotiation process with the next ranked vendor on the selection list. In the event a fee cannot be agreed upon with the second ranked vendor, the process will be repeated with the third ranked vendor. If a fee still cannot be agreed to, the Town shall review the history of negotiations and make appropriate determinations including program adjustments so as to lead a negotiated contract with one of the original three firms selected. Such renegotiation with the firms shall be carried out in the original selection order. The negotiation process will continue until a fee has been determined that is agreed to by the Town and the vendor.

APPENDIX I**TOWN OF XXXXXX, CT****INSURANCE REQUIREMENTS**

The successful bidder shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from, or be in connection with the performance of the work hereunder by the individual or the firm, his agents, representatives, or employees. The cost of such insurance shall be included in the proposal.

For the purpose of this clause, the term “successful bidder” shall also include the individual’s or firm’s respective officers, agents, officials, employees, interns, volunteers, boards and commissions.

A. Minimum Scope and Limits of Insurance

1. Broad Form Comprehensive General Liability

\$1,000,000 combined single limit per occurrence for bodily injury, personal injury, property damage, and products/completed operations.

2. Automobile Liability

\$1,000,000 combined single limit per occurrence for bodily injury and property damage

3. Umbrella Liability

\$1,000,000 per occurrence, following form.

4. Workers’ Compensation and Employer’s Liability

Limits as required by Connecticut State Law

5. Personal Property Coverage

Adequate insurance to cover the value of personal property (including but not limited to, personal computers) belonging to the auditor while located on Town property, while in use or in storage, for the duration of the contract.

B. Aggregate Limits

Any aggregate limits must be declared to and be approved by the Town. At the option of the Town, the insurer shall increase or eliminate the aggregate limit and notify the Town of any erosion of aggregate limits.

C. Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and be approved by the Town. At the option of the Town, the insurer shall reduce or eliminate such deductibles or self-insured retentions as regards the Town and the auditors shall procure a bond, which guarantees payment of the losses and related investigations claims administration and defense expenses. At no time will the Town be responsible for the payment of deductibles or self-insured retentions.

D. Notice of Cancellation or Non-renewal

Each insurance policy required by this Exhibit shall be endorsed to state that coverage shall not be suspended, voided, canceled, or reduced, either in coverage or in limits, except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the Town.

E. Other Insurance Provisions

The policies are to contain, or be endorsed to contain, the following provisions:

1. Liability (General, Automobile, Professional) Coverages:

- a. **“The Town of XXXXX and its respective officers, agents, officials, employees, volunteers, boards and commissions” are to be named as additional insureds** with regards to liability arising out of activities performed by or on behalf of the auditor; products and completed operations of the auditor; premises owned, leased or used by the auditor. The coverage shall contain no special limitations on the scope of protection afforded to the Town.
 - b. The auditor’s insurance coverage shall be the primary insurance as regards the Town. Any insurance maintained by the Town shall be in excess of the auditor’s insurance and shall not contribute with it.
 - c. Any failure to comply with the reporting provisions of the policies shall not affect coverage provided to the Town.
 - d. Coverage shall state that the auditor’s insurance shall apply separately to each insured against whom a claim is made or a suit is brought, except with respect to the limits of the insurer’s liability.
2. **Workers’ Compensation and Employer’s Liability Coverage**
- a. The insurer shall agree to waive all rights of subrogation against the Town for losses arising from the work performed by the auditor for the Town.
 - b. If State statute does not require the auditor to obtain Workers’ Compensation insurance, then the auditor shall furnish the Town with adequate proof of the self-employment status. The auditor agrees to waive all rights of claims against the Town for losses arising from the work performed by the auditor. In the event that during the contract this self-employment status should change, the auditor shall immediately furnish proper notice to the Town and a certificate of insurance indicating that Workers’ Compensation insurance and Employer’s Liability coverage has been obtained by the auditor as required by this Exhibit.

F. Acceptability of Insurers

1. Insurance is to be placed with insurers which have a Best’s rating of at least A.
2. Insurance companies must either be licensed to do business in the State of Connecticut or be deemed to be acceptable by the Town’s Director of Finance.

G. Verification of Coverage

The auditor shall furnish the Town with certificates of insurance effecting coverage required by this clause. The certificates and endorsements for each insurance policy are to be signed by a person authorized by the insurer to bind coverage on its behalf. The certificates and

endorsements are to be received and approved by the Director of Finance before work commences. Renewal of expiring certificates shall be filed thirty (30) days prior to expiration. The Town reserves the right to require complete, certified copies of all required policies, at any time.

All insurance documents required by this Exhibit shall be mailed to the Director of Finance.

AGREEMENT

TOWN OF _____

AND

THIS AGREEMENT made this _____ day of _____, 2011 by and between the TOWN OF _____ (here in after referred to as the Town) located at _____ and _____ (here in after referred to as Consultant, located at _____.

WHEREAS, Consultant is in the business of providing energy savings performance contract consulting services as set forth in this Agreement; and

WHEREAS, the Town desires that Consultant provide energy savings performance contract consulting services as set forth in this Agreement; and

NOW THEREFORE, in consideration of the mutual promises and covenants contained in this Agreement the parties hereto mutually agree as follows:

TERM OF AGREEMENT: this Agreement shall be in effect for the PERIOD _____, 2011 to _____, 2012 unless terminated under terms set forth herein.

SCOPE OF SERVICES: Consultant will provide the following services:

Consultant will provide third party Owner’s Representative consulting services in accordance with standard industry practices and concurrent with the progress of the Town’s Performance Contracting (PC) project development. Consultant will complete the following tasks (Based on the Town’s RFQ requirements):

- 1. Develop an RFP to secure an Energy Services Company to upgrade the energy efficiency of Town owned facilities through a performance contract.**
 - 1.1. Meet with Town staff and Energy Committee members to explain the ESPC process, ensuring all members are comfortable with the process prior to developing the ESCO RFP.
 - 1.2. Work with the Town Procurement and the Town Engineering, Construction and Facilities staff to set goals and commitments.

- 1.3. Evaluate all Municipal facilities for performance contracting projects.
- 1.4. Assist the Town in selecting the initial candidate facilities for the ESCO competition to be included in the Program.
- 1.5. Assist in the preparation of an RFP and Appendix data. Tasks will include:
 - 1.5.1. Modify it to comply with the Town Charter language as well as standard ESPC protocols in use across the country. RFPs that are based on “Open Book” pricing gives the Town the ability to dispense with unneeded wrangling over project costs.
 - 1.5.2. Conduct initial assessments of the facilities included in the project RFP. It is recommended that a few buildings are selected for the ESCOs to evaluate and make recommendations on, as discussed above. This provides several benefits, including shortening the solicitation period, and the review time required by the Town. It also reduces the amount of time and effort each ESCO needs to invest in the proposal to a manageable amount. Since only one firm will be selected it isn’t fair to make multiple firms spend significant sums developing proposals.
 - 1.5.3. Consultant will conduct a more detailed assessment for the several buildings that have been selected for the ESCOs to conduct Preliminary Audits upon.
 - 1.5.4. Consultant will evaluate and prepare a brief (2-4) list of minimum mandatory energy conservation measures (ECMs) that each ESCO will be asked to propose upon. This creates an opportunity to conduct an “apples to apples” comparison on ECM approach and pricing.
 - 1.5.5. Meet with Operation and Maintenance (O&M) staff to assess chronic problems and other improvement opportunities that can be addressed by the ESPC program.
 - 1.5.6. Prepare a list of O&M improvements for ESCOs to evaluate during proposal preparation.
 - 1.5.7. Appendix data that Consultant will help assemble may include as-built plans, specifications, reports, equipment cut-sheets, utility data, O&M data, etc.
 - 1.5.8. Submit comments and contract RFP items to the Town for consideration.

- 1.5.9. Once the Town has made modifications to the RFP, Consultant will conduct a final review.
 - 1.6. Explain the financing aspects of ESPC, and discuss possible incentives and grants from utility, State and Federal Agencies.
 - 1.7. Explain the concept of Measurement & Verification (M&V), and assist the Town with M&V protocol selection/acceptance.
 - 1.8. Participate in miscellaneous conference calls, email correspondence, etc. during RFP development.
 - 1.9. Assist with and monitor the release of the RFP by the Town.
 - 1.10. Organize and attend Initial ESCO and Pre-bid Meeting and Municipal tours. Consultant will fully explain the expectations of the RFP to the ESCOs, and answer any questions that arise during the tour.
 - 1.11. Answer technical questions and clarifications during bid period.
- 2. Review and evaluate the proposals submitted by the ESCO's. Submit a written report with comments.**
- 2.1. Consultant will review the ESCOs' proposals, including the preparation and submission of comments. Meet with Selection Committee to explain expectations of the Proposal Review. CEI will provide both Qualitative and Quantitative evaluation sheets to assist the Town in reviewing the proposals. Assist the Town with establishing a shortlist of firms to interview.
 - 2.1.1. Attend all ESCO presentations. Prepare and ask pertinent questions to aid in the selection process.
 - 2.1.2. Participate in the review and selection recommendation of an ESCO to proceed forward with the development of a detailed energy audit. It is important to note that we will ***not*** be voting members of the selection committee, but acting in an advisory capacity only. It is recommended that only Town employees or Energy Committee members comprise the selection committee.

3. Attend meetings as required with all interested parties.

- 3.1. Attendance at up to six meetings is included in description above. Once hired, Consultant will finalize the scope and fees associated with the project so the Town knows exactly what their costs will be.

PAYMENT SCHEDULE: In full consideration of services describe above numbered 1 through 3, to be rendered by Consultant to the Town, for the term of this Agreement, the Town agrees to pay Consultant the lump sum, including expenses fee of **\$XXXXX.XX**.

Additionally, for any optional services not outlined above but requested by the Town and rendered by Consultant during the term of this agreement, the Town agrees to pay Consultant on an hourly basis according to the rates in effect at the time the services are rendered according to the Professional rate Schedule in effect at the time. Expenses for automobile travel will be reimbursed according to IRS guidelines. All other appropriate expenses will be reimbursed using standard industry practices.

INVOICE DUE ON MONTHLY BASIS: Consultant will submit invoices for services rendered on a monthly basis. The invoice shall include a statement for the billing period showing the percentage of the project completed, the types of services rendered, and the fees payable. Payment to Consultant shall be made within thirty (30) days from receipt of invoice.

INDEPENDENT CONTRACTOR: All employees of Consultant shall be deemed employees of Consultant for all purposes and Consultant alone shall be responsible for their work, personal conduct, direction and compensation. Consultant acknowledges that it will not hold itself, its officer's employees and/or agents out as employees of the Town. Consultant understands and acknowledges that it is retained by the Town only for the purposes and to the extent set forth in this Agreement and its relationship to the Town, shall during the period of its services hereunder, be that of an independent contractor. Neither Consultant nor its employees shall be considered as having employee status and shall not be entitled to participate in any of Town's employee benefit programs including but not limited to: Social Security, Medicare, Worker's Compensation, retirement fringe benefits, unemployment insurance, liability insurance, and disability insurance. Similarly, Consultant, its officers, its employees, and/or agents shall not be considered as having employee status for the purposes of any other rights, privileges or benefits derived from employment with the Town. Consultant agrees that this Agreement does not offer benefits of any nature whatsoever upon it other than payment for services provided herein. Consultant shall not assert any claim for additional benefits of any nature, including, but not limited to, unemployment compensation benefits, by reason of the services to be performed pursuant to this Agreement. Consultant shall not be entitled to assert any claim to entitlements pursuant to any collective bargaining Agreement now or hereafter in effect between the Town and its employees.

INSURANCE PROVISION: **Insert Town Insurance requirements here**

NOTICES: Any notices to be given under this Agreement by either party to the other may be effectuated by personal delivery in writing or by mail, registered or certified, postage prepaid with return receipt requested. Each party may change their address by giving written notice in accordance with this paragraph. Notices delivered personally will be deemed communicated as of actual date of receipt; mailed notices will be deemed communicated as of two days after mailing.

Notices shall be delivered or mailed to:

Town of _____

_____, CT 06XXX

ASSIGNMENT OF CONTRACT: Consultant shall not Sublet, transfer, assign or otherwise dispose of this contract or any portion thereon or of their right, title or interest therein, or of their obligations there under, without the written consent of the Town.

DISCRIMINATION: Consultant warrants that the services they provide to the Town pursuant to this Agreement shall be provided without regard to race, creed, color, sex, sexual orientation, national origin, religion, age or disability.

GOVERNING LAW: This Agreement shall be governed by the laws of the State of Connecticut.

SEVERABILITY: If any term, provision, covenant or condition of this Agreement, or the application thereof to any person, place or circumstance shall be held by a court of competent jurisdiction to be invalid, unenforceable or void, the remainder of this Agreement not so held shall remain in full force and effect.

NO PRIOR AGREEMENTS: This Agreement constitutes the full and complete Agreement between the Town and Consultant, and as such, it supersedes all prior written and oral Agreements, commitments or understandings with respect thereto. This Agreement may not be altered, changed, added to, deleted from or modified in anyway except through the mutual written consent of both the Town and Consultant.

AGREEMENT CONSTRUCTION: This Agreement has been arrived at mutually and is not to be construed against any party hereto as being the drafter hereof or causing the same to be drafted.

REPRESENTATIONS AND WARRANTIES: Consultant represents and warrants: 1) that Consultant has no obligations, legal or otherwise, inconsistent with the terms of this Agreement; 2) that the performance of the services to be provided in this Agreement does not and will not violate any applicable law, rule or regulation or any proprietary or other right of any third party; and 3) that Consultant has not entered into or will not enter into any Agreement (whether oral or written) which does or will conflict with this Agreement.

AMENDMENT: This Agreement may only be amended in writing and the written amendment must be signed by the authorized representatives of both parties.

NONWAIVER: No action or failure to act by Consultant or the Town shall constitute a waiver of any right or duty afforded to them under this Agreement, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed to in writing.

AUTHORITY TO ENTER AGREEMENT: The undersigned representative of Consultant hereby represents and warrants that the undersigned is an authorized representative of Consultant with full legal rights, power and authority to enter into this Agreement on behalf of Consultant and to bind Consultant with respect to the obligations enforceable against Consultant in accordance with its terms.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day and year first above written.

Date: _____

By: _____

Date: _____

By: _____

Appendix 3 – Model ESCO RFP Document

LEGAL NOTICE

TOWN OF _____, CONNECTICUT

REQUEST FOR PROPOSALS

[for Energy Performance Contracting Services]

July __, 2011

Sealed bids for the services named above will be received until ____ AM/PM on _____, 2011. Thereafter, proposals will be opened in public.

The Town reserves the rights to: amend or terminate this Request for Proposals; accept all or any part of a proposal; reject all proposals; waive any informalities or non-material deficiencies in a proposal; and award the proposal to the proposer that, in its judgment, will be in the Town's best interests.

TOWN OF _____, CONNECTICUT

REQUEST FOR PROPOSALS FOR

ENERGY PERFORMANCE CONTRACTING SERVICES

Proposal Number: XXX

Proposal Opening Date: XXX

Proposal Opening Time: XXX

Proposal Opening Place: Town Municipal Center, Room []

The Town of _____, (hereinafter referred to as the “Town”) seeks proposals from Energy Services Companies (Contractor) to conduct investment grade energy and water use audits of town facilities and schools and implement an Energy Savings Performance Contract. The Contractor will identify and implement building improvements to reduce energy and related costs in town facilities and schools, so that the annual cost savings in excess of payments to the Contractor resulting from the improvements are applied to the annual payments of the cost of the improvements.

One (1) original and four (4) copies of sealed proposals must be received by the date and time, and at the place, noted above. Also include one electronic version of the proposal in one single PDF document. The sample audit can also be supplied in PDF format. The Town will not accept submissions by e-mail or fax. The Town also will reject proposals received after the date and time noted above.

The documents comprising this Request for Proposals, as described below, may be obtained from _____, during the hours of 8:30 AM – 4:00 PM Monday through Friday or on the Town’s website, www._____.ct.gov, under “Proposals & RFP’s”.

Proposals must be held firm and cannot be withdrawn for sixty (60) calendar days after the opening date.

The Town reserves the rights to: amend or terminate this Request for Proposals; accept all or any part of a proposal; reject all proposals; waive any informalities or non-material deficiencies in a proposal; and award the proposal to the proposer that, in its judgment, will be in the Town’s best interests.

This Request for Proposals “RFP” includes:

- Section 1: Standard Instructions to Proposers
- Section 2: Specifications
- Section 3: Insurance Requirements
- Section 4: Proposal Form

- Section 5: Proposer’s Legal Status Disclosure
- Section 6: Proposer’s Certification of Affirmative Action Program
- Section 7: Proposer’s Non Collusion Affidavit
- Attachment A: Special Contract Terms and Conditions
- Attachment B: Proposed Project Schedule
- Attachment C: Contractor Response
- Attachment D: Evaluation Criteria
- Attachment E: Technical Facility Profile
- Attachment F: Model Investment Grade Audit and Project Proposal Contract
- Attachment G: Model Energy Savings Performance Contract
- Attachment H: Financing Solicitation Package

TOWN OF _____, CONNECTICUT

STANDARD INSTRUCTIONS TO PROPOSERS

INTRODUCTION

The Town of _____ and the _____ Board of Education, (hereinafter referred to as the “Town”) seek proposals from Energy Services Companies (Contractor) to conduct investment grade energy and water use audits of town facilities and schools and implement an Energy Savings Performance Contract. The Contractor will identify and implement building improvements to reduce energy and related costs in town facilities and schools, so that the annual cost savings in excess of payments to the Contractor resulting from the improvements are applied to the annual payments of the cost of the improvements. This RFP is not a contract offer, and no contract will exist unless and until a written contract is signed by the Town and the successful proposer.

Interested parties should submit a proposal in accordance with the requirements and directions contained in this RFP. Proposers are prohibited from contacting any Town employee, officer or official concerning this RFP, except as set forth in Section 6, below. A proposer’s failure to comply with this requirement may result in disqualification.

If there are any conflicts between the provisions of these Standard Instructions to Proposers and any other documents comprising the RFP, these Standard Instructions to Proposers shall prevail.

RIGHT TO AMEND OR TERMINATE THE RFP OR CONTRACT

The Town may, before or after proposal opening and in its sole discretion, clarify, modify, amend or terminate this RFP if the Town determines it is in the Town’s best interest. Any such action shall be effected by posting a notice on the Town’s website, www._____.ct.gov, under “Proposals & RFP’s.”

If this RFP provides for a multi-year agreement, the Town also reserves the right to terminate the Contract at the end of the last fiscal year for which funds have been appropriated, and the Town shall have no obligation or liability to the successful proposer for any unfunded year or years.

KEY DATES

Pre-Proposal Conference or Site Visit: A site meeting and tour of the facilities will be held prior to the proposal due date. The purpose of the Pre-proposal Conference will be to review the requirements of this RFP and answer questions from ESCOs in attendance. The site visit is **mandatory** for all Contractors who plan to submit a proposal. No follow-up tours, additional access to buildings, or alternative dates for tours will be allowed unless offered to all respondents.

DATE: **TBD**

TIME: 9:00 a.m. to 3:00 p.m.

LOCATION: Municipal Center

_____, Connecticut, 06____

Proposal Opening:

Preliminary Notice of Award:

Contract Execution:

The Preliminary Notice of Award and Contract Execution dates are anticipated, not certain, dates.

OBTAINING THE RFP

All documents that are a part of this RFP may be obtained as instructed above.

PROPOSAL SUBMISSION INSTRUCTIONS

Proposals must be received in the Town office identified above prior to the date and time the first proposal is scheduled to be opened publicly. Postmarks prior to the opening date and time do **NOT** satisfy this condition. The Town will not accept submissions by electronic mail or fax. Proposers are solely responsible for ensuring timely delivery. The Town will **NOT** accept late proposals, corrections and/or modifications.

One (1) original and four (4) copies, plus one (1) electronic version, of all proposal documents must be submitted in sealed, opaque envelopes clearly labeled with the proposer's name, the proposer's address, the words "**PROPOSAL DOCUMENTS**," and the **Proposal Title, Proposal Number and Proposal Opening Date**, to prevent opening prior to the opening date set forth above. The Town may decline to accept proposals submitted in unmarked envelopes that the Town opens in its normal course of business. The Town may, but shall not be required to, return such proposal documents and inform the proposer that the proposal documents may be resubmitted in a sealed envelope properly marked as described above.

Proposal prices must be submitted on the prescribed Proposal Form, and all blank spaces for proposal prices must be completed in ink or be typewritten in both words and figures. The person signing the Proposal Form must initial any errors, alterations or corrections on that form. Ditto marks or words such as "SAME" shall not be used in the Proposal Form.

Proposals may be withdrawn personally or in writing provided that the Town receives the withdrawal prior to the time and date fixed for the opening. Proposals are considered valid, and may not be withdrawn, cancelled or modified, for sixty (60) days after the opening date, to give

the Town sufficient time to review the proposals, investigate the proposers' qualifications, and execute a binding agreement with the successful proposer.

An authorized person representing the legal entity of the proposer must sign the proposal.

QUESTIONS AND AMENDMENTS

Questions concerning the proposal process and procedures are to be submitted **in writing** (including e-mail and fax) and directed **only to:**

Name: _____

Department: Public Works Director

E-mail: _____@_____ -ct.gov

Fax: _____

Proposers are prohibited from contacting any other Town employee, officer or official concerning this RFP. A proposer's failure to comply with this requirement may result in disqualification.

The appropriate Town representative listed above must receive any questions from proposers no later than fourteen (14) business days before the proposal opening date. That representative will confirm receipt of a proposer's questions by electronic mail. The Town will answer all written questions by issuing an addendum, which shall be a part of this RFP and the resulting Contract, containing all questions received as provided for above and decisions regarding same. At least four (4) calendar days prior to proposal opening, the Town will post a copy of the addendum on the Town's website, www._____-ct.gov, under "Proposals & RFP." Each proposer is responsible for checking the website to determine if the Town has issued an addendum and, if so, to complete its proposal in accordance with the RFP as modified by the addendum.

No oral statement of the Town, including oral statements by the Town representatives listed above, shall be effective to waive, change or otherwise modify any of the provisions of this RFP, and no proposer shall rely on any alleged oral statement.

ADDITIONAL INFORMATION

The Town reserves the right, either before or after the opening of proposals, to ask any proposer to clarify its proposal or to submit additional information that the Town in its sole discretion deems desirable.

COSTS FOR PREPARING PROPOSAL

Each proposer's costs incurred in developing its proposal are its sole responsibility, and the Town shall have no liability for such costs.

OWNERSHIP OF PROPOSALS

All proposals submitted become the Town's property and will not be returned to proposers.

FREEDOM OF INFORMATION ACT

All information submitted in a proposal or in response to a request for additional information is subject to disclosure under the Connecticut Freedom of Information Act as amended and judicially interpreted. A proposer's responses may contain financial, trade secret or other data that it claims should not be public (the "Confidential Information"). A proposer must identify specifically the pages and portions of its proposal that contain the claimed Confidential Information by visibly marking all such pages and portions. Provided that the proposer cooperates with the Town as described below, the Town shall, to the extent permitted by law, protect from unauthorized use and disclosure such Confidential Information.

If the Town receives a request for a proposer's Confidential Information, it shall immediately notify the proposer in writing of such request and provide the proposer with a copy of any written disclosure request. The proposer may provide written consent to the disclosure, or may object to the disclosure of said information by notifying the Town in writing to withhold disclosure of said information, identifying in such notice the basis for such objection, including the statutory exemption(s) from disclosure. The proposer shall be responsible for defending any complaint brought in connection with the nondisclosure, including but not only appearing before the Freedom of Information Commission, and providing witnesses and documents as appropriate.

REQUIRED DISCLOSURES

In its Proposal Form each proposer must disclose, if applicable:

Its inability or unwillingness to meet any requirement of this RFP, including but not only any of the Contract terms contained in this RFP.

If it is listed on the State of Connecticut's Debarment List;

If it is ineligible, pursuant to Conn. Gen. Stat. § 31-57b, to be awarded the Contract because of occupational safety and health law violations;

All resolved and pending arbitrations and litigation matters in which the proposer or any of its principals (regardless of their place of employment) have been involved within the last ten (10) years;

All criminal proceedings in which the proposer or any of its principals (regardless of their place of employment) has ever been the subject; and

Each instance in which it or any of its principals (regardless of their place of employment) have ever been found to have violated any state or local ethics standard or to have committed any other offense arising out of the submission of proposals or bids, or the performance of work on public works projects or contracts.

A proposer's acceptability based on these disclosures lies solely in the Town's discretion.

LEGAL STATUS

If a proposer is a corporation, limited liability company, or other business entity that is required to register with the Connecticut Secretary of the State's Office, it must have a current registration to do business in the State of Connecticut that is on file with that office. The Town may, in its sole discretion, request acceptable evidence of any proposer's legal status.

PRESUMPTION OF PROPOSER'S FULL KNOWLEDGE

Each proposer is responsible for having read and understood each document in this RFP and any addenda issued by the Town. A proposer's failure to have reviewed all information that is part of or applicable to this RFP shall in no way relieve it from any aspect of its proposal or the obligations related thereto.

Each proposer is deemed to be familiar with and is required to comply with all federal, state and local laws, ordinances and regulations that in any manner relate to the RFP or the performance of the work described therein.

By submitting a proposal, each proposer represents that it has thoroughly examined and become familiar with the scope of work outlined in the RFP, and it is capable of performing the work to achieve the Town's objectives. If applicable, each proposer shall visit the site, examine the areas and thoroughly familiarize itself with all conditions of the property before preparing its proposal.

TAX EXEMPTIONS

The Town is exempt from the payment of federal excise taxes and Connecticut sales and use taxes. Federal Tax Exempt #_____. Exemption from State sales tax per Conn. Gen. Stat. Chapter 219, § 12-412(1). No exemption certificates are required, and none will be issued.

DELIVERY ARRANGEMENTS

The successful proposer shall deliver the items that are the subject of the RFP, at its sole cost and expense, to the location listed in the Specifications.

AWARD CRITERIA; SELECTION; CONTRACT EXECUTION

All proposals will be publicly opened as received on the date, at the time, and at the place identified in this RFP. Proposers may be present at the opening.

The Town may correct, after proposer verification, any mistake in a proposal that is a clerical error, such as a price extension, decimal point error or FOB terms. If an error exists in an extension of prices, the unit price shall prevail. In the event of a discrepancy between the price quoted in words and in figures, the words shall control.

The Town reserves the right to accept the proposal that, all things considered, is in the Town's best interests. Although price will be an important factor, it will not be the only basis for award. Due consideration may also be given to a proposer's experience, references, service, ability to

respond promptly to requests, past performance, and other criteria relevant to the Town's interests, including compliance with the procedural requirements stated in this RFP.

The Town will not award the proposal to any business that or person who is in arrears or in default to the Town with regard to any tax, debt, contract, security or any other obligation.

The Town reserves the rights to: accept all or any part of a proposal; reject all proposals; waive any informalities or non-material deficiencies in a proposal; and award the proposal to the proposer that, in its judgment, will be in the Town's best interests. The Town also reserves the right, if applicable, to award the purchase of individual items under this RFP to any combination of separate proposals or proposers.

If the selected proposer meets all specifications, is responsive, and, if applicable, qualified, but the proposal is not acceptable to the First Selectman or the Board of Education, the matter must be referred to the Town Council for its decision on whether to reject all proposals, to accept a different proposal, or to take such other action as may be in the Town's best interests.

The Town will select the proposal that it deems to be in the Town's best interest and issue a Preliminary Notice of Award to the successful proposer. The award is subject to further discussions with the proposer. **The making of a preliminary award to a proposer does not provide the proposer with any rights and does not impose upon the Town any obligations. The Town is free to withdraw a preliminary award at any time and for any reason. A proposer has rights, and the Town has obligations, only if and when a Contract is executed by the Town and the proposer.**

If the proposer does not execute the Contract within ten (10) business days of the Preliminary Notice of Award, unless extended by the Town, the Town may call any proposal security provided by the proposer and may enter into discussions with another proposer.

The Town will post the proposal results and award recommendation on its website, www._____.ct.gov, under "Proposals & RFP's," if it intends to do so.

The Preliminary Notice of Award and Contract Execution dates in Section 3's Key Dates are anticipated, not certain, dates.

AFFIRMATIVE ACTION, AND EQUAL OPPORTUNITY

Each proposer must submit a completed Certification of Affirmative Action Program form included with this RFP. Proposers with fewer than ten (10) employees should indicate that fact on the Certification form and return the form with their proposal.

NONRESIDENT REAL PROPERTY CONTRACTORS

If the successful proposer is a "nonresident contractor" as defined in Conn. Gen. Stat. § 12-430(7)(A) as amended, it shall comply fully with the provisions of § 12-430(7) and, prior to execution of the Contract, shall furnish the Town with a copy of the requisite certificate of compliance set forth in § 12-430(7)(E). The successful proposer agrees to defend, indemnify, and

hold harmless the Town, its employees, officers, officials, agents, volunteers and independent contractors, including any of the foregoing sued as individuals (collectively, the “Town Indemnified Parties”), from any and all taxes, interest and penalties that the State of Connecticut asserts are due with respect to the successful proposer’s activities under the Contract.

The successful proposer shall also be required to pay any and all attorney’s fees incurred by the Town Indemnified Parties in enforcing any of the successful proposer’s obligations under this section, whether or not a lawsuit is commenced, which obligations shall survive the termination or expiration of the Contract.

COMPLIANCE WITH IMMIGRATION LAWS

By submitting a proposal, each proposer confirms that it has complied, and during the term of the Contract will comply, with the Immigration Reform and Control Act (“IRCA”) and that each person it provides under the Contract will at all times be authorized for employment in the United States of America. Each proposer confirms that it has a properly completed Employment Eligibility Verification, Form I-9 for each person who will be assigned under the Contract and that it will require each subcontractor, if any, to confirm that it has a properly completed Form I-9 for each person who will be assigned under the Contract.

The successful proposer shall defend, indemnify, and hold harmless the Town, its employees, officers, officials, agents, volunteers and independent contractors, including any of the foregoing sued as individuals (collectively, the “Town Indemnified Parties”), against any and all proceedings, suits, actions, claims, damages, injuries, awards, judgments, losses or expenses, including fines, penalties, punitive damages, attorney’s fees and costs, brought or assessed against, or incurred by, the Town Indemnified Parties related to or arising from the obligations under IRCA imposed upon the successful proposer or its subcontractor. The successful proposer shall also be required to pay any and all attorney’s fees and costs incurred by the Town Indemnified Parties in enforcing any of the successful proposer’s obligations under this provision, whether or not a lawsuit is commenced, which obligations shall survive the termination or expiration on the Contract.

NON COLLUSION AFFIDAVIT

Each proposer shall submit a completed Non Collusion Affidavit that is part of this RFP.

CONTRACT TERMS

The following provisions will be mandatory terms of the Town’s Contract with the successful proposer. If a proposer is unwilling or unable to meet any of these Contract Terms, the proposer must disclose that inability or unwillingness in its Proposal Form (see Section 11 of these Standard Instructions to Proposers):

DEFENSE, HOLD HARMLESS AND INDEMNIFICATION

The successful proposer must agree, to the fullest extent permitted by law, to defend, indemnify, and hold harmless the Town, its employees, officers, officials, agents, volunteers and independent

contractors, including any of the foregoing sued as individuals (collectively, the “Town Indemnified Parties”), from and against all proceedings, suits, actions, claims, damages, injuries, awards, judgments, losses or expenses, including attorney’s fees, arising out of or relating, directly or indirectly, to the successful proposer’s malfeasance, misconduct, negligence or failure to meet its obligations under the RFP or the Contract. The successful proposer’s obligations under this section shall not be limited in any way by any limitation on the amount or type of the successful proposer’s insurance.

In any and all claims against the Town Indemnified Parties made or brought by any employee of the successful proposer, or anyone directly or indirectly employed or contracted with by the successful proposer, or anyone for whose acts or omissions the successful proposer is or may be liable, the successful proposer’s obligations under this section shall not be limited by any limitation on the amount or type of damages, compensation or benefits payable by the successful proposer under workers’ compensation acts, disability benefit acts, or other employee benefits acts.

The successful proposer shall also be required to pay any and all attorney’s fees incurred by the Town Indemnified Parties in enforcing any of the successful proposer’s obligations under this section, which obligations shall survive the termination or expiration of this RFP and the Contract.

The Town will NOT defend, indemnify, or hold harmless the successful proposer.

ADVERTISING

The successful proposer shall not name the Town in its advertising, news releases, and promotional efforts without the Town’s prior written approval.

If it chooses, the successful proposer may list the Town in a Statement of References or similar document required as part of a public proposal. The Town’s permission to the successful proposer to do so is not a statement about the quality of the successful proposer’s work or the Town’s endorsement of the successful proposer.

W-9 FORM

The successful proposer must provide the Town with a completed W-9 form before Contract execution.

PAYMENTS

Proposers are encouraged to offer discounts for early payment. All other payments are to be made 30 days after the appropriate Town employee receives and approves the invoice, unless otherwise specified in the Specifications.

TOWN INSPECTION OF WORK

The Town may inspect the successful proposer’s work at all reasonable times. This right of inspection is solely for the Town’s benefit and does not transfer to the Town the responsibility for

discovering patent or latent defects. The successful proposer has the sole and exclusive responsibility for performing in accordance with the Contract.

REJECTED WORK OR MATERIALS

The successful proposer, at its sole cost and expense, shall remove from the Town's property rejected items, commodities and/or work within 48 hours of the Town's notice of rejection. Immediate removal may be required when safety or health issues are present.

MAINTENANCE AND AVAILABILITY OF RECORDS

The successful proposer shall maintain all records related to the work described in the RFP for a period of five (5) years after final payment under the Contract or until all pending Town, state and federal audits are completed, whichever is later. Such records shall be available for examination and audit by Town, state and federal representatives during that time.

SUBCONTRACTING

Prior to entering into any subcontract agreement(s) for the work described in the Contract, the successful proposer shall provide the Town with written notice of the identity (the subcontractor's full legal name, street address, mailing address (if different from street address), and telephone number) of each proposed subcontractor. The Town shall have the right to object to any proposed subcontractor by providing the successful proposer with written notice thereof within seven (7) business days of receipt of all required information about the proposed subcontractor. If the Town objects to a proposed subcontractor, the successful proposer shall not use that subcontractor for any portion of the work described in the Contract.

All permitted subcontracting shall be subject to the same terms and conditions as are applicable to the successful proposer. The successful proposer shall remain fully and solely liable and responsible to the Town for performance of the work described in the Contract. The successful proposer also agrees to promptly pay each of its subcontractors within thirty (30) days of receipt of payment from the Town or otherwise in accordance with law. The successful proposer shall assure compliance with all requirements of the Contract. The successful proposer shall also be fully and solely responsible to the Town for the acts and omissions of its subcontractors and of persons, whether directly or indirectly employed by the subcontractor(s), as the successful proposer is for the acts or omissions of the persons it employs directly.

PREVAILING WAGES

Wages paid on an hourly basis to any person performing the work of any mechanic, laborer or worker under the Contract and the amount of payment or contribution paid or payable on behalf of each such person to any employee welfare fund, as defined in Conn. Gen. Stat. § 31-53, as amended, shall be at a rate equal to the rate customary or prevailing for the same work in the same trade or occupation in the Town. A successful proposer who is not obligated by agreement to make payment or contribution on behalf of such persons to any such employee welfare fund shall

pay to each mechanic, laborer or worker as part of such person's wages the amount of payment or contribution for such person's classification on each pay day.

PREFERENCES

The successful proposer shall comply with the requirements of Conn. Gen. Stat. § 31-52(b), as amended. Specifically, the successful proposer agrees that in the employment of labor to perform the work under the Contract, preference shall be given to citizens of the United States who are, and have been continuously for at least three (3) months prior to the date of the Contract, residents of the labor market area (as established by the State of Connecticut Labor Commissioner) in which such work is to be done, and if no such qualified person is available, then to citizens who have continuously resided in Fairfield County for at least three (3) months prior to the date hereof, and then to citizens of the State who have continuously resided in the State at least three (3) months prior to the date of the Contract.

WORKERS COMPENSATION

Prior to Contract execution, the Town will require the tentative successful proposer to provide a current statement from the State Treasurer that, to the best of her knowledge and belief, as of the date of the statement, the tentative successful proposer was not liable to the State for any workers' compensation payments made pursuant to Conn. Gen. Stat. § 31-355.

SAFETY

The successful proposer and each of its permitted subcontractors shall furnish proof that each employee performing the work of a mechanic, laborer or worker under the Contract has completed a course of at least ten (10) hours in construction safety and health approved by the federal Occupational Safety and Health Administration or has completed a new miner training program approved by the Federal Mine Safety and Health Administration. Such proof shall be provided with the certified payroll submitted for the first week each such employee, mechanic, laborer, or worker begins work under the Contract.

COMPLIANCE WITH LAWS

The successful proposer shall comply with all applicable laws, regulations, ordinances, codes and orders of the United States, the State of Connecticut and the Town related to its proposal and the performance of the work described in the Contract.

LICENSES AND PERMITS

The successful proposer certifies that, throughout the Contract term, it shall have and provide proof of all approvals, permits and licenses required by the Town and/or any state or federal authority. The successful proposer shall immediately and in writing notify the Town of the loss or suspension of any such approval, permit or license.

AMENDMENTS

The Contract may not be altered or amended, except by written agreement of both parties.

ENTIRE AGREEMENT

It is expressly understood and agreed that the Contract contains the entire agreement between the parties, and that the parties are not, and shall not be, bound by any stipulations, representations, agreement or promises, oral or otherwise, not printed or inserted in the Contract or attached as exhibits hereto.

VALIDITY

The invalidity of one or more of the phrases, sentences or clauses contained in the Contract shall not affect the remaining portions so long as the material purposes of the Contract can be determined and effectuated.

CONNECTICUT LAW AND COURTS

The Contract shall be governed by and construed in accordance with the internal laws (as opposed to the conflicts of law provisions) of the State of Connecticut, and the parties irrevocably submit in any suit, action or proceeding arising out of this Contract to the jurisdiction of the United States District Court for the District of Connecticut and the jurisdiction of any court of the State of Connecticut.

NON-EMPLOYMENT RELATIONSHIP

The Town and the successful vendor are independent parties. Nothing contained in the Contract shall create, or be construed or deemed as creating, the relationships of principal and agent, partnership, joint venture, employer and employee, and/or any relationship other than that of independent parties contracting with each other solely for the purpose of carrying out the terms and conditions of the Contract. The successful vendor understands and agrees that it is not entitled to employee benefits, including but not limited to worker's compensation and employment insurance coverage, and disability. The successful vendor shall be solely responsible for any applicable taxes.

END OF STANDARD INSTRUCTIONS TO PROPOSERS

TOWN OF _____, CONNECTICUT

**SPECIFICATIONS FOR
ENERGY PERFORMANCE CONTRACTING SERVICES**

PROPOSAL #

SCOPE OF WORK

ENERGY SAVINGS PERFORMANCE CONTRACT PROJECT PHASES

Investment Grade Audit and Project Proposal Phase

Investment Grade Audit and Project Proposal Contract. An Investment Grade Audit and Project Proposal Contract will be negotiated in substantially the same format as presented in **Attachment F: Model Investment Grade Audit & Project Proposal Contract** (also see **Attachment A: Special Contract Terms and Conditions**).

Construction/Implementation/Commissioning/Financing Phase.

Energy Savings Performance Contract. Following successful completion and acceptance of the Investment Grade Audit and Project Proposal Contract, an Energy Savings Performance Contract may be negotiated to implement the selected projects, in substantially the same format as presented **Attachment G: Energy Performance Contract** (also see **Attachment A: Special Contract Terms and Conditions**). Any or all performance contract agreements may be denied.

Financing Agreement. The Contractor may be required to solicit bids from a minimum of three financing companies, prior to negotiation of the energy savings performance contract, using the bid documents in **Attachment H: Financing Bid Package**. Any and all financing arrangements are subjected to Town approval in accordance with Town Charter and State statute.

CONTRACTOR SERVICES

Contractor must have the demonstrated capability in engineering and management to provide a broad range of services. Services may include but are not limited to the following:

Investment Grade Audit and Project Proposal Phase

- Investment grade audit to evaluate costs and savings of a variety of energy and water-saving measures
- project proposal including financial analysis
- benchmarking using Energy Star tools
- monitoring and verification plan
- utility bill data services to capture credits from utility bill errors

Construction/Implementation/Commissioning and Financing Phase

- engineering design
- equipment procurement and purchasing
- construction management
- hazardous waste disposal or recycling
- access to financing from credible companies
- commissioning

Guarantee/Monitoring Phase

- continuing operations and maintenance for all improvements
- staff training on routine maintenance and operation of systems
- training of occupants
- guarantee of performance and cost savings for the entire term of the contract
- monitoring and verification for measurement and reporting of the performance and savings
- allow for independent review of monitoring & verification (guaranteed savings to pay for independent Contractor)
- analysis and application for Energy Star Label www.energystar.gov and/or LEED-EBOM (Leadership in Energy and Environmental Design for Existing Buildings-Operations and Maintenance, by the US Green Building Council) <http://www.usgbc.org/DisplayPage.aspx?CMSPageID=221>
- monitoring and reporting of emissions reductions
- maintaining long-term, high-efficiency performance of buildings

Contractor must have the technical capability to address a broad range of systems including, but not limited to:

- Mechanical Systems. Heating, ventilating and air conditioning (HVAC) systems, energy management and control systems, domestic hot water systems, distribution systems, etc.
- Plants. Distribution systems, cogeneration systems, etc.
- Lighting systems. Indoor and outdoor lighting systems, lighting controls, daylighting strategies.
- Electrical distribution systems. Transformer replacements, etc.
- Building envelope systems. Windows, insulation, weatherization, etc. (It is recognized that window replacements are rarely cost-effective, but could be considered as part of an overall comprehensive plan.)
- Specialty Systems: laundry equipment, kitchen equipment, renewable energy systems (e.g. PV, solar thermal, ground source heat pumps, wind power.)

- LEED-EBOM: LEED-EB strategies to improve operations and maintenance practices
- Water and Sewage Systems. Automatic controls, low-flow faucet aerators, low-flow toilets, cooling tower modifications, and irrigation system controls or modifications.
- Desired projects.

BUILDINGS, FACILITIES AND APPROACH

All facilities owned, managed or operated by Town at any time during the term of the performance contract will be considered for this work. Specific facilities now operated by Town are listed in **Attachment E: Technical Facility Profile**. Additional facilities not yet identified that are under the jurisdiction of the Town at any time during the term of the performance contract can be included in the scope of work through a contract amendment.

Work may be conducted in phases where the detailed scope of work can be developed at any time during the term of the performance contract.

The performance contract can be amended at any time during the initial performance contract term to address other buildings or new projects.

Utility Incentives – Contractor must diligently pursue any local utility incentive programs, grants, or assignment of tax benefits, as applicable. Detailed information concerning these programs may be obtained directly from the utilities or other funding sources. Contractor will deduct any utility incentives from the Total Project Investment. All grants and other funding sources must entirely be passed through to the Town. The selected Contractor will be required to secure and maximize the usage of all applicable utility incentives available for this project.

Town reserves the right to reduce the scope of work, to conduct the work in phases or to segment work in facilities based on technological improvements.

The objective of the Town in issuing this RFP is to upgrade facilities through a “Guaranteed Energy Savings Contract”, sometimes also referred to as “Performance Contracting”. The Town is interested in contracting for a full range of energy services and energy-related

capital improvements ("energy conservation measures" or "ECMs"), financed through a guaranteed energy savings contract at no capital cost to the Town, for the Project Sites listed in Attachment E. The total amount of space that is being considered for this contract is approximately _____ square feet in _____ facilities.

Please note, in order to conserve the resources of both the Town and the proposing ESCos, we are asking that the ESCos prepare a proposal on only the following three (3) facilities:

NAME OF LOCATION	SQ FT
_____ School	57,100
Municipal Building	33,000
_____ Middle School	175,000
Total	265,100

See below for location of sample buildings on partial Town map

Identification of preliminary ECMs. The Town expects the ESCOs to individually propose innovative ways to reduce current energy usage and costs and propose creative solutions to operational problems and maintenance issues.

However, in order to make the evaluation process somewhat more objective, and to ease comparison of technical and pricing approaches between the submitted proposals, the ESCOs, shall consider, at a minimum, the following list of energy conservation measures (ECMs):

- **Elementary School**
 - _____

- **Municipal Center**
 - _____

- **Middle School**
 - _____

INSURANCE REQUIREMENTS

The successful proposer shall, at its own expense and cost, obtain and keep in force at least the insurance listed in the Insurance Requirements that are a part of this RFP, shown in Attachment F, Section 5. The Town reserves the right to request from the successful proposer a complete, certified copy of any required insurance policy.

TOWN OF _____, CONNECTICUT

PROPOSAL FORM

Energy Performance Contracting Services

PROPOSAL #

PROPOSER'S FULL LEGAL NAME: _____

Pursuant to and in full compliance with the RFP, the undersigned proposer, having visited the site or property if applicable, and having thoroughly examined each and every document comprising the RFP, including any addenda, hereby offers and agrees as follows:

REQUIRED DISCLOSURES

1. Exceptions to the RFP

_____ This proposal does not take exception to any requirement of the RFP, including but not only any of the Contract Terms set forth in Section __ of the Standard Instructions to Proposers.

OR

_____ This proposal takes exception(s) to the RFP requirements, including but not only the following Contract Terms set forth in Section __ of the Standard Instructions to Proposers. Attached is a sheet fully describing each such exception.

2. State Debarment List

Is the proposer on the State of Connecticut's Debarment List?

_____ Yes

_____ No

3. Occupational Safety and Health Law Violations

Has the proposer or any firm, corporation, partnership or association in which it has an interest (1) been cited for three or more willful or serious violations of any occupational safety and health act or of any standard, order or regulation promulgated pursuant to such act, during the three-year period preceding the proposal (provided such violations were cited in accordance with the provisions of any state occupational safety and health act or the Occupational Safety and Health Act of 1970, and not abated within the time fixed by the citation and such citation has not been set aside following appeal to the appropriate agency or court having jurisdiction) or (2) received one or more criminal convictions related to the injury or death of any employee in the three-year period preceding the proposal?

_____ Yes

_____ No

If "yes," please attach a sheet fully describing each such matter.

4. Disputes

Has either the proposer or any of its principals (regardless of their place of employment) been involved for the most recent ten (10) years in any resolved or pending arbitration or litigation?

_____ Yes

_____ No

If “yes,” please attach a sheet fully describing each such matter.

5. Civil/Criminal Findings

Has the proposer or any of its principals (regardless of their place of employment) ever been the subject of any criminal proceedings?

_____ Yes

_____ No

If “yes,” please attach a sheet fully describing each such matter.

6. Ethics

Has either the proposer or any of its principals (regardless of their place of employment) ever been found to have violated any state or local ethics standard or to have committed any other offense arising out of the submission of proposals or proposals, or performance of work on public works projects or contracts?

_____ Yes

_____ No

If "yes," please attach a sheet fully describing each such matter.

PROPOSAL SECURITY (if required)

I/we have included herein the required certified check or proposal bond in the amount of 10% of the proposal amount.

NOTE: THIS DOCUMENT, IN ORDER TO BE CONSIDERED A VALID PROPOSAL, MUST BE SIGNED BY A PRINCIPAL OFFICER OR OWNER OF THE BUSINESS ENTITY THAT IS SUBMITTING THE PROPOSAL. SUCH SIGNATURE CONSTITUTES THE PROPOSER'S REPRESENTATIONS THAT IT HAS READ, UNDERSTOOD AND FULLY ACCEPTED EACH AND EVERY PROVISION OF EACH DOCUMENT COMPROMISING THE RFP, UNLESS AN EXCEPTION IS DESCRIBED ABOVE.

BY _____
(PRINT NAME)

TITLE: _____

(SIGNATURE)

DATE: _____

END OF PROPOSAL FORM

TOWN OF _____, CONNECTICUT

PROPOSER'S LEGAL STATUS DISCLOSURE

Please fully complete the applicable section below, attaching a separate sheet if you need additional space.

For purposes of this disclosure, "permanent place of business" means an office continuously maintained, occupied and used by the proposer's regular employees regularly in attendance to carry on the proposer's business in the proposer's own name. An office maintained, occupied and used by a proposer only for the duration of a contract will not be considered a permanent place of business. An office maintained, occupied and used by a person affiliated with a proposer will not be considered a permanent place of business of the proposer.

IF A SOLELY OWNED BUSINESS:

Proposer's Full Legal Name _____

Street Address _____

Mailing Address (if different from Street Address) _____

Owner's Full Legal Name _____

Number of years engaged in business under sole proprietor or trade name _____

Does the proposer have a "permanent place of business" in Connecticut, as defined above?

_____ Yes _____ No

If yes, please state the full street address (not a post office box) of that "permanent place of business."

IF A CORPORATION:

Proposer's Full Legal Name _____

Street Address _____

Mailing Address (if different from Street Address) _____

Owner's Full Legal Name _____

Number of years engaged in business under sole proprietor or trade name _____

Names of Current Officers

President

Secretary

Chief Financial Officer

Does the proposer have a "permanent place of business" in Connecticut, as defined above?

_____ Yes _____ No

If yes, please state the full street address (not a post office box) of that "permanent place of business."

IF A LIMITED LIABILITY COMPANY:

Proposer's Full Legal Name _____

Street Address _____

Mailing Address (if different from Street Address) _____

Owner's Full Legal Name _____

Number of years engaged in business under sole proprietor or trade name _____

Names of Current Manager(s) and Members

Name & Title (if any)

Residential Address (street only)

Name & Title (if any)

Residential Address (street only)

Name & Title (if any)

Residential Address (street only)

Name & Title (if any)

Residential Address (street only)

Name & Title (if any)

Residential Address (street only)

Does the proposer have a "permanent place of business" in Connecticut, as defined above?

_____ Yes

_____ No

If yes, please state the full street address (not a post office box) of that "permanent place of business."

IF A PARTNERSHIP:

Proposer's Full Legal Name _____

Street Address _____

Mailing Address (if different from Street Address) _____

Owner's Full Legal Name _____

Number of years engaged in business under sole proprietor or trade name _____

Names of Current Partners

_____	_____
Name & Title (if any)	Residential Address (street only)

_____	_____
Name & Title (if any)	Residential Address (street only)

_____	_____
Name & Title (if any)	Residential Address (street only)

_____	_____
Name & Title (if any)	Residential Address (street only)

Does the proposer have a "permanent place of business" in Connecticut, as defined above?

_____ Yes _____ No

If yes, please state the full street address (not a post office box) of that
"permanent place of business."

Sign on the next page

Proposer's Full Legal Name

(print)

Name and Title of Proposer's Authorized Representative

(signature)

Proposer's Representative, Duly Authorized

Date

END OF LEGAL STATUS DISCLOSURE FORM

TOWN OF _____, CONNECTICUT

PROPOSAL #

ENERGY PERFORMANCE CONTRACTING SERVICES

PROPOSER'S CERTIFICATION

Concerning Equal Employment Opportunities

And Affirmative Action Policy

I/we, the proposer, certify that:

- 1) I/we are in compliance with the equal opportunity clause as set forth in Connecticut state law (Executive Order No. Three).
- 2) I/we do not maintain segregated facilities.
- 3) I/we have filed all required employer's information reports.
- 4) I/we have developed and maintain written affirmative action programs.
- 5) I/we list job openings with federal and state employment services.
- 6) I/we attempt to employ and advance in employment qualified handicapped individuals.

7) I/we are in compliance with the Americans with Disabilities Act.

8) I/we (check one):

_____ have an Affirmative Action Program, or

_____ employ 10 people or fewer.

Legal Name of Proposer

(signature)

Proposer's Representative, Duly Authorized

Name of Proposer's Authorized Representative

Title of Proposer's Authorized Representative

Date

TOWN OF _____, CONNECTICUT

PROPOSER'S NON COLLUSION AFFIDAVIT

PROPOSAL FOR: ENERGY PERFORMANCE CONTRACTING SERVICES

PROPOSAL NUMBER:

The undersigned proposer, having fully informed himself/itself regarding the accuracy of the statements made herein, certifies that:

- (1) the proposal is genuine; it is not a collusive or sham proposal;
- (2) the proposer developed the proposal independently and submitted it without collusion with, and without any agreement, understanding, communication or planned common course of action with, any other person or entity designed to limit independent competition;
- (3) the proposer, its employees and agents have not communicated the contents of the proposal to any person not an employee or agent of the proposer and will not communicate the proposal to any such person prior to the official opening of the proposal; and
- (4) no elected or appointed official or other officer or employee of the Town is directly or indirectly interested in the proposer's proposal, or in the supplies, materials, equipment, work or labor to which it relates, or in any of the profits thereof.

The undersigned proposer further certifies that this affidavit is executed for the purpose of inducing the Town to consider its proposal and make an award in accordance therewith.

Legal Name of Proposer

(signature)

Proposer's Representative, Duly Authorized

Name of Proposer's Authorized Representative

Title of Proposer's Authorized Representative

Date

Subscribed and sworn to before me this _____ day of _____, 20__.

Notary Public

My Commission Expires

ATTACHMENT A: SPECIAL CONTRACT TERMS AND CONDITIONS

Contract Documents. The **Model Investment Grade Audit & Project Proposal Contract (Attachment F)** and the **Model Energy Savings Performance Contract (Attachment G)** will be used.

Payment for Audit. As given in the **Model Investment Grade Audit & Project Proposal Contract (Attachment F)**:

Payment through Performance Contract. Town shall have no payment obligations under this contract provided that Contractor and Town execute an Energy Savings Performance Contract within 120 days, after issuance of the **Notice of Acceptance** of the final **Investment Grade Audit and Project Proposal Contract**, but the fee indicated above shall be incorporated into Contractor's project costs in the Energy Savings Performance Contract and paid through the Energy Savings Performance Contract funding mechanisms.

Project With Insufficient Savings. Town shall have no payment obligations under this Contract in the event that Contractor's final **Investment grade Audit and Project Proposal Contract** does not contain a package of energy and water saving measures which, if implemented and as meeting terms of **Scope of Work, Guidelines and Requirements**, will provide the Town with cash savings sufficient to fund Town's payments of all costs and fees associated with the Energy Savings Performance Contract, including 1) the fee associated with the Investment Grade Audit, 2) all monthly payments on a lease purchase agreement to finance the measures, 3) any annual fees for monitoring and maintenance incurred by the Contractor. Should the Contractor determine at any time during the Investment Grade Audit that savings cannot be attained to meet these terms, the Investment Grade Audit will be terminated by written notice by the Contractor to Town. In this event this Contract shall be cancelled and Town shall have no obligation to pay, in whole or in part.

Project is Declined By Town. Within 90 days of Town's decision not to execute the **Project Proposal Contract**, Town shall pay to Contractor a sum not to exceed **TBD Dollar Amount in Words (\$ dollar amount)** based on a maximum of square footage to be audited gross square feet at cost per square foot per square foot of audited square-footage, as per **Cost and Pricing**. Town shall only pay for square-footage actually audited. Areas deemed by Contractor not to be audited will not be charged to Town.

Funding sources to support annual payment:

The following payment sources will be considered in the audit:

- Annual energy cost savings
- Annual water and other utility cost savings

- Material/commodity savings, only in years when savings are achieved, including avoided costs such as lamp and ballast replacements, scheduled replacement of parts, etc.
- During negotiations, Town may consider savings to include the following:
- Maintenance cost savings such as terminated service contracts on equipment.

Equity cash outlay:

- At option of Town, an equity cash outlay, pending funding approval, may be used to supplement savings

Maintenance and operation cost savings: Savings will be limited to those that can be thoroughly documented and approved. Such savings must only be attributed to the cash flow in years when savings will actually occur.

Contract Term. The contract term is up to 20 years provided the cost-weighted average lifetime of the equipment exceeds the contract term. The *ASHRAE Book of Standards* will be used in determining the cost-weighted average useful life of the equipment.

Annual Savings Exceed Annual Costs. Annual savings shall exceed annual payments each and every year while the performance guarantee is in effect. This means that excess savings in other years and interim savings during the construction period shall not be allocated to meet shortfalls in any other year. Annual payments shall include debt service, Contractor fees, maintenance services, monitoring services, third party consultant services, and other services.

Annual Guaranteed Cost Savings. An annual contractual guarantee will be provided for every year of the contract term. However, the Town reserves the right to terminate the Guarantee after three years from the date of project acceptance. If the Town exercises that option, the ESCO will have no more savings guarantee requirements. Any measurement guarantee shall be made available as a continued option for each subsequent year of the contract term. The Town can cancel the guarantee at any time after the required period. The guarantee must provide for the sum of identified cost savings to equal or exceed the amount of the annual payment, where annual payment equals lease plus monitoring & verification fee plus required service, each and every year while the guarantee is in effect.

Interim Savings during Construction Period. Savings accrued during the construction period will not be allocated to the annual savings of any year, unless the Town directs the selected ESCO to include it. See "Annual Savings Exceed Annual Costs" above.

Excess Savings (beyond the guaranteed amount). Excess savings will be retained by Town and will not be allocated to shortfalls in savings in other years. See “Annual Savings Exceed Annual Costs” above.

Use of Stated Cost Markups. The individual cost markups disclosed in the proposal will be used in both the Investment Grade Audit and the Energy Savings Performance Contract, provided the size and scope of the project remain similar. Cost markups presented in the proposal can be negotiated downward.

Open Book Pricing. Open book pricing will be required, such that the Contractor will fully disclose all costs, including all costs of subcontractors and vendors. Contractor will maintain cost accounting records on authorized work performed under actual costs for labor and material, or other basis requiring accounting records. Contractor will provide access to records and preserve them for a period of three (3) years after final payment. Costs will be evaluated through price analysis to compare costs with reasonable criteria such as established catalog and market prices or historical prices. Stated cost markups will be clearly applied.

Contingency. Any unused contingency cost will not be retained by the Contractor and will be applied to the project.

Equipment Compatibility or Standardization. All equipment installed that is comparable to similar equipment at the facilities, shall have compatibility with existing systems, and/or be of the same manufacturer for standardization of equipment Town-wide, unless excepted by Town.

Annual Appropriations. Annual payment is subject to annual appropriations.

Inflation and Escalation Rates. Any inflation rates will be pre-approved by Town.

Energy Escalation Rates. Where the annual lease-purchase payments are set-up to escalate each year in anticipation of annually escalating energy cost savings, a calculator will be used to determine the maximum value as developed by the US Department of Energy for energy saving performance contracts in its Federal Energy Management Program. The tool is on-line at:

http://www1.eere.energy.gov/femp/information/download_blcc.html#eerc (EERC). ***However for the purposes of the RFP response, all ESCOs should use a 2% escalation factor for all utilities and a 3% escalation factor for all M&V and O&M costs.***

Monitoring and Verification Plan. A monitoring and verification plan will be developed per IPMVP guidelines in the energy savings performance contract. Note that this will be rigorously reviewed by the Town's third party consultant, Celtic Energy, Inc.

Independent Review of Project. The energy savings performance contract must include a portion (2%) of the total project cost to be used to cover the cost of the Town's independent Owner's representative/measurement & verification specialist, to provide an independent review of the Contractor's scope, pricing reasonableness, energy savings calculations, monitoring & verification plans, O&M plans, commissioning plans, reporting, etc. Also include a placeholder for independent review of Annual M&V Reports by the Owner's Representative equal to 5% of the annual savings in each year of the contract term. ESCos should include this as a line item in their cost buildup and cash flow document.

ATTACHMENT B: PROPOSED PROJECT SCHEDULE

The following schedule is the proposed schedule, and may change during the project.

ACTIVITY	DATE
<u>RFP Phase</u>	
Contractor Selection and Award Refer to Submittal Schedule in Section 2.3 above.	Weeks 1- 10
<u>Investment Grade Audit Phase</u>	
Contract Negotiation	Weeks 11-13
Board approval and signatures to execute contract	Week 14-18
Audit, Final Report and Presentation	Weeks 19-29
<u>Energy Savings Performance Contract Phase</u>	
Negotiation and Documentation	Weeks 29-30
Board approval and signatures to execute contract	Weeks 31-34

Installation

To be negotiated

Commissioning/Monitoring Phase

Commissioning

To be negotiated

Monitoring

To be negotiated

Staff Training

To be negotiated

Other

To be negotiated

Proposed Contract Term

To be negotiated

Note: This schedule is subject to change.

ATTACHMENT C: CONTRACTOR RESPONSE

- An electronic copy of this RFP section will be made available to all attendees of mandatory pre-proposal meeting for easier response preparation.
- ***Please number and re-state each subheading or question, followed by your response.***
- ***Number all pages.***

COVER SHEET

See cover sheet example at the end of this attachment.

FIRM'S GENERAL APPROACH TO PERFORMANCE CONTRACTING

Describe performance contracting from your firm's perspective, describing your phases and your firm's ability to support each of the phases. Provide a stand-alone overview, maximum of 5 pages, using any order or format to present your company as you wish. Include highlights on company background, market sectors served, company strengths and areas of expertise. Also include your general approach to performance contracting: typical phases for a project and ability to support each phase (Project Development, Energy Auditing, Performance/Savings Guarantee, Financing, Construction, Commissioning, Measurement and Verification, Client Staff/Occupant Training, Post-construction Maintenance Support).

The purpose of this overview is to provide a good introduction of your firm to the evaluation committee.

2. PROJECT HISTORY

a. **Project List.**

List all energy savings performance contracts that your firm or personnel have managed within the last five years. Include list as shown below. Truncate the list at one page.

1) PERFORMANCE CONTRACTING PROJECTS

Project Name	City, State	Total Project \$	Year completed

All projects listed should be those conducted only by your firm. If you deem it relevant to list projects under contract to a different firm, clearly identify the name of firm responsible for the project and indicate why you're including it as a reference for your company and for this project.

2) OTHER PROJECTS (only if deemed relevant to this project)

If desired, also list related projects deemed relevant to this work, particularly those managed in the state.

Project Name	Project Type	City, State	Total Project \$	Year constructed

b. Project References

Provide detailed information on *performance contract-based projects* you want to showcase that have similarities to work related to this proposal. Similarities could include type/use of building, size of individual buildings, size of total expected project, technical scope of projects, geographic region (work in this state or similar type of metro/rural region). Include the following information on each project, as a minimum.

Using the forms on the following pages, list at least 3 energy savings performance contracting projects in repayment by and currently under contract with your firm. Limit your response to ONLY those projects that have been managed directly by the specific branch, division, office or any individual in such branch, division or office who will be specifically assigned to this project. Attach additional sheets as necessary. Please put an asterisk by any project references involving buildings similar to the building(s) described in the technical appendices. All information requested is required.

Project Name and Location; Number of Buildings; Primary Use; Total square footage	
Project Dollar Amount (installed project costs); Source of Project Financing	
Primary ECMs Installed; ESCO Services Provided	
Construction Start & End Dates	
Contract Start & End Dates	
Dollar Value and Type of Annual Operational Cost Savings (if applicable) (e.g., outside maintenance contracts, material savings, etc.)	
Method(s) of Savings Measurement and Verification	
Provide CURRENT and ACCURATE telephone numbers and email addresses of the owner(s)' representatives with whom your firm did business on this project. You should ensure that all representatives are familiar with this project.	
Describe the specific roles and responsibilities of ESCO personnel associated with the identified project. Limit your response to only those personnel who will be directly involved in Customer's project.	
ESCO Notes or Comments	

PROJECT HISTORY AND CLIENT REFERENCE FORM

Complete the following information for each of the projects listed.

A. ANNUAL ENERGY SAVINGS DATA FORM

Name of Project: _____ Name of ESCO: _____

	Projected	Guaranteed	Achieved				
			Year 1	Year 2	Year 3	Year 4	Year 5
KWH							
KW Demand							
Therms							
Water(Gallons)							
Other (Specify)							
Other (Specify)							

Information for each of the headings listed above MUST be completed using the above format. DO NOT provide savings data in terms of BTU's or dollars. Data should be given in the form of fuel units which appear in the utility bills. Additional forms should be reproduced as needed.

B. ANNUAL ENERGY SAVINGS DATA FORM

Name of Project: _____ Name of ESCO: _____

	Projected	Guaranteed	Achieved				
			Year 1	Year 2	Year 3	Year 4	Year 5
KWH							
KW Demand							
Therms							
Water Gallons							
Other (Specify)							
Other (Specify)							

All projects listed should be those conducted only by your firm. If you deem it relevant to list projects under contract to a different firm, clearly identify the name of firm responsible for the project and indicate why you're including it as a reference for your company and for this project.

c. **Relevant Experience - Overview of Strengths**

Briefly summarize your project histories to define your firm's strengths and the relevance of past work to this project (experience similar to this project in terms of size, scope, facility type; experience with types of retrofits applicable to this project; etc.).

3. QUALIFICATIONS OF THE FIRM OR TEAM

a. **Background Information on the Firm**

- 1) Structure and Evolution of Firm.** Type of firm (corporation, partnership, sole proprietorship, joint venture); Name of parent company if applicable (include the name, main office address and parent company's tax identification number). Name of division or branch office if applicable; Name of current firm and number of years operating under this firm name; Former firm names if applicable and corresponding years in operation. Structure of team if this is a joint venture.
- 2) Years in Energy Business.** State the number of years your firm has been involved in the energy-efficiency related business.
- 3) Years in Performance Contracting.** State the number of years your firm has offered performance contracting services.
- 4) Number of Performance Contracting Projects.** State the number of performance contracting projects completed by your firm. Number under \$1 million. Number over \$1 million.
- 5) Project Team Members**
Briefly describe the relevant experience, qualifications and educational background for each individual team member assigned to this project using the format provided below. Project Manager, Site Manager, Point of Contact, and a Professional Engineer Registered in Connecticut must be included in the team. Do not include individual resumes in lieu of this information.

Name of Project Team Member:	
Current Job Title: Job responsibilities: Number of years with ESCO: Primary Office Location:	
Employment History Company Name: Primary job responsibilities: Number of years with firm:	
Educational Background List all academic degrees, certifications, professional affiliations, relevant publications and technical training.	
List all energy savings performance contracting projects this individual has been involved with during past 5 years. Include project location, type of facilities, year implemented and dollar value of installed project costs.	
Describe the specific role and responsibilities this individual had for each listed project.	
Provide a detailed description of the role and responsibilities this individual will have for the duration of this project.	
Describe any other relevant technical experience.	
Indicate the total years of relevant energy-related experience for this individual.	

Submit an organizational chart that clearly identifies the roles and relationships of all key team members.

Financial Qualifications & Stability of Firm

- 1) **Financial Soundness.** Describe the financial soundness and stability of the firm.
- 2) **Profitability.** Has your firm or parent company been profitable each year for the past three years?
- 3) **Financial Report.** Submit the most recent annual summary (1-3 pages) of the annual Statements of Financial Conditions, including balance sheet, income statement and statement of cash flows, dated within the past twelve (12) months, along with name, address, and the telephone number of firm(s) that prepared the Financial Statements.
- 4) **Bonding.** Current bonding capacity; bond rating; confirmation that firm is currently bondable for 100% of a payment bond for construction of this project; 100% of a performance bond for construction of this project; letter from a licensed surety as evidence of ability to bond for each of these categories.

c. Industry Accreditations

State if your firm is accredited by industry organizations, such as the National Association of Energy Service Companies (NAESCO), or pre-qualified for work through the U.S. Department of Energy for federal facilities or the U.S. Department of Defense. Describe the relevance or importance of any accreditations or pre-qualifications with regard to this project.

d. Compliance with Requirements

Affirm your ability to meet requirements: *“Yes, this firm or team responding to this proposal understands the requirements specified in Attachment A: Special Contract Terms and Conditions, Attachment F: Model Investment Grade Audit and Project Proposal Contract, and Attachment G: Energy Savings Performance Contract and can abide by them.*

4. PERFORMANCE CONTRACTING CAPABILITY & TECHNICAL APPROACH

a. General Scope of Services

Following is a minimum scope of services acceptable to compete for an energy savings performance contract. Add a brief comment for each item (25 words or less preferred) to demonstrate your capability for each.

1) *Energy systems in buildings, facilities and infrastructure:*

Mechanical/Electrical Systems

- a) Lighting: indoor and outdoor
- b) Heating
- c) Ventilation and indoor air quality issues
- d) Cooling
- e) Control and building automation
- f) Fuel switching
- g) Central plant
- h) Water-consuming

Renewables

- i) Daylighting
- j) Solar-electric
- k) Solar thermal
- l) Geothermal
- m) Wind, small-scale or large-scale
- n) Biomass
- o) Distributed generation

Specialty Systems or Specific Building Types

- p) Kitchen or laundry
- q) Laboratories, clean rooms
- r) Healthcare hospitals, nursing homes, clinics
- s) Swimming pools and recreational facilities
- t) Computer laboratories

Energy Management Services:

- u) Energy management
- v) Utility bill auditing and bill payment (identifying errors and collecting credits)
- w) Energy Star Portfolio Manager, benchmarking
- x) LEED for Existing Buildings Operations & Maintenance
- y) Commissioning/re-commissioning
- z) LEED-NC support for any new building/addition project

Other

- aa) Transportation – fleet fuel management, etc.

bb) Other

2) Project Development and Implementation

- a) Energy auditing (identify potential energy-saving measures, determine savings projection based on standard energy engineering principles; estimate project costs; present package of measures with cash flow)
- b) System design engineering: mechanical, electrical, etc.
- c) Procurement, bidding
- d) Construction
- e) Commissioning of projects and retro-commissioning of existing buildings
- f) Project management
- g) Identification of asbestos and other hazardous materials and abatement, recycling or disposal as applicable

3) Core Performance Contracting Services

- a) Performance guarantee for every year of the financing term
- b) Insurance per contract requirements
- c) Equipment warranties
- d) Ability to facilitate financing including a municipal, tax-exempt lease purchase
- e) Measurement and verification of savings
- f) Training: maintenance staff and occupants

4) Support Services

- a) Long-term maintenance services on energy systems
- b) Application for an Energy Star Label and LEED certification.
- c) Calculation and reporting of emissions reductions
- d) Assistance with securing funding from the Connecticut Energy Efficiency Fund, CT Clean Energy Fund, American Recovery and Reinvestment Act (ARRA), and CT Department of Education Office of Facilities Services, etc.
- e) Assistance with securing additional funding streams such as QZABS, QECBS, Build America Bonds, etc.

b. Performance Contracting Technical Approach

- 1) **Performance Guarantee.** How is a performance guarantee provided (self-guarantee or third party) and describe the value of this approach?
- 2) **Insurance.** How is insurance provided (self-guarantee or third party) and describe the value of this approach?
- 3) **Warrantees.** Who provides warrantee service (Contractor or manufacturer)? How is this provided? Describe the value of this approach.
- 4) **Standards of Comfort.** Describe standards of comfort that are generally used for light levels, space temperatures, ventilation rates, etc. in the intended facilities. Describe any flexibility.
- 5) **Baseline Calculation Methodology.** Describe in detail the methodology your firm normally uses to compute baseline of energy and water use as well as performance.
- 6) **Project Schedule.** Comment on your ability to meet the schedule and the reasonableness of the schedule.

b. Sample Technical Audit.

Submit a sample technical audit conducted by your firm for a similar project (as directed in the Proposal Submittal Information).

- 1) Briefly describe this sample audit. It should be representative of the type of facility and the type of audit that will be conducted.
- 2) Verify that this audit includes detailed energy and economic calculations.
- 3) Verify that it was conducted by a current member of the team proposed for this project.

c. Financing Company

Contractor may be required to solicit bids for financing on behalf of Town. (Since Town will sign a separate agreement with the financing company, Town will review bids, select desired firm, and develop the financing agreement.) To solicit bids, Contractor will use the RFP and supplemental information provided in **Appendix H (Financing Bid Package)**.

- 1) Identify at least three financing companies that you recommend as qualified to provide municipal tax-exempt financing for this project.
- 2) Provide letters of qualifications and references from each firm.

d. Site-Specific Approach

- 1) Types of Services. Summarize the scope of services (auditing, design, construction, monitoring, operations, maintenance, training, financing, etc.) identified for this project.
- 2) Potential Projects. Based on your preliminary assessment of the information provided, describe any equipment modifications, installations or replacements at the facility that your firm would consider installing as a part of this project. Address energy, water and LEED-EBOM opportunities related to operation and maintenance. Also describe any special features, renewable technologies, or advanced technologies that might be applicable. Describe any special features or services associated with your proposed improvements that would add value to Town. Describe your approach to achieve compatibility (such as open systems) and/or standardization of equipment in the facilities to be addressed. Complete the Summary Table below and include in the Executive Summary.
- 3) Cash Flow Pro Forma. Provide a cash flow spreadsheet showing the total project cost by component, and all annual savings and costs, with net positive cash flow for each year of the term of the contract.
- 4) Measure Economics must be segregated by building (An ECM Summary Table must be provided for each building, and then totaled).

ECM Summary Table

ECM No.	ECM Description	Implementation Expense	Monthly Demand Savings (kW)	Annual Electric Savings (kWh)	Annual Fossil Fuel Savings (mmBtu)	Annual Water Savings (gal)	Annual Utility Cost Savings	Annual O&M Cost Savings	Total Cost Savings	Estimated Incentive	Simple Payback (yrs)
1											
2											
3											
4											
<i>Project Totals</i>											

5. MANAGEMENT AND STAFFING FOR THIS PROJECT

This section applies to this project, with an emphasis on local capability/service.

A. Management

- 1) **Coordination.** Describe your firm's approach to managing this project. Include an organizational chart showing clear lines of communication and responsibility. Describe the transition and responsible parties from the sales to auditing phase, auditing to construction phase, construction to follow-up monitoring phase, etc.
- 2) **Construction Management.** Describe how your firm would work with current building management and maintenance personnel in order to coordinate construction and avoid conflicts with the building's operation and use. Describe your flexibility and/or any limitations regarding possible Town activities such as: management of additional energy and water projects, monitoring of installation and performance of Contractor projects, integration of other identified capital needs with Contractor projects which may or may not contain energy and water saving opportunities.
- 3) **Project Development and Construction Schedule.** Provide a preliminary schedule describing the proposed sequence of activities for developing an Investment Grade Audit and implementing the recommendations through project acceptance.
- 4) **In-house Capability vs. Subcontractors.** Generally describe the types of services (both professional and construction services) that you offer in-house and the services you offer through subcontractors, and describe the strategy behind in-house vs. subcontractor use. (Detailed information on pricing of subcontractors is requested in the Cost Section below.)
- 5) **Town Involvement.** Describe how you engage the Town in decision-making regarding project scope, equipment specifications, ongoing operational and maintenance strategies, etc., and how you incorporate Town's needs.
- 6) **Local Staffing and Support.** Describe extent of local staffing and support for the geographic region. Include basic job descriptions and capabilities of the local staff. Describe the relevance or importance of local presence with regard to this project.
- 7) **Long-term Servicing.** Describe long-term servicing of equipment and systems. State the location of your nearest servicing office.
- 8) **Risk/Responsibility Allocation.** Use the Risk/Responsibility matrix below to propose sharing of risks between the Town and ESCO.

RESPONSIBILITY/DESCRIPTION	ESCO PROPOSED APPROACH
<p>1. Financial</p>	
<p>a. Interest rates: Neither the Contractor nor the Town has significant control over prevailing interest rates. During all phases of the project, interest rates will change with market conditions. Higher interest rates will increase project cost, financing/project term, or both. The timing of the Contract / Delivery Order signing may impact the available interest rate and project cost.</p>	
<p>b. Energy prices: Neither the Contractor nor the Town has significant control over actual energy prices. For calculating savings, the value of the saved energy may either be constant, change at a fixed inflation rate, or float with market conditions. If the value changes with the market, falling energy prices place the Contractor at risk of failing to meet cost savings guarantees. If energy prices rise, there is a small risk to the Town that energy saving goals might not be met while the financial goals are. If the value of saved energy is fixed (either constant or escalated), the Town risks making payments in excess of actual energy cost savings. Clarify how future energy costs will be treated.</p>	
<p>c. Construction costs: The Contractor is responsible for determining construction costs and defining a budget. In a fixed-price design/build Contract, the Town assumes little responsibility for cost overruns. However, if construction estimates are significantly greater than originally assumed, the Contractor may find that the project or measure is no longer viable and drop it before Contract award. In any design/build Contract, the Town loses some design control. Clarify design standards and the design approval process (including changes) and how costs will be reviewed.</p>	

<p><u>d. M & V costs:</u> Third party M&V costs are paid from the project savings. Clarify how project savings are being verified (e.g., equipment performance, operational factors, energy use) and the impact on M&V costs.</p>	
<p><u>e. Non-Energy Cost Savings:</u> The Town and the ESCO may agree that the project will include savings from <i>recurring</i> and/or <i>one-time</i> costs. Recurring savings generally result from reduced O&M expenses or reduced water consumption. These O&M and water savings must be based on actual spending reductions. Clarify sources of non-energy cost savings and how they will be verified.</p>	
<p><u>f. Delays:</u> Both the Contractor and the Town can cause delays. Failure to implement a viable project in a timely manner costs the Town in the form of lost savings, and can add cost to the project (e.g. construction interest, re-mobilization). Clarify schedule and how delays will be handled.</p>	
<p><u>g. Major changes in facility:</u> The Town controls major changes in facility use, including closure. Clarify responsibilities in the event of a premature facility closure, loss of funding, or other major change.</p>	
<p>2. Operational</p>	
<p><u>a. Operating hours:</u> The Town generally has control over operating hours. Increases and decreases in operating hours can show up as increases or decreases in “savings” depending on the M&V method (e.g., operating hours multiplied by improved efficiency of equipment vs. whole-building/utility bill analysis). Clarify whether operating hours are to be measured or stipulated and what the impact will be if they change. If the operating hours are stipulated, the baseline should be carefully documented and agreed to by both parties.</p>	

<p>b. Load: Equipment loads can change over time. The Town generally has control over hours of operation, conditioned floor area, intensity of use (e.g. changes in occupancy or level of automation). Changes in load can show up as increases or decreases in “savings” depending on the M & V method. Clarify whether equipment loads are to be measured or stipulated and what the impact will be if they change. If the equipment loads are stipulated, the baseline should be carefully documented and agreed to by both parties.</p>	
<p>c. Weather: A number of energy efficiency measures are affected by weather. Neither the Contractor nor the Town has control over the weather. Changes in weather can increase or decrease “savings” depending on the M&V method (e.g. equipment run hours multiplied by efficiency improvement vs. whole-building/utility bill analysis). If weather is “normalized,” actual savings could be less than payments for a given year, but will average out over the long run. Clearly specify how weather corrections will be performed.</p>	
<p>d. User participation: Many energy conservation measures require user participation to generate savings (e.g., control settings). The savings can be variable and the Contractor may be unwilling to invest in these measures. Clarify what degree of user participation is needed and utilize monitoring and training to mitigate risk. If performance is stipulated, document and review assumptions carefully and consider M&V to confirm the capacity to save (e.g., confirm that the controls are functioning properly).</p>	
<p>3. Performance</p>	

<p>a. Equipment performance: Generally the Contractor has control over the selection of equipment and is responsible for its proper installation, commissioning, and performance. Generally the Contractor has responsibility to demonstrate that the new improvements meet expected performance levels including specified equipment capacity, standards of service, and efficiency. Clarify who is responsible for initial and long-term performance, how it will be verified, and what will be done if performance does not meet expectations.</p>	
<p>b. Operations: Responsibility for operations is negotiable, and it can impact performance. Clarify responsibility for operations, the implications of equipment control, how changes in operating procedures will be handled, and how proper operations will be assured.</p>	
<p>c. Preventive Maintenance: Responsibility for maintenance is negotiable, and it can impact performance. Clarify how long-term preventive maintenance will be assured, especially if the party responsible for long-term performance is not responsible for maintenance (e.g., Contractor provides maintenance checklist and reporting frequency). Clarify who is responsible for long-term preventive maintenance to maintain operational performance throughout the Contract term. Clarify what will be done if inadequate preventive maintenance impacts performance.</p>	
<p>d. Equipment Repair and Replacement: Responsibility for repair and replacement of Contractor-installed equipment is negotiable; however it is often tied to project performance. Clarify who is responsible for replacement of failed components or equipment throughout the term of the Contract. Specifically address potential impacts on performance due to equipment failure. Specify expected equipment life and warranties for all installed equipment. Discuss replacement responsibility when equipment life is shorter than the term of the Contract.</p>	

b. Self-Performed Work or Subcontractors.

- 1) State whether work is completed by the Contractor or by a subcontractor for each category of measure (auditing, design, procurement/supply of equipment from vendors and manufacturers, engineering, construction management services, lighting, HVAC, controls, monitoring & verification, etc.),
- 2) Describe how subcontractors are selected. Also comment on your ability to competitively select subcontractors.
- 3) Identify any subcontractors already selected.

6. COST AND PRICING

a. Markups

Markups represent a percentage added to the base cost for the project. Markup costs are disclosed to provide a typical project costing approach for a project of similar scope and size. This disclosure will provide the open book pricing structure to be used by the Contractor for this project. The markups will be used in the Investment Grade Audit Contract and Energy Savings Performance Contract. (A substantial change in the scope and size of the project may necessitate renegotiation of the markups.)

Provide your company's proposed maximum allowable markups in the schedule below for each category listed on the schedule. (The use of margins in lieu of markups is not acceptable.) This format is required and must be completed in its entirety. Use only the categories provided. Ranges for markups are not acceptable.

Clearly indicate (mark by page) if elements of this section are requested to be treated as proprietary (the responsible Purchasing official will make the final decision if this is to be treated as proprietary).

MARK-UPS		
CATEGORY OF MARK-UP	MARK-UP APPLICATION	% MARK-UP
Overhead		
Profit		
Labor – Internal		
Equipment Purchased		

Materials Purchased		
Subcontract Labor		
Subcontract Material		
Total:		

Clearly describe how self-performed work will be charged (billed hourly, billed as a markup of equipment and labor costs, etc.). If self-performed work will be billed hourly, include markups proposed to be applied to the hourly rate.

If a proposal is from a joint venture partnership, include proposed maximum allowable markups in the schedule format above for each participating company.

b. Fees

Provide your company's proposed maximum allowable fees in the schedule below for each category listed on the schedule. This format is required and must be completed in its entirety. Use only the categories provided. Ranges for fees are not acceptable. If a proposal is from a joint venture partnership, provide proposed maximum allowable fees in the schedule format below for each participating company.

FEES		
CATEGORY OF FEE	HOW DETERMINED AND USED	YEARS APPLIED (One-time, Annual, etc.)
Investment Grade Audit and Project Development	\$ _____ per Square Foot	One time

Solicit & Evaluate Project Financing Proposals		
Design	(Example) ___% of _____	
Contingency		
Permits		
Performance Bond		
Project Management		
Commissioning		
Training		
Monitoring and Verification		
Warranty Service		
Maintenance on Installed Measures		

Provide the proposed maximum fee for Investment Grade Audit and Project Proposal on a cost per square foot basis. The company agrees that the proposed maximum fees shall incorporate its responsibility to adhere to and complete the full scope of work as presented in the Standard Investment Grade Audit and Project Proposal Contract.

For each fee category listed on the schedule describe how that fee is determined, how the fee is charged to the project and when it is applied. For example, fees might be based on a percentage of project cost. Markups on fees are not allowable.

c. Audit Cost

- 1) Total Cost. State the total cost of the investment grade audit. Ensure that your cost is based on the approach and requirements included in Attachment F: Model Investment Grade Audit and Project Proposal Contract. For the purpose of this evaluation, assume all facilities listed in Attachment E: Technical Facility Profile will be audited.**
- 2) Unit Cost. State the cost per square foot of the audit. This cost will be evaluated on the basis of reasonableness, so an unrealistically high or low cost will be devalued in the evaluation process.**
- 3) Meet Full Scope of Work of Audit Contract. State your capability to complete the full scope of work as presented in Attachment F: Model Investment Grade Audit and Project Proposal Contract, within your proposed cost.**

d. Contingency

Describe your company's typical level of contingency budget for lighting, electrical, mechanical, controls projects, and other projects and how it proposes to apply contingency to cover changes in work scope and subcontractor change orders. Note that all unused contingency funds will revert to the Facility Owner or be applied to additional work scope through a change order approved by the Facility Owner.

State how the contingency will be applied to cover changes in work scope and subcontractor change orders. State the typical level of contingency budget for lighting, electrical, mechanical, controls projects, and other projects.

Note that all unused contingency funds will revert to Town or be applied to additional work scope through a State approved change order.

e. Equipment/Labor Cost Competition

Describe your company's process to solicit bids on equipment/labor or to ensure price/cost competition and the best value for the Facility Owner.

f. Open Book Pricing

Open book pricing is full disclosure by the contractor to the Facility Owner of all costs and markups for materials, labor, and services received during the project development, implementation, and performance period phases. Open book pricing will be required such that all costs, including all costs of subcontractors and vendors, are fully disclosed. Describe your company's approach to open book pricing and its method for maintaining cost accounting records on authorized work performed under actual costs for labor and material, or other basis requiring accounting records.

g. Application of Markups and Fees (Hypothetical Example)

Provide a sample of your pricing model using a two-measure performance contracting project.

Show the complete detail of what will be provided to the Town in the actual project using the markups and fees you will commit to in the actual project, as identified above, for all categories, fees and services that will be seen in the actual project.

Include a sample project proforma and clearly indicate all fees required for monitoring & verification, project management and all services that may be included in the actual project, including the audit cost. All markups and fees used in this example must be representative of what will be used in the actual project.

Additional markups, fees, or service category costs not shown in this example will NOT be allowed in the final contract.

Incomplete information will be considered an incomplete response and cause the response to be rejected.

- a)** Provide an example lighting measure that relates to this project in size and scope. Provide all pricing documentation as you will provide it for open book pricing in the final contract. Clearly differentiate the subcontracted portion of the project and break out labor, materials and other categories as you will for open book pricing.
- b)** Provide same information for an example boiler measure (or other heating/cooling equipment if a boiler replacement is not relevant for this project)
- c)** Show the two measures above in a complete two-measure performance contracting project. Provide a proforma to clearly indicate all costs and fees represented as they will be applied in the final contract. Use the format and structure you will use in the final contract.

- 2) **Best Value.** Briefly describe how your approach to performance contracting delivers best value for the investment. This is an opportunity to point out how your company may be able to deliver a more cost-effective overall project due to corporate structure, relationships with vendors, depth of experience and expertise, local relationships and experience, experience in similar types of facilities, knowledge of particular retrofits, etc. Also describe any utility rebates or other financial incentives or grants can potentially provide and/or facilitate.

ATTACHMENT D: EVALUATION

The Evaluation Team has identified scoring weights for each section, with the “Cost and Pricing” section equaling a minimum of 30% of the total score of the written response to this RFP. The Evaluation Team recognizes it is premature to place a major emphasis on projected financial benefits prior to the completion of the Investment Grade Audit, because the Audit will define the potential scope and cost benefit. Therefore, the most emphasis will be on qualifications and less emphasis will be placed on the cost information, as shown below. The criterion listed below will be used to determine a short list of responders who will then be interviewed by the selection committee.

Project Management

<u>Criterion</u>	Point Value
Clarity, organization, and level of detail in written proposal.	5
Quality of presentation content, and communication skills of the ESCO's representatives at the oral interview.	10
Clarity/reasonableness of proposed milestones and timeline for project implementation.	3
Quality of proposed training for facility staff.	3
Quality of products proposed.	3
General reputation, reliability, working relationship and performance capabilities of the qualified providers.	6
Total:	30

Technical Approach

<u>Criterion</u>	Point Value
Quality of project-specific Preliminary Investment Grade Audit Report, including comprehensiveness of analysis, understanding of existing building systems and conditions, and	10

conformity with specifications set forth in the RFP.	
Quality of baseline energy calculations.	5
Quality of proposed project-specific Project Commissioning Plan.	4
Quality of proposed project-specific Maintenance Plan	3
Understanding of customer's facility, operation, and challenges.	3
Quality of proposed project-specific Measurement and Verification Plan.	5
Total:	30

Financial Approach

<u>Criterion</u>	Point Value
Reasonableness of proposed financing arrangement and financial analysis assumptions	5
Reasonableness of the project-specific Preliminary Cost Proposal	3
Dollar value of projected energy savings.	3
Dollar value of projected operating savings and clarity of supporting documentation.	4
Reasonableness of investment grade energy audit costs.	3
Subcontractor prices offered are reasonable	2
Markups fair and reasonable	5
Reasonableness of fees for design, construction, financing, maintenance and training.	5
Total:	30

Other benefits to Town: This can refer to such non-tangible benefits such as improvements to the learning environment, teaching opportunities, green building considerations, greenhouse gas reductions, anti-drought measures, etc. **10**

Grand Total: 100

INTERVIEWS

Contractors in the competitive range will be invited for an oral interview. The selection committee will review the results of the interview and, based on the previous criterion and the oral interview, a final selection will be made.

SELECTION

The Evaluation Team will identify the apparent awardee and then contact references to complete the evaluation.

With quality references, the apparent awardee will be notified of selection; otherwise, the same process will be used with the second-ranked Contractor.

ATTACHMENT E: TECHNICAL FACILITY PROFILE

The information in this technical facility profile is provided to inform the Contractor about the condition of the facilities. The information was prepared with diligence, however the Contractor is responsible for verifying the accuracy of all information provided in this RFP and its Attachments.

ATTACHMENT F – MODEL INVESTMENT GRADE AUDIT & PROJECT PROPOSAL CONTRACT

This document is part of a collection of model procurement and contracting documents that represent best practices for state energy offices (SEOs) to launch and administer programs to increase energy efficiency through Energy Savings Performance Contracting. The documents draw from successful programs in various states and are continually updated to incorporate the latest strategies. They can be easily customized to meet the needs of any SEO or similar government department.

DESCRIPTION –Investment Grade Audit and Project Proposal Contract:

This Investment Grade Audit & Project Proposal Contract is the first of two contracts with the selected ESCO. The ESCO will complete an Investment Grade 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 Energy Savings Performance Contract 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 Energy Savings Performance Contract.

This is a model document only and does not attempt to identify or address all circumstances or conditions you may encounter or desire. Consult with your legal counsel and procurement staff to adapt it to meet your needs.

INVESTMENT GRADE AUDIT & PROJECT PROPOSAL CONTRACT

TABLE OF CONTENTS

EXHIBITS

- Exhibit A: Scope of Work**
- Exhibit B: Notice of Acceptance of Investment Grade Audit Report**
- Exhibit C: Guidelines for Preliminary Monitoring and Verification Plan**
- Exhibit D: Cost and Pricing for IGA Development**
- Exhibit E: Pricing for Project Proposal Development**

Appendices

- Appendix A** RFP for ESCO Solicitation (Pre-qualification Phase; Final Selection Phase)
- Appendix B** ESCO Proposal (Pre-qualification Phase; Final Selection Phase)
- Appendix C** ESCO Base Contract (including maximum markups)

INVESTMENT GRADE AUDIT AND PROJECT PROPOSAL CONTRACT

This Investment Grade Audit & Project Proposal Contract (the "Contract") is made and entered into as of _____ Date, between ESCO Name ("ESCO"), having its principal offices at ESCO Address, and Institution Name and/or name of authorizing Board hereinafter referred to as ("Institution"), Institution Address.

WITNESSETH

WHEREAS, this Contract was created for use by towns to obtain an investment grade audit of a facility from a private energy service company (ESCO).

WHEREAS, Authority exists in the law of the Town to enter into this contract, and funds have been budgeted, appropriated and otherwise made available; a sufficient unencumbered balance thereof remains available for payment; and the required approval, clearance and coordination have been accomplished from and with appropriate agencies.

WHEREAS, ESCO is a company with experience and technical and management capabilities to provide for the discovery, engineering, procurement, installation, financing, savings guarantee, maintenance and monitoring of energy and water saving measures at facilities similar in size, function and system type to Town's facilities; and

WHEREAS, ESCO has submitted a ESCO Response, in response to Town's Request for Proposals (RFP), pertaining to the discovery, engineering, procurement, installation, financing, savings guarantee, maintenance and monitoring of energy and water saving measures at Town's facilities; and

WHEREAS, the Town has selected ESCO to provide the services described herein; and

WHEREAS, the Town desires to enter into a Contract to have ESCO perform an **Investment Grade Audit and Project Proposal** to determine the feasibility of entering into an **Energy Savings Performance Contract** to provide for installation and implementation of energy and water saving measures at the Town's facilities.

WHEREAS, if energy and water saving measures are determined to be feasible, and if the amount of savings can be reasonably sufficient to cover all costs, as defined by the Town, associated with an energy savings performance contracting project, the parties may to negotiate an Energy Savings Performance Contract under which the ESCO would design, procure, install, implement, maintain and monitor such energy and water saving measures. However, this intent does not commit Town to entering into such Energy Savings Performance Contract.

WHEREAS, provided the Town pays for the audit services, the Town shall have the right in its sole discretion to use the draft and final investment grade audit reports for its purposes regardless of whether the Town enters into an Energy Savings Performance Contract. Furthermore, the Town shall have the right to proceed with as many of the audit recommendations as it may deem appropriate, or not at all,

THEREFORE, the parties agree as follows:

1. Investment Grade Audit and Project Proposal Contract

ESCO agrees to perform an Investment Grade Audit in accordance with the Scope of Work described below. ESCO agrees to complete the Investment Grade Audit and tender to Institution a final report within Number of Days –120 days recommended depending on size and complexity of facilities and time needed to review the audit calendar days from the execution of this Contract.

Institution agrees to assist the ESCO in performing the Investment Grade Audit in accordance with the Scope of Work described below. Institution agrees to work diligently to provide full and accurate information. ESCO agrees to work diligently to assess validity of information provided and to confirm or correct the information as needed. The parties contemplate that this will be an iterative process and that Institution will have a reasonable amount of time to review and determine acceptance before issuing the **Notice of Acceptance (Exhibit B: Notice of Acceptance of Investment Grade Audit Report)**.

ESCO agrees to offer an **Energy Savings Performance Contract Proposal** with a package of energy and water saving measures and with details as specified in the Scope of Work below.

2. Compensation to ESCO

ESCO shall be compensated as follows:

- a. **Basis and Maximum Amount.** Except as provided for in **Subsections 2(b), 2(c), or 2(d)** below, within Number of Days: 120 days recommended days after Institution's acceptance of the final

Investment Grade Audit and Project Proposal Contract, Institution shall pay to ESCO a sum not to exceed Dollar Amount in Words (\$ dollar amount) based on a maximum of square footage to be audited gross square feet at cost per square foot per square foot of audited square-footage, as per **Exhibit D: Cost and Pricing for IGA Development**. Institution shall only pay for square-footage actually audited. Areas deemed by ESCO not to be audited will not be charged to Institution.

- b. **Payment through Performance Contract.** Institution shall have no payment obligations under this contract provided that ESCO and Institution execute an Energy Savings Performance Contract within Number of Days – 120 days suggested, allowing sufficient time for contract negotiation, attorney review, and Institution processing days, after issuance of the **Notice of Acceptance (Exhibit B: Notice of Acceptance of Investment Grade Audit Report)** of the final **Investment Grade Audit and Project Proposal Contract**, but the fee indicated above shall be incorporated into ESCO's project costs in the Energy Savings Performance Contract and paid through the Energy Savings Performance Contract funding mechanisms.
- c. **Project With Insufficient Savings.** Institution shall have no payment obligations under this Contract in the event that ESCO's final **Investment Grade Audit and Project Proposal Contract** does not contain a package of energy and water saving measures which, if implemented and as meeting terms of **Exhibit A: Scope of Work, (b) Guidelines and Requirements**, will provide the Institution with cash savings sufficient to fund Institution's payments of all costs and fees associated with the Energy Savings Performance Contract, including 1) the fee associated with the Investment Grade Audit, 2) all monthly payments on a lease purchase agreement to finance the measures, 3) any annual fees for monitoring and maintenance incurred by the ESCO. Should the ESCO determine at any time during the Investment Grade Audit that savings cannot be attained to meet these terms, the Investment Grade Audit will be terminated by written notice by the ESCO to Institution. In this event this Contract shall be cancelled and Institution shall have no obligation to pay, in whole or in part, the amount specified in this **Section 2(a)**.

3. Scope of Work

The Investment Grade Audit and Energy Savings Performance Proposal Contract shall be performed as described in **Exhibit A: Scope of Work**.

4. Termination

This Contract may be terminated at any time as described below by:

a. Termination for Default/Cause

1) Default.

If the ESCO refuses or fails to timely perform any of the provisions of this contract, with such diligence as will ensure its completion within the time specified in this contract, the Town may notify the ESCO in writing of the non-performance, and if not promptly corrected within the time specified, may terminate the ESCO's right to proceed with the contract or such part of the contract as to which there has been delay or a failure to properly perform. The ESCO shall continue performance of the contract to the extent it is not terminated and shall be liable for excess costs incurred in procuring similar goods or services elsewhere.

2) ESCO's Duties

Notwithstanding termination of the contract and subject to any directions from the Town, the ESCO shall take timely, reasonable and necessary action to protect and preserve property in the possession of the ESCO in which the Town has an interest.

3) Compensation

Payment for completed services delivered and accepted by the Town shall be at the contract price. The Town may withhold amounts due to the ESCO as it deems to be necessary to protect the Town against loss because of outstanding liens or claims of former lien holders and to reimburse the Town for the excess costs incurred in procuring similar goods and services.

4) Excuse for Nonperformance or Delayed Performance

The ESCO shall not be in default by reason of any failure in performance of this contract in accordance with its terms if such failure arises out of acts of God; acts of the public enemy; acts of the State and any governmental entity in its sovereign or contractual capacity; fires; floods; epidemics; quarantine restrictions; strikes or other labor disputes; freight embargoes; or unusually severe weather. Upon request of the ESCO, the Town shall ascertain the facts and extent of such failure, and, if the Town determines that any failure to perform was occasioned by any one or more of the excusable causes, and that, but for the excusable cause, the ESCO's progress and performance would have met the terms of the contract, the delivery schedule shall be revised accordingly, subject to the rights of the purchasing Town.

5) Erroneous Termination for Default

If after notice of termination of the ESCO's right to proceed under the provisions of this clause, it is determined for any reason that the ESCO was not in default under the provisions of this clause, or that the delay was excusable, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to the termination for convenience clause.

b. Termination for Convenience

1) Termination

The Institution may, when the interests of the institution so require, terminate this contract in whole or in part, for the convenience of the institution. The Institution shall give written notice of the termination to the ESCO specifying the part of the contract terminated and when termination becomes effective. This in no way implies that the purchasing institution has breached the contract by exercise of the Termination for Convenience Clause.

2) ESCO's Obligations

The ESCO shall incur no further obligations in connection with the terminated work and on the date set in the notice of termination the ESCO will stop work to the extent specified. The ESCO shall also terminate outstanding orders and subcontracts as they relate to the terminated work. The ESCO shall settle the liabilities and claims arising out of the termination of subcontracts and orders connected with the terminated work. The Institution may direct the ESCO to assign the ESCO's right, title, and interest under terminated orders or subcontracts to the purchasing institution. The ESCO must still complete and deliver to the purchasing institution the work not terminated by the Notice of Termination and may incur obligations as are necessary to do so.

3) Compensation

- a)** The ESCO shall submit a termination claim specifying the amounts due because of the termination for convenience together with cost or pricing data bearing on such claim. If the ESCO fails to file a termination claim within 90 days from the effective date of termination, the Institution may pay the ESCO, if at all, an amount set in accordance with subparagraph C of this Section.
- b)** The Institution and the ESCO may agree to a settlement provided the ESCO has filed a termination claim supported by cost or pricing data and that the settlement does not exceed the total contract price plus settlement costs, reduced by payments previously made by the purchasing institution, the proceeds of any sales of supplies and manufactured materials made under agreement, and the contract price of the work not terminated.
- c)** Absent complete agreement, under subparagraph B of this Section, the Institution shall pay the ESCO the following amounts, provided the payments agreed to under subparagraph B shall not duplicate payments under this subparagraph:
 - (1)** Contract prices for supplies or services accepted under the contract;
 - (2)** Costs incurred in preparing to perform the terminated portion of the work plus a fair and reasonable profit on such portion of the work (such profit shall not include anticipatory profit or consequential damages) less amounts paid to or to be paid for accepted supplies or services; provided, however, that if it appears that the ESCO would have been sustained a loss if the entire contract would have been completed, no profit shall be allowed or included and the amount of compensation shall be reduced to reflect the anticipated rate of loss.
 - (3)** Costs of settling and paying claims arising out of the termination of subcontracts or orders pursuant to the ESCO's obligations paragraph of this clause. These costs must not include costs paid in accordance with subparagraph B of this Section.
 - (4)** The reasonable settlement costs of the ESCO including accounting, legal, clerical, and other expenses reasonably necessary for the preparation of settlement claims and supporting data with respect to the terminated portion of the contract and for the termination and settlement of subcontracts there under, together with

reasonable storage, transportation, and other costs incurred in connection with the terminated portion of this contract.

(5) The total sum to be paid the ESCO under this subparagraph C shall not exceed the total contract price plus settlement costs, reduced by the amount of payments otherwise made, the proceeds of any sales of supplies and manufacturing materials under subparagraph B, and the contract price of work not terminated.

d) Cost claimed or agreed to under this section shall be in accordance with applicable sections of the State Procurement Code.

c. Available Funds – Contingency - Remedies

The Town is prohibited by law from making fiscal commitments beyond the term of its current fiscal period. Therefore, ESCO's compensation is contingent upon the continuing availability of Town appropriations. Payments pursuant to this contract shall only be made from available funds encumbered for this Contract, and the Town's liability for such payments shall be limited to the amount remaining of such encumbered funds. If funds are not appropriated, or otherwise become unavailable to fund this Contract, the Town may immediately terminate the Contract in whole or in part without further liability in accordance with the Termination for Cause subsection of the Remedies section of this Contract. All payments are subject to the general Remedies section of this Contract.

5. Insurance

Coordinate insurance requirements and amounts of coverage with existing policy amounts and coverage's and modify below as needed.

Before commencing any Work under this Contract, ESCO shall file with Institution certificates of insurance evidencing the coverage's as specified below:

- a. It is agreed and understood ESCO shall maintain in full force and effect adequate commercial general liability insurance and property damage insurance, as well as workmen's compensation and employer's liability insurance pursuant to the State insurance requirements as defined below.
- b. The ESCO shall obtain, and maintain at all times during the term of this Agreement, insurance in the following kinds and amounts.
 - 1) Standard Workers' Compensation and Employer's Liability as required by State statute, including occupational disease, covering all employees at the work site.
 - 2) General Liability (minimum coverage)
 - a) Combined single limit of \$600,000 written on an occurrence basis.
 - b) Any aggregate limit will not be less than \$1,000,000.
 - c) The ESCO must purchase additional insurance if claims reduce the annual aggregate below \$600,000.
 - 3) Automobile Liability (minimum coverage) in the amount of \$600,000 combined single limit
 - 4) The Institution shall be named as an additional insured on each commercial general liability policy.
 - 5) The insurance shall include provisions preventing cancellation without 30 calendar days prior written notice, by certified mail to the Principal Representative

- 6) ESCO shall be responsible for all claims, damages, losses or expenses, including attorney's fees, arising out of or resulting from the performance of the Services contemplated in this Contract, provided that any such claim, damage, loss or expense is caused by any negligent act, error or omission of ESCO, any Consultant or associate thereof, or anyone directly or indirectly employed by ESCO. ESCO shall submit a Certificate of Insurance at the signing of this Contract and also any notices of Renewal of said Policy as they occur.

6. Energy Savings Performance Contract

The Parties intend to negotiate an Energy Savings Performance Contract under which the ESCO will design, install and implement energy and water saving measures which the Parties have agreed to, and provide certain maintenance and monitoring services. However, nothing in this Contract should be construed as an obligation on any of the Parties to execute such a contract. The terms and provisions of such an Energy Savings Performance Contract will be set forth in a separate contract.

7. Extent of Agreement

- a. This Contract represents the entire agreement between the Town and ESCO and supersedes all prior negotiations, representations or agreements, either written or oral. This Contract may be amended only by written instrument signed by the Town.
- b. The Town and ESCO understand and agree the attachment and exhibits hereto are and shall be an integral part of this Contract and the terms and provisions thereof are hereby incorporated, made a part of and shall supplement those recited herein. In the event of any conflict, or variance, the terms and provisions of this printed Agreement shall supersede, govern and control.

8. Term

The term of this Contract will become effective upon approval by the Town Manager and acceptance by the ESCO's Principal Representative. The term shall end number of days plus 15 days to allow for processing of check (suggest 135 days) after signing of the **Notice of Acceptance (Exhibit B)** of the Final Investment Grade Audit Report by the Principal Representative.

9. Order of Precedence

In the event of conflict or inconsistency between this contract and its exhibits or attachments, such conflicts or inconsistencies shall be resolved by reference to the documents in the following order of priority:

1. Connecticut State Statute. State Special Provisions *These Special Provisions are required for State institution/institution projects.*
2. Town Code of Ordinances
3. Contract - general terms and conditions
4. Exhibits or attachments

10. Institution's Special Provisions

Insert as required or as available.

THE PARTIES HERE HAVE EXECUTED THIS CONTRACT

IN WITNESS WHEREOF, and intending to be legally bound, the parties hereto subscribe their names to this Contract on the date first written above.

Institution

By _____
Principal Representative

(Corporate Seal)

ESCO

By: _____

ATTEST

Name

Title

Signature

Address

City, State, Zip

Social Security Number or Federal ID Number

APPROVED:

EXHIBIT A

Scope of Work

NOTE: It is tempting to develop a prescribed scope of work for the ESCO, detailing exactly what projects the ESCO should undertake in your facilities. This is not recommended, however, because it is very valuable to use the ESCO's technical expertise to help identify and assess the opportunities that are most cost-effective or most valuable for your facilities instead of pre-determining the scope.

a. Process

This will be an interactive approach in working with Institution, following these steps:

- 1) Preliminary Assessment of Needs and Opportunities
 - a) Meet with Institution to establish 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 preliminary walk-through of facilities and interview staff and occupants to identify potential measures
 - d) Meet with Institution to present 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 with Institution to present preliminary findings and establish agreement on measures to further analyze
 - d) See ENERGY STAR below.
- 3) Further Analysis and Audit Report
 - a) Further analyze measures
 - b) Develop a preliminary Investment Grade Audit Report
 - c) Meet with Institution to present results
 - d) Prepare final Investment Grade Audit Report
- 4) Energy Savings Performance Contract Proposal
 - a) Develop Energy Savings Performance Contract proposal
 - b) Meet with Institution to present results and negotiate final terms

b. Scope Guidelines and Requirements

- 1) Energy Savings Performance Contract Term. The Energy Savings Performance Contract Term shall have a term no greater than 25 years and no greater than the

cost-weighted average lifetime of the equipment. Institution's goal is for a term no greater than Desired Financing Term years.

NOTE: Refer to legislation where the maximum financing term may be set. A generally recognized maximum is 25 years, as used by the federal government. A typical term is 12-17 years and is governed by financing availability, longevity of installed measures, and ability for savings to allow a cash-flow to pay for the desired scope of projects. The ESC recommends not to otherwise restrict the financing term at this stage as it reduces the project potential.

- 2) Annual Guaranteed Energy and Cost Savings. The annual guarantee is required for the entire financing term; however Institution has the option to terminate the guarantee at any time after the first three years of the contract term provided the annual guaranteed energy and cost savings were achieved each prior year. The guarantee is based on cost savings attributable to all energy saving measures, and must equal or exceed all project costs each year during the contract period. Annual project costs include debt service, ESCO fees, maintenance services, monitoring services, and other services.
- 3) ESCO shall reserve up to 2% of annually guaranteed savings for Institution to hire an independent third-party professional to review the ESCO's monitoring and verification reports and advise Institution of compliance in monitoring and verifying savings.
- 4) Excess Savings. Annual cost savings beyond the guaranteed minimum savings will be retained by Institution, and will not be allocated to shortfalls in other years.
- 5) Annual Savings Estimates: The annual savings estimates for all measures must be estimated for each year during the contract period.
- 6) Allowable cost and savings factors approved for consideration. Institution will provide ESCO 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
 4. In-house labor costs
 5. Deferred maintenance cost
 6. Offset of future capital cost
 7. Outside incentive funds (utility incentives, grants, etc.)
 8. Any savings related to maintenance and operation of the facilities will be limited to those that can be thoroughly documented.
 - b) Payment sources that may also be considered and negotiated:
 - c) 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. NOTE:

Use federal government guidelines on utility escalation rates to ensure reasonableness.

2. Interest rates (municipal tax-exempt rates for public institutions)
 3. Institution cash outlay (Institution's sole discretion)
 - d) The markup costs are presented in **Exhibit D: Cost and Pricing for IGA Development**. These rates will be used in the Investment Grade Audit and subsequent Energy Savings Performance Contract.
- c. **Collect data and background information from Institution** concerning facility operation and energy use for the most recent three years from the effective date of this Contract as follows.
- 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 or equipment modifications and replacements
 - 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

Institution agrees to work diligently to furnish ESCO, upon request, accurate and complete data and information as available. Where information is not available from Institution, ESCO will make a diligent effort to collect such information through the facility inspection, staff interviews, and utility companies.

ESCO agrees 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-using 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, 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 saving 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 equipment replacement or building renovations
 - h) Facility operation and maintenance procedures that could be affected
 - i) Capability to monitor energy performance and verify savings

Institution will allow ESCO reasonable access to facility staff to ensure understanding of existing systems and opportunities.

ESCO agrees 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 bills for the past three years for electricity, gas, steam, water, etc. 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 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. ESCO 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),

ESCO will use its best judgment, spot measurements or short-term monitoring. ESCO 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 saving measures.**
This list shall be compiled and submitted to Institution within 90 calendar days of the execution of this 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. **Meet with Institution to present preliminary findings** prior to thorough analysis. Describe how the projected project economics meet the Institution’s terms for completing the Investment Grade Audit and Proposal Contract. Discuss assessment of energy use, savings potential, project opportunities, and potential for developing an Energy Savings Performance Contract. Develop a list of recommended measures for further analysis. The Institution 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) Follow the methodology of ASHRAE or other 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 durations so as to achieve an accurate and faithful characterization of energy use
 - 4) Use markups and fees stated above in all cost estimates.
 - 5) Develop a preliminary measurement and verification plan for each measure
 - 6) Follow additional guidelines for analysis and report preparation given below
 - 7) Include cost to provide services and complete application for Energy Star Label, LEED-EB certification for Existing Buildings, or other certification. Also include cost for EPA’s Tools for Schools or other such program related to improved air quality.

- i. **Prepare Draft Investment Grade Audit Reports.** The reports provide an engineering and economic basis for negotiating a potential Energy Savings Performance Contract between the Institution and the ESCO. They shall be submitted at 30%, 60%, and 90% completion levels. The detailed requirements for each submission will be discussed with the ESCO prior to commencing with the IGA. The reports shall be completed within **90** calendar days of the date of execution of this Contract. The reports 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.
 - 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 Institution as described above.
 - (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, include a short description and state key input data. If requested by Institution, 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
 - (4) Construction management fees
 - (5) Environmental costs or benefits (disposal, avoided emissions, handling of hazardous materials, etc.)
 - (6) Note that all markups and fees stated in this 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
 - (8) Other cost categories as defined above under "markups" in Section 3b above.
- d) Other
- (1) Estimate of average useful service life of equipment
 - (2) Preliminary commissioning plan (as outlined in **Energy Savings Performance Contract – Schedules**)
 - (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 (stipulated by Contract, utility bill analysis, end-use measurement and calculation, etc.). The Preliminary M&V plan shall follow the format provided in **Exhibit C: Savings Measurement and Verification Plan.**
 - (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. **NOTE:** 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.

- j. **Meet with Institution** to:
Review the recommendations, savings calculations and impact of the measures on the operations of the facility. Describe how the projected project economics meet the Institution's terms for completing the Investment Grade Audit and Performance Contract Proposal. Discuss the willingness and capability of Institution to make capital contributions to the project to improve the economics of the overall project.

- k. **Revise Audit as directed by Institution.**

- l. **Prepare an Energy Savings Performance Contract Proposal (Term Sheet).** In anticipation of ESCO and Institution entering into an Energy Savings Performance Contract to design, install, and monitor the energy and water saving measures proposed in the Investment Grade Audit Report, ESCO shall prepare a proposal for terms to be incorporated in a Energy Savings Performance Contract to include:
 - 1) Project Price is the total amount Institution will pay for the project and ESCO's services. The price must be consistent with maximum markups, margins and fees established in **Exhibit D: Cost and Pricing for IGA Development** and the pricing margins established in **Exhibit E: Pricing for Project Proposal Development**. Costs may include but are not limited to: engineering, designing, packaging, procuring, installing (from Investment Grade Audit 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 Energy Savings Performance Contract.
 - 4) Description of how the project will be financed including available interest rates and financing terms, based on interest rates likely available to Institution at this time, and based on a 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* and **Exhibit C: Savings Measurement and Verification Plan**.
 - 6) Analysis of annual cash flow for Institution during the contract term.

- m. **Utilize ENERGY STAR Tools** ESCO shall provide a Portfolio Manager rating and energy performance target score estimate. For each eligible building, ESCO shall provide a pre-retrofit Energy Performance Rating using EPA ENERGY STAR's Portfolio Manager, the weather normalized energy intensity in kBtu/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 EUI will suffice. 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 customer 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 agency can run its own analyses on financing options in the agreed format. 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.

EXHIBIT B

Notice of Acceptance of Investment Grade Audit Report

Notice of Acceptance

Date of Notice _____

Notice is hereby given that ***Institution*** accepts the Investment Grade Audit and Project Development Proposal by ESCO, as contemplated in **Section 2 of the Investment Grade Audit and Project Proposal Contract** dated _____.

Institution Name

By _____

Date

When completely executed, this form is to be sent by certified mail to the ESCO by Institution Name.

EXHIBIT C
Guidelines for Preliminary Monitoring and Verification Plan

Prepare the M&V Plan as outlined below.

List of Processes and Tables:

Risk, Responsibility and Performance Matrix

M&V Plan and Savings Calculation Methods

- Proposed Annual Savings Overview
- Site Use and Savings Overview (Optional)
- M&V Plan Summary
- Schedule of Verification Reporting Activities
- Proposed Annual Savings For ECM
- Expected Year 1 Savings for ECM
- ENERGY STAR Ratings

Risk, Responsibility and Performance Matrix.

The ESCO shall complete and include the matrix below to summarize the allocation of responsibility for key items related to M&V.

RISK, RESPONSIBILITY AND PERFORMANCE MATRIX

RESPONSIBILITY/DESCRIPTION	CONTRACTOR PROPOSED APPROACH
1. Financial	
<p>a. Interest rates: Neither the contractor nor the Institution has significant control over prevailing interest rates. Higher interest rates will increase project cost, financing/project term, or both. The timing of the TO signing may impact the available interest rate and project cost.</p>	

<p>b. Construction costs: The contractor is responsible for determining construction costs and defining a budget. In a fixed-price design/build contract, the Institution assumes little responsibility for cost overruns. However, if construction estimates are significantly greater than originally assumed, the contractor may find that the project or measure is no longer viable and drop it before TO award. In any design/build contract, the Institution loses some design control. Clarify design standards and the design approval process (including changes) and how costs will be reviewed.</p>	
<p>c. M&V confidence: The Institution assumes the responsibility to determine the confidence that it desires to have in the M&V program and energy savings determinations. The desired confidence will be reflected in the resources required for the M&V program, and the ESCO must consider the requirement prior to submittal of the final proposal. Clarify how project savings are being verified (e.g., equipment performance, operational factors, energy use) and the impact on M&V costs.</p>	
<p>d. Energy Related Cost Savings: The Institution and the contractor may agree that the project will include savings from <i>recurring</i> and/or <i>one-time</i> costs. This may include one-time savings from avoided expenditures for projects that were appropriated but will no longer be necessary. Including one-time cost savings before the money has been appropriated may involve some risk to the Institution. Recurring savings generally result from reduced O&M expenses or reduced water consumption. These O&M and water savings must be based on actual spending reductions. Clarify sources of non-energy cost savings and how they will be verified.</p>	
<p>e. Delays: Both the contractor and the Institution can cause delays. Failure to implement a viable project in a timely manner costs the Institution in the form of lost savings, and can add cost to the project (e.g., construction interest, re-mobilization). Clarify schedule and how delays will be handled.</p>	
<p>f. Major changes in facility: The Institution controls major changes in facility use, including closure. Clarify responsibilities in the event of a premature facility closure, loss of funding, or other major change.</p>	
<p>2. Operational</p>	
<p>a. Operating hours: The Institution generally has control over operating hours. Increases and decreases in operating hours can show up as increases or decreases in “savings” depending on the M&V method (e.g., operating hours multiplied by improved efficiency of equipment vs. whole-building/utility bill analysis). Clarify whether operating hours are to be measured or stipulated and what the impact will be if they change. If the operating hours are stipulated, the baseline should be carefully documented and agreed to by both parties.</p>	
<p>b. Load: Equipment loads can change over time. The Institution generally has control over hours of operation, conditioned floor area, intensity of use (e.g., changes in occupancy or level of automation). Changes in load can show up as increases or decreases in “savings” depending on the M&V method. Clarify whether equipment loads are to be measured or stipulated and what the impact will be if they change. If the equipment loads are stipulated, the baseline should be carefully documented and agreed to by both parties.</p>	

<p>c. Weather: A number of energy efficiency measures are affected by weather. Neither the contractor nor the Institution has control over the weather. Should the Institution agree to accept risk for weather fluctuations, it shall be contingent upon aggregate payments not exceeding aggregate savings. Clearly specify how weather corrections will be performed.</p>	
<p>d. User participation: Many energy conservation measures require user participation to generate savings (e.g., control settings). The savings can be variable and the contractor may be unwilling to invest in these measures. Clarify what degree of user participation is needed and utilize monitoring and training to mitigate risk. If performance is stipulated, document and review assumptions carefully and consider M&V to confirm the capacity to save (e.g., confirm that the controls are functioning properly).</p>	
<p>3. Performance</p>	
<p>a. Equipment performance: The contractor has control over the selection of equipment and is responsible for its proper installation, commissioning, and performance. The contractor has responsibility to demonstrate that the new improvements meet expected performance levels including specified equipment capacity, standards of service, and efficiency. Clarify who is responsible for initial and long-term performance, how it will be verified, and what will be done if performance does not meet expectations.</p>	
<p>b. Operations: Performance of the day-to-day operations activities is negotiable and can impact performance. However, the contractor bears the ultimate risk regardless of which party performs the activity. Clarify which party will perform equipment operations, the implications of equipment control, how changes in operating procedures will be handled, and how proper operations will be assured.</p>	
<p>c. Preventive Maintenance: Performance of day-to-day maintenance activities is negotiable and can impact performance. However, the contractor bears the ultimate risk regardless of which party performs the activity. Clarify how long-term preventive maintenance will be assured, especially if the party responsible for long-term performance is not responsible for maintenance (e.g., contractor provides maintenance checklist and reporting frequency). Clarify who is responsible for performing long-term preventive maintenance to maintain operational performance throughout the contract term. Clarify what will be done if inadequate preventive maintenance impacts performance.</p>	
<p>d. Equipment Repair and Replacement: Performance of day-to-day repair and replacement of contractor-installed equipment is negotiable, however it is often tied to project performance. The contractor bears the ultimate risk regardless of which party performs the activity. Clarify who is responsible for performing replacement of failed components or equipment replacement throughout the term of the contract. Specifically address potential impacts on performance due to equipment failure. Specify expected equipment life and warranties for all installed equipment. Discuss replacement responsibility when equipment life is shorter than the term of the contract.</p>	

M&V PLAN AND SAVINGS CALCULATION METHODS OUTLINE

Fill in the following tables or provide equivalent information.

PROPOSED ANNUAL SAVINGS OVERVIEW

[Include all applicable fuels/commodities for project, e.g., electric energy, electric demand, natural gas, fuel oil, coal, water, etc.]

ECM	Total energy savings (MBtu/yr)	Electric energy savings (kWh/yr)	Electric demand savings (kW/yr)*	Natural gas savings (MBtu/yr)**	Water savings (gallons/yr)	Other energy savings (MBtu/yr)**	Total energy and water cost savings, Year 1 (\$/yr)	Other energy-related O&M cost savings, Year 1 (\$/yr)	Total cost savings, Year 1 (\$/yr)
Total savings									

First Year Guaranteed Cost Savings: \$

Notes

*Annual electric demand savings (kW/yr) is the sum of the monthly demand savings.

MBtu=10⁶ Btu.

**If energy is reported in units other than MBtu, provide a conversion factor to MBtu for link to cost schedules (e.g., 0.003413 MBtu/kWh).

SITE USE AND SAVINGS OVERVIEW

	Total energy	Electric energy	Electric demand savings	Natural gas savings	Water savings	Other energy savings
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	savings (MBtu/yr)	savings (kWh/yr)	(kW/yr)*	(MBtu/yr)**	(gallons/yr)	(MBtu/yr)**
Total proposed project savings						
Usage for entire site**						
% Total site usage saved						
Project square footage (KSF)						
Total site square footage (KSF)						
% Total site area affected						
<u>Notes</u>						
MBtu=10 ⁶ Btu *Annual electric demand savings (kW/yr) is the sum of the monthly demand savings. **If energy is reported in units other than MBtu, provide a conversion factor to MBtu for link to cost schedules (e.g., 0.003413 MBtu/kWh). ***Define usage period. KSF = 10 ³ square feet.						

M&V PLAN SUMMARY

ECM No.	ECM Description	M&V Option Used*	Summary of M&V Plan

*M&V options include A, B, C, and D of the International Performance Measurement and Verification Protocol (IPMVP).

SCHEDULE OF VERIFICATION REPORTING ACTIVITIES

Item	^a Recommended time of submission	^a Institution's review and acceptance period
Post-Installation Report	30 to 60 days after acceptance	30 days
Annual Report	30 to 60 days after annual performance period	30 days

^aTimes are recommended based on industry practice; modify as needed.

PROPOSED ANNUAL SAVINGS FOR EACH ECM

[Include all applicable fuels/commodities for project, such as: electric energy, electric demand, natural gas, fuel oil, coal, water, etc.]

	Total energy use (MBtu/yr)	Electric energy use (kWh/yr)	Electric energy cost, Year 1 (\$/yr)	Electric demand* (kW/yr)	Electric demand cost, Year 1 (\$/yr)	Natural gas use (MBtu/yr)**	Natural gas cost, Year 1 (\$/yr)	Water use (gallons/yr)	Water cost, Year 1 (\$/yr)	Other energy use (MBtu/yr)**	Other energy cost, Year 1 (\$/yr)	Other energy-related O&M costs, Year 1 (\$/yr)	Total costs, Year 1 (\$/yr)
Baseline use													
Post-installation use													
Savings													

Notes

*Annual electric demand savings (kW/yr) is the sum of the monthly demand savings.

MBtu = 10⁶ Btu.

**If energy is reported in units other than MBtu, provide a conversion factor to MBtu for link to cost schedules (e.g., 0.003413 MBtu/kWh).

ECM-SPECIFIC M&V PLAN AND SAVINGS CALCULATION METHODS

Develop section for each ECM.

- 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).
- Specify the M&V guideline and option used from the International Performance Measurement and Verification Protocol (IPMVP).
- Provide an overview of M&V Activities for ECM. Explain intent of M&V plan, including what is being verified.
- Provide an overview of savings calculations methods for ECM. Provide a general description of analysis methods used for savings calculations.

Proposed Energy and Water Savings Calculations and Methodology

- Provide detail description of analysis methodology used. Describe any data manipulation or analysis that was conducted prior to applying savings calculations.
- Detail all assumptions and sources of data, including all stipulated values used in calculations.
- Include equations and technical details of all calculations made. (Use appendix and electronic format as necessary.) Include description of data format (headings, units, etc.).
- Details of any savings or baseline adjustments that may be required.
- Detail energy and water rates used to calculate cost savings. Provide post-acceptance performance period energy and water rate adjustment factors.
- Detail proposed savings for this energy conservation measure for post-acceptance performance period. Include table - Proposed Annual Savings for Each ECM.

Operations and Maintenance Cost Savings

- Provide justification for O&M cost savings. Describe how savings are generated. Detail cost savings calculations.
- Provide post-acceptance performance period other cost savings adjustment factors.

Details of other savings (if applicable)

- Provide justification for cost savings. Describe how savings are generated. Detail cost savings calculations.
- Provide post-acceptance performance period other cost savings adjustment factors.

Post-Installation M&V Activities

- Describe the intent of post-installation verification activities, including what will be verified.
- 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.

- Define key system performance factors characterizing the post-installation conditions such as lighting intensities, temperature set points, etc.
- Define requirements for Institution witnessing of measurements if different than whole project data requirements.
- 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, Form of data to be collected (.xls, .csv, etc.), Sample data collection forms (optional)
- Detail data analysis to be performed.

Post-Acceptance Performance Period Verification Activities

- 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.
- Define key system performance factors characterizing the post-acceptance performance period conditions. Include factors such as comfort conditions, lighting intensities, temperature set points, etc.
- Describe the intent of post-acceptance performance period verification activities – what will be verified.
- Provide detailed schedule of post-acceptance performance period verification activities and inspections.
- Define requirements for Institution witnessing of measurements if different than whole project data requirements.
- Provide details of post-acceptance performance period 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, Form of data to be collected (.xls, .csv, etc.), Sample data collection forms (optional)
- Detail data analysis to be performed.
- Define O&M and repair reporting requirements. Detail verification activities and reporting responsibilities of Institution and contractor on operations and maintenance items. Define reporting schedule.

ENERGY STAR: For each building included in the project, ESCO will provide a Portfolio Manager rating. Also, for applicable buildings, ESCO includes the cost to provide services and complete the annual application for a building ENERGY STAR label. ESCO shall provide a Portfolio Manager rating and energy performance target score estimate. For each eligible building, ESCO shall provide a pre-retrofit Energy Performance Rating using EPA ENERGY STAR's Portfolio Manager, the weather normalized energy intensity in kBtu/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 EUI will suffice. 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 customer 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 agency can run its own analyses on financing options in the agreed format. 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.

EXHIBIT D
Cost and Pricing for IGA Development

Where a prior RFP required cost and pricing information, the response is repeated below or else negotiated with respect to the agreed maximums.

Institutions may choose to accept audit costs, markups, margins and fees proposed by ESCO for individual projects without further negotiation, provided they do not exceed the maximums established in the tables above, or directly negotiate with ESCO for reductions as dictated by individual facility or project requirements. ESCO may also propose lower audit costs, markups, margins and fees depending upon individual project considerations or their own internal business approach.

Cost Markups

Provide your company's markups in the table below for each category listed. Markups represent a percentage added to the base cost for the project (excluding the cost of the audit).

This format is required and must be completed in its entirety. Use only the categories shown.

Ranges for markups are not acceptable.

Clearly describe how self-performed work will be charged (billed hourly, billed as a markup of equipment and labor costs, etc.). If self-performed work will be billed hourly, include markups proposed to be applied to the hourly rate.

Construction Costs	Maximum Markup above actual costs (if any)
Subcontractor Costs (Contractor Costs to ESCO)	
Other Direct Purchases of Equipment, Material, Supplies by the ESCO (do not include subcontractor supplied purchases as they should be included above)	
Design (state at right whether this shall be completed by the ESCO or subcontracted)	
Project Management (state at right whether this shall be completed by the ESCO or subcontracted)	
Commissioning (state at right whether this shall be completed by the ESCO or subcontracted)	
Training (state at right whether this shall be completed by the ESCO or subcontracted)	
Construction Measurement and Verification (state at right whether this shall be completed by the ESCO or subcontracted)	
Permits (markup allowed only if permits are acquired by ESCO)	
Performance Bond	

Project Margins

In the table below provide the margins that will be applied to the project. Margins represent the percentage of the total price.

Project Margin	Maximum % Margin
Overhead Percent	
Profit Percent	

If a proposal is from a joint venture partnership, include proposed maximum allowable markups in the schedule format above for each participating company.

Audit Fee

Below is the fee to conduct the Investment Grade Audit and Project Development Proposal, on a cost per square foot basis and total price.

		Proposed Max cost per sf
	Investment Grade Audit and Project Proposal	\$/sf
		Total \$

Other Fees

For each category describe how that annual cost is determined, how the fee is charged to the project and when it is applied. Markups on fees are not allowable under the SEO/EPCP.

Annual Cost Category	How Price is Determined	Years Applied (One-time, Annual, etc.)
Warranty		
Post-Retrofit Measurement & Verification		
Maintenance		
Other:		
Other:		
Other:		

Contingency

Describe your company's typical level of contingency budget for lighting, electrical, mechanical, controls projects, and other projects and how it proposes to apply contingency to cover changes in work scope and subcontractor change orders. All unused contingency funds will revert to the Institution or be applied to additional work scope through a change order approved by the Institution.

EXHIBIT E
Pricing for Project Proposal Development

The below schedule is a deliverable that summarizes the pricing structure and the proposed project costs and price. Note that the base construction costs are presented in terms of margins for the purpose of the project proposal development, whereas they are represented as markups in **Exhibit D: Pricing for Project Proposal Development** for use in developing the IGA.

		Project Budget	Percent of Total Project Price	Price/ Cost
		Base Construction Costs		
	a	Subcontractor Costs (Contractor Costs to ESCO)		
	b	Other Direct Purchases of Equipment, Material, Supplies (Supplier Costs to ESCO)		
	c	Design		
	d	Project Management		
	e	Permits		
	f	Performance Bond		
	g	Commissioning		
	h	Training		
	i	Construction Measurement and Verification		
sum (a:i)	j	Sum Project Direct Costs		
	k	Overhead Percent		
	l	Profit Percent		
Sum (j:l)	m	PROJECT PRICE SUB TOTAL w/OH &P		
	n	Investment Grade Audit and Project Proposal		
	o	Contingency		
	p	Third Party Consultant Fee	2%	
Sum (m:p)	q	TOTAL PROJECT PRICE		

Annual Costing

Provide a price for all annual services not included above including but not limited to Warranty, Measurement and Verification, and Maintenance below.

CATEGORY OF ANNUAL COST	How Price is Determined	Years Applied (One-time, Annual, etc.)
Warranty		
Measurement and Verification		
Maintenance		
3 rd Party M&V Review		
Other: _____		

ENERGY SAVINGS PERFORMANCE CONTRACT

This document is part of a collection of model procurement and contracting documents that represent Best Practices for state energy offices (SEOs) to launch and administer programs to increase energy efficiency through Energy Savings Performance Contracting. The documents draw from successful programs in various states and are continually updated to incorporate the latest strategies. They can be easily customized to meet the needs of any SEO or similar government department.

DESCRIPTION –Energy Savings Performance Contract

This Energy Savings Performance Contract is for design, construction, guarantee, and follow-up monitoring of energy-saving projects. An energy audit was previously completed that identified the costs and savings of each project. The audit provides the basis to develop and negotiate this Energy Savings Performance Contract.

This is a model document only and does not attempt to identify or address all circumstances or conditions you may encounter or desire. Consult with your legal counsel and procurement staff to adapt it to meet your needs.

MODEL ENERGY SAVINGS PERFORMANCE CONTRACT

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MODEL ENERGY SAVINGS PERFORMANCE CONTRACT

This Energy Savings Performance Contract (the "Contract") is made and entered into as of this day of _____, at _____, in the County of _____, State of _____, by and between _____ ("ESCO"), having its principal offices at _____, and _____ ("Institution") having principal offices at _____, for the purpose of installing certain energy and water cost saving equipment, described in **Schedule R (Equipment to Be Installed by ESCO)**, and providing other services designed to save energy for the Institution's property and buildings, known as _____, located at _____ (the "Project Site(s)").

RECITALS

WHEREAS, Institution owns and operates the Project Site(s), and is in need of energy and water cost saving equipment and services designed to save energy and associated energy costs at said Project Sites; and

WHEREAS, Institution has been authorized to enter into a third party financing agreement for all professional services, equipment and construction for the purchase and installation of energy and water cost savings measures, collectively referred to as the "Work" (as herein after defined); and

WHEREAS, ESCO has developed or become knowledgeable about certain procedures for controlling energy and water consumption through services provided and equipment installed and maintained at project sites similar in scope and scale of Institution; and

WHEREAS, ESCO was selected after a determination that its proposal was the most advantageous to Institution pursuant to a Request for Proposal and contract for the Investment Grade Audit and Project Development Proposal (as hereinafter defined); and

WHEREAS, ESCO has made an assessment of the utility consumption characteristics of the Project Site(s) and existing Equipment described in **Schedule Q (Description of Project Site(s))**, which was

delivered to Institution as a Investment Grade Audit Report which Institution has approved and is attached as **Appendix D: Investment Grade Audit Report**; and

WHEREAS, Institution desires to retain ESCO to purchase, install and service certain energy and water cost savings equipment and to provide other services and strategies described in the attached Schedules, for the purpose of achieving energy and water cost reductions within Project Site(s), as more fully described herein; and

WHEREAS, Institution is authorized under the Constitution and the laws of the State of _____ to enter into this Contract for the purposes set forth herein.

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, and intending to be legally bound hereby, Institution and ESCO hereto covenant and agree that the following Schedules, Exhibits and Appendices are attached hereto (or will be, as provided in this Contract) and are made a part of this Contract by reference.

ARTICLE 1. DEFINITIONS, SCHEDULES, EXHIBITS AND APPENDICES

Section 1.1. Definitions.

Certificate of Acceptance: The certificate substantially in the form provided in **Exhibit III**.

Contract: This Energy Savings Performance Contract and all Schedules and Exhibits attached hereto.

Contract Sum: The sum of all materials, labor, auditing, design, engineering, project construction management fees, overhead, profit, contingency, subcontracted services related to the project.

Energy and Water Cost Savings: The savings as provided in **Schedule A (Savings Guarantee)**.

Energy and Cost Savings Guarantee: The guarantee that is achieved as a result of the installation and operation of the Equipment and provision of services provided for in this Contract as specified in **Schedule J (Compensation to ESCO for Annual Service)** and in accordance with the Savings Calculation Formula as set forth in **Schedule C (Savings Measurement and Verification Plan; Post-Retrofit M&V Plan; Annual M&V Reporting Requirements)**.

Equipment: The goods enumerated on **Schedule R (Equipment to be Installed by ESCO)** that is now or hereafter from time to time become attached hereto and incorporated herein by reference, together and with any and all additions, modifications, attachments, replacements and parts thereof.

Event of Default: Those events described in **Section 20 (Events of Default)** hereof.

Interim Period: The period from contract execution until the Commencement Date.

Commencement Date: The date described in **Section 2.2 (Commencement Date)**.

Project Site(s): The facilities of the Institution in need of energy and water saving equipment and services designed to reduce consumption and associated costs at said Project Site(s)

Investment Grade Audit: A study by the qualified energy services provider selected for a particular Energy Savings Performance Contract project which includes detailed descriptions of the improvements recommended for the project, the estimated costs of the improvements and the utility and operations and maintenance cost savings projected to result from the recommended improvements.

Work: Collectively, the Equipment, professional services and project construction related to the project.

Section 1.2. Investment Grade Audit Report and Project Development Proposal.

Section 1.2: This section records the approval and acceptance by the Institution of the Investment Grade Audit Report which must be completed prior to the execution of this contract. A Certificate of Acceptance of the audit should be signed by both parties and attached to the contract (Exhibit III (i)). If the list of measures is not completely finalized prior to the signing of this contract, then language to that effect should be included.

ESCO has prepared the complete Investment Grade Audit Report of the Project Site(s) set forth in **Appendix D (Investment Grade Audit Report)** which has been approved and accepted by Institution as set forth in Exhibit III (i) (**Certificate of Acceptance—Investment Grade Audit Report**). The audit includes all measures agreed upon by the parties.

Section 1.3. Schedules, Exhibits and Appendices

Section 1.3: The contract schedules detail the substantive technical parameters of the projects negotiated by the parties and accepted and approved by the Institution. These schedules are also referenced throughout the various sections of the Contract. Their titles may be included here for ease of reference or located at the end of the contract. If any schedules need to be completed after execution of the contract, language to the effect they are forthcoming should be included. (Please note that descriptions for each contract schedule are provided at the end of this sample contract document under the heading of Attachment I.)

ESCO has prepared and Institution has approved and accepted the following Schedules, copies of which are attached hereto (or will be as provided for in the Contract), set forth in their entirety as Attachment I and made a part of this Contract by reference.

Schedules

Savings Guarantee

- Schedule A Savings Guarantee
- Schedule B Baseline Energy Consumption; Methodology to Adjust Baseline
- Schedule C Savings Measurement and Verification Plan; Post-Retrofit M&V Plan; Annual M&V Reporting Requirements
- Schedule D-G Left blank for optional schedules

Payments and Schedule

- Schedule H Final Project Cost & Project Cash Flow Analysis
- Schedule I Financing Agreement and Payment Schedule
- Schedule J Compensation to ESCO for Annual Services
- Schedule K Rebates, Incentives and Grants
- Schedule L-P Left blank for optional schedules

Design and Construction Phase

- Schedule Q Description of Project Site(s)
- Schedule R Equipment to be Installed by ESCO
- Schedule S Construction and Installation Schedule
- Schedule T Systems Start-Up and Commissioning; Operating Parameters of Installed Equipment
- Schedule U Standards of Comfort
- Schedule V ESCO's Training Responsibilities
- Schedule W-AA Left blank for optional schedules

Post-Construction

- Schedule BB ESCO's Maintenance Responsibilities
- Schedule CC Institution's Maintenance Responsibilities
- Schedule DD Facility Maintenance Checklist
- Schedules EE – II Left blank for optional schedules

Administration

Schedule JJ Alternative Dispute Resolution Procedures

Schedule KK – OO Left blank for optional schedules

Optional Schedules

Pre-Existing Service Contracts

Energy Savings Projections

Facility Changes Checklist

Current and Known Capital Projects at Facility

Exhibits

Exhibit I Performance Bond

Exhibit II Labor and Material Payment Bond *if required*

Exhibit III (i) Certificate of Acceptance—Investment Grade Audit Report

Exhibit III (ii) Certificate of Acceptance—Installed Equipment

Exhibit IV Equipment Warranties

Optional Exhibits

Manifest of Ownership

Minority and Woman-Owned Business Certification

Certification that Financing Term is no Longer than the Aggregated
Equipment Lifetime

Notice of Substantial Completion

Notice to Proceed with Construction Phase

Record of Reviews by Institution

Appendices

Appendix A RFP for ESCO Solicitation (Pre-qualification Phase; Final Selection
Phase)

Appendix B ESCO Proposal (Pre-qualification Phase; Final Selection Phase)

Appendix C Investment Grade Audit and Project Development Contract

Appendix D Investment Grade Audit Report

Section 1.4. Other Documents

Section 1.4: This section makes the original Request for Proposals (RFP) and the selected ESCO's proposal part of the contract. It also acknowledges the completion of the ESCO's Investment Grade Audit Report and its approval and acceptance by the Institution. It is recommended that the original Investment Grade Audit Report in its entirety be attached and/or referenced as an Exhibit to this contract. It is important to note the last sentence of this provision makes it clear that if there is any future discrepancy between the Investment Grade Audit Report and any technical schedule(s), the terms of this contract shall apply.

This Contract incorporates herein and makes a part hereof the entire RFP and ESCO Proposal for this Project labeled Appendix A and B respectively. Acceptance by the Institution of the Investment Grade Audit Report is reflected in Exhibit III (i). Notwithstanding, the provisions of this Contract and the attached Schedules shall govern in the event of any inconsistencies between the Investment Grade Audit Report and the provisions of this Contract.

PAYMENTS AND SCHEDULES

ARTICLE 2. PURCHASE AND SALE; COMMENCEMENT DATE AND TERMS; INTERIM PERIOD

Section 2.1. Purchase and Sale

Section 2.1. When using a third-party lease-purchase structure the ESCO will receive 100% of the Contract Sum from the Institution once the Certificate of Acceptance is signed. The payments to the ESCO during the construction period (Interim Period) can be drawn down by the ESCO from the proceeds of the lease through an escrow account set up by the leasing ESCO. Payments will be made based upon the percentage of work completed and approved by the Institution. The Institution should require a ___% retainage be withheld from the ESCO until the Certificate of Acceptance is executed at which time final payment can be made.

Institution agrees to lease Equipment through a third party financier, name of lender, as provided for in a separate lease document, **Schedule I (Financing Agreement and Payment Schedule)**. ESCO agrees to provide the Equipment, together with installation, maintenance and other services as provided herein, as in **Schedule R, (Equipment to be Installed by ESCO)** based upon the terms and conditions set forth in **Schedule I (Financing Agreement and Payment Schedule)**.

The agreed to Contract Sum for the Work is a Guaranteed Maximum Price of \$ _____ as set forth in **Schedule H (Final Project Cost & Project Cash Flow Analysis)**. Payment terms are described in **Schedule I (Financing Agreement and Payment Schedule)**.

ESCO will provide the Work and all related services identified in **Schedule R (Equipment to be Installed by ESCO)** and the services detailed in **Schedule BB (ESCO's Maintenance Responsibilities)** and **Schedule J (Compensation to ESCO for Annual Services)**. ESCO shall supervise and direct the Work and shall be responsible for all construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the Work under this Contract. ESCO shall be responsible to pay for all labor, materials, equipment, tools, construction equipment and machinery, transportation and other facilities and services necessary for the proper execution and completion of the Work.

Institution shall pay ESCO the Contract Sum in accordance with **Schedule I (Financing Agreement and Payment Schedule)**. Payments will be made on a progress basis in accordance with **Schedule I (Financing Agreement and Payment Schedule)**, for Work completed and authorized by Institution during the Interim Period. The Progress Payments outlined in **Schedule I (Financing Agreement and Payment Schedule)** will not be applicable to this Contract. Retainage of ___% will be withheld from each payment until the construction installation is completed as set forth in **Section 2.2 (Commencement Date)**.

Section 2.2. Commencement Date

Section 2.2: This section defines the Commencement Date which is the actual beginning date for the savings guarantee period. It is standard for this date to be the first month AFTER the ESCO has completed construction and delivered a notice that all equipment is installed and operating. In addition, the Institution will have accepted the installation by signing a Certificate of Acceptance which should be attached to the contract. It also clearly states that no payment for any of the ESCO's on-going services (e.g. measurement and verification, project monitoring, maintenance, training etc.) will be made prior to the Commencement Date. It is recommended that the repayment obligation of project financing be arranged to coincide with the Commencement Date. The timing of the Commencement Date may also need to be arranged to accommodate the Institution's fiscal year for the purpose of appropriations and budgeting. This date alignment should not prevent the ESCO from timely remuneration for training and other services performed prior to Commencement Date.

The Commencement Date shall be the first day of the month after the month in which all schedules are in final form and accepted by Institution and ESCO shall have delivered a Notice to Institution that it has installed and commenced operating all of the Equipment specified in **Schedule R (Equipment to be Installed by ESCO)** and in accordance with the provisions of **ARTICLE 8 (Construction Schedule and Equipment Installation; Approval)**, **Schedule S (Construction and Installation Schedule)** and **Schedule T (Systems Start-Up and Commissioning; Operating Parameters of Installed Equipment)**; and Institution has inspected and accepted said installation and operation as evidenced by the Certificate of Acceptance as set forth in **Exhibit III (ii) (Certificate of Acceptance—Installed Equipment)**.

Notwithstanding anything to the contrary in this **Article 2 and Article 3 (Purchase and Sale; Commencement Date and Terms; Interim Period)**, the Commencement Date shall not occur and the Institution shall not be required to accept the work under this Contract unless and until all Equipment installation for the Project Site(s) is completed by ESCO in accordance with the terms and conditions of this Contract. Institution shall have _____ days after notification by the ESCO to inspect and accept the Equipment. Institution reserves the right to reject the Equipment if installation fails to meet reasonable standards of workmanship, does not comply with applicable building codes, or is otherwise not in compliance with this Contract. ESCO shall not be paid in full, including retainage, until after the punch list is completed and ESCO has satisfied any and all claims

for labor and materials and the Certificate of Acceptance has been signed. The Certificate of Acceptance will not be unreasonably withheld by the Institution.

Compensation payments due to ESCO for on-going services and maintenance under this Contract as set forth in **Schedule J (Compensation to ESCO for Annual Services)** shall begin no earlier than _____ from the Commencement Date as defined herein.

Section 2.3. Term of Contract; Interim Period

Section 2.3: Prior to the Commencement Date (Section 2.2) the final contract and technical schedules are negotiated and executed by signature. At that point in time the ESCO typically begins the final design of the project and finalizes the construction schedule with the Institution. The "Interim Period" refers to the construction period, during which some amount of energy savings will start to accrue. The treatment of those energy savings can be negotiated to either be credited to the ESCO's guarantee or credited to the Institution. If such savings are credited to the ESCO's guarantee, it is recommended that such credit be extended for a specified period of time (e.g. 1-2 years). If the ESCO is credited with the interim period savings, the Institution and ESCO will need to agree to develop an approach to the measurement of those savings.

Subject to the following sentence, the term of this Contract shall be _____ years measured beginning with the Commencement Date. Nonetheless, the Contract shall be effective and binding upon the parties immediately upon its execution, and the period from contract execution until the Commencement Date shall be known as the "Interim Period". All energy savings achieved during the interim period will be fully credited to Institution.

ARTICLE 3. SAVINGS GUARANTEE; ANNUAL RECONCILIATION; PAYMENTS TO ESCO

Section 3.1. Energy and Cost Savings Guarantee

Section 3.1: This section establishes the term of the Energy and Cost Savings Guarantee to be on an annual basis and structured to cover any and all annual payments (debt service/lease payment and on-going ESCO fees) to be made by the Institution. It ensures that the ESCOs' savings guarantee will at least cover annual project lease-purchase costs (principal and interest) and all annual ESCO service fees for maintenance.

ESCO has formulated and, subject to the adjustments provided for in **ARTICLE 15 (Material Changes)**, has guaranteed the annual level of energy and water cost savings to be achieved as a result of the installation and operation of the Equipment and provision of services provided for in this Contract in accordance with the methods of savings measurement and verification as set forth in **Schedule C (Savings Measurement and Verification Plan; Post-Retrofit M&V Plan; Annual M&V Reporting Requirements)**. The Energy and Cost Savings Guarantee is set forth in annual increments for the term of the Contract as specified in **Schedule A (Savings Guarantee)** and has been structured by the ESCO to be sufficient to cover any and all annual payments required to be made by the Institution as set forth in **Schedule J (Compensation to ESCO for Annual Services)** and **Schedule I (Financing Agreement and Payment Schedule)**.

Section 3.2. Annual Review and Reimbursement/Reconciliation

Section 3.2: At the end of each year of the contract and within a specified number of days, there will be a review and reconciliation of the actual achieved savings (subject to any adjustments made for weather, occupancy, operations etc.) with the ESCO's guaranteed savings. If there is a savings shortfall, the ESCO is contractually liable to reimburse the Institution for the difference between what was actually achieved and the amount guaranteed. If in any future year, the achieved savings exceed the guarantee, the excess savings will be used to reimburse the ESCO for any shortfall payments made in previous years. It is recommended that all excess savings be retained by the Institution except when the ESCO has had a previous year's shortfall and not be credited to satisfy savings guarantees in future years of the contract. Institution may negotiate to receive cash, equipment or services equivalent to any deficiency in savings.

Energy-related cost savings shall be measured and/or calculated as specified in **Schedule C (Savings Measurement and Verification Plan; Post-Retrofit M&V Plan; Annual M&V Reporting)** and **Schedule B (Baseline Energy Consumption; Methodology to Adjust Baseline)** and a report provided within ninety (90) days of the end of the year for the previous year for each anniversary of the Commencement Date.

In the event the Energy and Cost Savings achieved during such guarantee year are less than the Guaranteed Energy and Cost Savings as defined in **Schedule A (Savings Guarantee)**, ESCO shall pay the Institution an amount equal to the deficiency.

The ESCO shall remit such payments to the Institution within days of written notice by the Institution of such monies due. When the total energy savings in any one year during the guarantee period exceed the Energy and Cost Savings Guarantee as set forth in **Schedule A (Savings Guarantee)** and are in addition to those monies due the ESCO for compensation for services as set forth in **Schedule J (Compensation to ESCO for Annual Services)**, such excess savings shall first be applied to reimburse ESCO for any payment ESCO made to Institution to meet ESCO's guarantee for previous years in which the energy savings fell short of ESCO's Energy and Cost Savings Guarantee under the terms as set forth in **Schedule A (Savings Guarantee)**. In no event shall credit for excess savings be used to satisfy saving guarantees in future years of the Contract

Section 3.3. ESCO Compensation and Fees

Section 3.3: This section ensures that the ESCO's savings guarantee will, at a minimum, cover annual project financing costs (principal and interest). In addition, it states that all annual ESCO service fees for maintenance will also be paid from savings.

ESCO has structured the Energy and Cost Savings Guarantee referred to in 3.1 above, to be sufficient to include any and all annual payments required to be made by the Institution in connection with financing/purchasing the Equipment to be installed by ESCO under this Contract as set forth in **Schedule I (Financing Agreement and Payment Schedule)**. Actual energy and operations savings achieved by ESCO through the operation of Equipment and performance of services by ESCO shall be sufficient to cover any and all annual fees to be paid by Institution to ESCO for the provision of services as set forth and in accordance with the provisions of **Schedules J (Compensation to ESCO)** and **BB (ESCO's Maintenance Responsibilities)**.

Section 3.4. Billing Information Procedure

Sections 3.4 & 3.5: These sections which deal with payment can be negotiated and structured to suit the needs of the Institution. It is, however, important to provide the ESCO with monthly utility bills and to do so in a timely manner. The project's billing schedule for on-going ESCO services can be set up on a monthly or quarterly basis.

Payments due to ESCO under this Section 3 shall be calculated each _____ in the following manner:

- (i) By the _____ day after receipt, Institution shall provide ESCO with copies of all energy bills for the Project Site(s) which it shall have received for the preceding month;
- (ii) Upon receipt of the required information, ESCO shall calculate the savings in accordance with the agreed-upon calculation formulae in **Schedule C (Savings Measurement and Verification Plan; Post-Retrofit M&V Plan; Annual M&V Reporting Requirements)**.
- (iii) Based upon paragraphs (i) and (ii) above, ESCO shall prepare and send to Institution a _____ invoice which shall set forth for each _____ the amounts of the energy and operations dollar savings calculated in accordance with **Schedule C (Savings Measurement and Verification Plan; Post-Retrofit M&V Plan; Annual M&V Report Requirements)** and for the services as provided for in **Schedule J (Compensation to ESCO for Annual Services)**. The invoice will set forth the total _____ payment due from Institution.

Section 3.5. Payment

Institution shall pay ESCO within _____ days of receipt of ESCO's invoice.

Section 3.6. Effective Date of Payment Obligation

Section 3.6: This section states that no ESCO fees for ongoing maintenance, monitoring or other services shall be paid until all equipment is installed and operating in accordance with the agreed upon Construction Schedule and Institution has approved the completed installation and signed the requisite Certificate of Acceptance—Installed Equipment.

Notwithstanding the above provisions in Section 3, Institution shall not be required to begin any payments to ESCO under this Contract unless and until all equipment installation is completed by

ESCO in accordance with the provisions of **Article 8 (Construction and Equipment Installation; Approval)** and **Schedule T (Systems Start-Up and Commissioning; Operating Parameters of Installed Equipment)**, and accepted by Institution as evidenced by the signed Certificate of Acceptance as set forth in **Exhibit III (ii) (Certificate of Acceptance—Installed Equipment)**, and unless and until said equipment is fully and properly functioning.

Section 3.7. Open Book Pricing

Section 3.7: This section establishes that the ESCO will fully disclose all costs, providing access to records for all labor and material costs, making them available for three years beyond final payment.

Open book pricing will be required, such that the Contractor will fully disclose all costs of materials and labor purchased and subcontracted by the ESCO and a list of hourly rates and position descriptions for labor or services provided by the ESCO. Estimates for number of hours required for the project and deviations of these budgeted hours shall require prior written approval by the owner or shall not be paid. Contractor will maintain cost accounting records on authorized work performed under actual costs for labor and material, or other basis requiring accounting records. Contractor will afford Agency access to these records and preserve them for a period of three (3) years after final payment. Costs will be evaluated through price analysis to compare costs with reasonable criteria such as established catalog and market prices or historical prices. The pricing methodology and individual cost markups disclosed during preliminary contract negotiations will be expected to be applied, providing the scope and size of the project remain the same as assumed when markups were disclosed.

Institution shall have the right to audit all books and records (in whatever form they may be kept, whether written, electronic or other) relating or pertaining to this contract or agreement (including any and all documents and other materials, in whatever form they may be kept, which support or underlie those books and records), kept by or under the control of the ESCO, including, but not limited to those kept by the ESCO, its employees, agents, assigns, successors and subcontractors.

The ESCO shall maintain such books and records, together with such supporting or underlying documents and materials, for the duration of this contract or agreement and for at least 3 years following the completion of this contract, guarantee period, or agreement, including any and all renewals thereof. The books and records, together with the supporting or underlying documents and materials shall be made available, upon request, to through its employees, agents, representatives, contractors or other designees, during normal business hours at the ESCO's office or place of

business. In the event that no such location is available, then the books and records, together with the supporting or underlying documents and records, shall be made available for audit at a time and location at, location, which is convenient for ESCO.

ARTICLE 4. FISCAL FUNDING

Section 4.1. Non-appropriation of Funds

Section 4.1: This section protects the Institution in the event no funds or insufficient funds are appropriated to cover the financial payments due to the ESCO under the terms of this Contract, in effect terminating the contract with no penalty to the Institution. This is a standard provision in public sector performance contracting and is generally accepted by the ESCO industry since it is unlikely that funding for utilities (source of funds) would be withheld.

In the event no Institution or other funds or insufficient Institution or other funds are appropriated and budgeted, and funds are otherwise unavailable by any means whatsoever in any fiscal period for which payments are due ESCO under this Contract, then the Institution will, not less than ___ days prior to end to such applicable fiscal period, in writing, notify the ESCO of such occurrence and this Contract shall terminate on the last day of the fiscal period for which appropriations were made without penalty or expense to the Institution of any kind whatsoever, except as to the portions of payments herein agreed upon for which Institution and/or other funds shall have been appropriated and budgeted or are otherwise available.

Section 4.2. Non-substitution

Section 4.2: In the rare event that funds were not appropriated or the Institution is in default, and to protect the ESCO, this provision prevents the Institution from securing funding for the same purposes for a period of one year following the termination of the contract.

In the event of a termination of this contract due to the non-appropriation of funds or in the event this Contract is terminated by ESCO due to a default by the Institution, the Institution agrees, to the extent permitted by state law, not to purchase, lease, rent, borrow, seek appropriations for, acquire or otherwise receive the benefits of any of the same and unique services performed by ESCO under

the terms of this Contract for a period of three-hundred sixty five (365) calendar days following such default by Institution, or termination of this Contract due to non-appropriations.

AUDIT AND CONSTRUCTION PHASE

ARTICLE 5. ENERGY USAGE RECORDS AND DATA

Article 5: This section ensures that the ESCO has access to the historical energy consumption, facility operations and occupancy data in order to develop baseline utility consumption. At a minimum, there should be 24 months of data made available, however, 36 months is recommended. Existing facility conditions, operations and equipment needs to be carefully recorded to establish an accurate baseline. This will serve as a record of your buildings as they were configured prior to project installation and will be critical to the establishment and adjustment of baseline, and measurement of savings. As well, any prior technical studies and/or energy audits should also be made available for the ESCO's review and verification.

Institution has furnished and shall continue to furnish (or authorize its energy suppliers to furnish) during the Term of this Contract to ESCO or its designee, upon its request, all of its records and complete data concerning energy and water usage and related maintenance for the Project Site(s).

ARTICLE 6. LOCATION AND ACCESS

Article 6: This provision states the Institution's responsibility for providing adequate space and protection for the installed equipment and authorizes the ESCO's access to the facility to perform routine and emergency operations.

ESCO acknowledges that there exists sufficient space on the Project Site(s) for the installation and operation of the Equipment. Institution shall take reasonable steps to protect such Equipment from harm, theft and misuse during the term of this Contract. Institution shall provide access to the Project Site(s) for ESCO to perform any function related to this Contract during regular business hours, or such other reasonable hours as may be requested by ESCO and acceptable to the Institution. ESCO shall be granted immediate access to make emergency repairs or corrections as it may, in its discretion, determine are needed. The ESCO's access to Project Site(s) to make emergency repairs or corrections as it may determine are needed shall not be unreasonably restricted by the Institution. ESCO shall immediately notify the Institution when emergency action is taken and follow up with written notice with three (3) business days specifying the action taken, the reasons therefore, and the impact upon the Project Site(s), if any.

ARTICLE 7. PERMITS AND APPROVALS; COORDINATION

Section 7.1. Permits and Approvals

Section 7.1: This standard construction provision requires the ESCO comply with all code requirements, pay all associated permit fees and provide the Institution with copies of each permit and license required to do the work. The Institution agrees to assist the ESCO to the best of its ability to obtain all required permits and approvals.

Institution shall use its best efforts to assist ESCO in obtaining all necessary permits and approvals for installation of the Equipment. In no event shall Institution, however, be responsible for payment of any permit fees. The equipment and the operation of the equipment by ESCO shall at all times conform to all federal, state and local code requirements. ESCO shall furnish copies of each permit or license which is required to perform the work to the Institution before the ESCO commences the portion of the work requiring such permit or license.

Section 7.2. Coordination During Installation

Section 7.2: This standard provision directs the Institution and ESCO to coordinate the equipment installation activities to not interfere with the Institution's business activities. If an installation will require interference, the ESCO must first obtain the Institution's written approval to proceed. If a facility generates revenue for the Institution (e.g. civic center, theater, arena etc.) and scheduled revenue-producing activities are interrupted due to the fault of the ESCO, either during project installation or operation, then a provision for the collection of damages may be negotiated.

The Institution and ESCO shall coordinate the activities of ESCO's equipment installers with those of the Institution, its employees, and agents. ESCO shall not commit or permit any act which will interfere with the performance of business activities conducted by the Institution or its employees without prior written approval of the Institution.

ARTICLE 8. CONSTRUCTION SCHEDULE AND EQUIPMENT INSTALLATION; APPROVAL

Section 8.1. Construction Schedule; Equipment Installation

Section 8.1: It is important that the construction/installation phase of the project be managed in compliance with individual Institution requirements and the appropriate governing statutes. 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.

Construction and equipment installation shall proceed in accordance with the construction schedule approved by Institution and attached as **Schedule S (Construction and Equipment Installation Schedule)**.

Section 8.2. Systems Startup and Equipment Commissioning

Section 8.2: This section requires the ESCO to conduct performance testing of the equipment as specified in its Commissioning Plan located in Schedule T (Systems Start-Up and Commissioning; Operating Parameters of Installed Equipment), and verify the specified operating parameters to make certain the system is working properly. In most instances this activity occurs prior to the Institution's final acceptance of the project as fully installed, however, if any testing is negotiated to occur after project acceptance, language to that effect should be included here. It also requires the ESCO notify the Institution of when the testing will take place and gives the Institution (or its designee) the right to be present during all tests. Make sure the commissioning plan includes manufacturer's startup and performance sheets.

The ESCO shall conduct a thorough and systematic performance test of each element and total system of the installed Equipment in accordance with the procedures specified in **Schedule T (Systems Start-Up and Commissioning; Operating Parameters of Installed Equipment)** and prior to acceptance of the project by the Institution as specified in **Exhibit III (i) (Certificate of Acceptance)**. Testing shall be designed to determine if the Equipment is functioning in accordance with both its published specifications and the Schedules to this Contract, and to determine if modified building systems, subsystems or components are functioning properly within the new integrated environment. The ESCO shall provide notice to the Institution of the scheduled test(s) and the Institution and/or its designees shall have the right to be present at any or all such tests conducted by ESCO and/or manufacturers of the Equipment. The ESCO shall be responsible for correcting and/or adjusting all deficiencies in systems and Equipment operations that may be observed during system commissioning procedures as specified in **Schedule T (Systems Start-Up and Commissioning; Operating Parameters of Installed Equipment)**. The Contractor shall be responsible for correcting and/or adjusting all deficiencies in Equipment operation that may be observed during system testing procedures. Prior to Institution acceptance ESCO shall also provide Institution with reasonably satisfactory documentary evidence that the Equipment installed is the Equipment specified in **Schedule R (Equipment to be Installed by ESCO)**.

ARTICLE 9. EQUIPMENT WARRANTIES

Article 9: This warranty provision requires all installed equipment be new and protected by appropriate written manufacturer's warranties for a minimum of one year, covering parts and performance. It also requires warranties provide for the installation of only new parts (not used or reconditioned) during the warranty period. While equipment warranties will be transferred to the Institution after completed project installation, this provision makes the ESCO responsible for pursuing any necessary remedies during the warranty period. If the ESCO fails to exercise the warranty and damages occur, the ESCO is responsible for all costs of repair and any lost savings.

ESCO warrants that all equipment sold and installed as part of this Contract is new, will be materially free from defects in materials or workmanship, will be installed properly in a good and workmanlike manner, and will function properly for a period of one (1) year from the date of the Substantial Completion for the particular energy conservation measure if operated and maintained in accordance with the procedures established per building. Substantial Completion shall be defined as the stage in the progress of the Work where the Work is sufficiently complete in accordance with the Contract Documents so that the Institution can utilize and take beneficial use of the Work for its intended use or purpose. Substantial Completion does not occur until the Equipment or system has been commissioned, accepted, and the "Substantial Completion" form fully executed.

After the warranty period, ESCO shall have no responsibility for performing maintenance, repairs, or making manufacturer warranty claims relating to the Equipment, except as provided in **Schedule BB (ESCO's Maintenance Responsibilities)**.

ESCO further agrees to assign to Institution all available manufacturer's warranties relating to the Equipment and to deliver such written warranties and which shall be attached and set forth as **Exhibit IV (Equipment Warranties)**; pursue rights and remedies against the manufacturers under the warranties in the event of Equipment malfunction or improper or defective function, and defects in parts, workmanship and performance. ESCO shall, during the warranty period, notify the Institution whenever defects in Equipment parts or performance occur which give rise to such rights and remedies and those rights and remedies are exercised by ESCO. During this period, the cost of any risk of damage or damage to the Equipment and its performance, including damage to property and equipment of the Institution or the Project Site(s), due to ESCO's failure to exercise its warranty rights shall be borne solely by ESCO.

All warranties, to the extent transferable, shall be transferable and extend to the Institution. The warranties shall specify that only new, not reconditioned, parts may be used and installed when repair is necessitated by malfunction. All extended warranties shall be addressed as the property of the owner and appropriately documented and titled.

Notwithstanding the above, nothing in this Section shall be construed to alleviate/relieve the ESCO from complying with its obligations to perform under all terms and conditions of this Contract and as set forth in all attached Schedules.

ARTICLE 10. STANDARDS OF COMFORT

Article 10: This section references the **Schedule U (Standards of Comfort)** which the ESCO is contractually liable to maintain throughout the term of the contract. These standards are negotiated between the ESCO and Institution to reflect realistic ranges of heating, cooling and hot water temperatures, lighting levels, chilled water requirements, and other specified comfort and operating parameters to be maintained.

ESCO will maintain and operate the Equipment in a manner which will provide the standards of heating, cooling, ventilation, hot water supply, and lighting quality and levels as described in **Schedule U (Standards of Comfort)**. During the term of this Contract, ESCO and Institution will maintain, according to **Schedule BB (ESCO's Maintenance Responsibilities)** and **Schedule CC (Institution's Maintenance Responsibilities)**, and operate the Equipment in a manner that will provide the standards of comfort and levels of operation as described in **Schedule U (Standards of Comfort)**.

ARTICLE 11: ENVIRONMENTAL REQUIREMENTS

Section 11.1. Excluded Material and Activities

Section 11.1. This section addresses hazardous materials and establishes that the ESCO may encounter such materials but is not responsible for identification, handling or any work. The Institution will be responsible for such handling at its expense. In the event the ESCO discovers such materials, the ESCO will stop work and the Institution will handle it. Neither the ESCO's stoppage of work nor the Institution's discovery are grounds for default. If work can commence, any lost time will be added to the time schedule. The ESCO is responsible for any hazardous materials related to equipment it brings to the site.

Institution recognizes that in connection with the installation and/or service or maintenance of Equipment at Institution's Project Site(s), ESCO may encounter, but is not responsible for, any work relating to (i) asbestos, materials containing asbestos, or the existence, use, detection, removal, containment or treatment thereof, (ii) fungus (any type of form of fungi, including mold or mildew, and myotoxins, spores, scents or by-products produced or released by fungi), (iii) incomplete or damaged work or systems or code violations that may be discovered during or prior to the work of this agreement, or (iv) pollutants, hazardous wastes, hazardous materials, contaminants other than those described in this Section below (collectively "Hazardous Materials"), or the storage, handling, use, transportation, treatment, or the disposal, discharge, leakage, detection, removal, or containment thereof. The materials and activities listed in the foregoing sentence are referred to as "Excluded Materials and Activities". Institution agrees that if performance of work involves any Excluded Materials and Activities, Institution will perform or arrange for the performance of such work and shall bear the sole risk and responsibility therefore. In the event ESCO discovers Hazardous or Excluded Materials, ESCO shall immediately cease work, remove all ESCO personnel or subcontractors from the site, and notify the Institution. The Institution shall be responsible to handle such Materials at its expense. ESCO shall undertake no further work on the Project Site(s) except as authorized by the Institution in writing. Notwithstanding anything in this Contract to the contrary, any such event of discovery or remediation by the Institution shall not constitute a default by the Institution. In the event of such stoppage of work by ESCO, the Time for Completion of Work will be automatically extended by the amount of time of the work stoppage and any additional costs incurred by ESCO as a result will be added by Change Order.

ESCO shall be responsible for any hazardous or other materials, including, without limitation, those listed in this section that it may bring to the Project Site(s).

Section 11.2. Polychlorinated Biphenyl (PCB) Ballasts; Mercury Lamps

Section 11.2. The ESCO is required to have an agreement with an approved PCB ballast disposal company that will properly handle transport, recycling, and incineration, providing information for site handling and a Certificate of Destruction. Similarly the ESCO is required to have an agreement with an approved lamp disposal company. In both cases, the Institution will sign manifests of ownership.

ESCO will enter into an agreement with an approved PCB ballast disposal company that will provide an informational packet, packing receptacles and instructions, labels and shipping materials, transportation, and recycling or incineration services for PCB ballasts. All capacitors and asphalt potting compound materials removed from Institution's PCB ballasts will be incinerated in a federally approved facility. After proper disposal, a Certificate of Destruction will be provided by the approved facility to Institution. ESCO's responsibility shall be for the proper and legal management of any of Institution's PCB ballasts removed as a result of the installation of the Equipment and shall be limited only until said PCB ballasts are loaded onto an approved PCB ballast disposal ESCO's vehicle for transportation.

ESCO will enter into an agreement with an approved lamp disposal company who will provide approved containers, materials required to label, transportation, recycling or incineration in accordance with EPA requirements, and a copy of the manifest.

Institution agrees to sign manifests of ownership for all PCB ballasts and mercury lamps removed from the Project Site(s).

ARTICLE 12. TRAINING BY ESCO

Article 12: In many performance contracts the training of facility personnel is often conducted prior to acceptance by the Institution of the completed installation. There are occasions, however, where it may be necessary to conduct training after project acceptance, which can be noted and included in the appropriate schedule. If there are charges for unscheduled training, such charges should be noted in this section.

The ESCO shall conduct the training program described in **Schedule V (ESCO's Training Responsibilities)** hereto. The training specified in **Schedule V (ESCO's Training Responsibilities)** must be completed prior to acceptance of the Equipment installation. The ESCO shall provide ongoing training whenever needed with respect to updated or altered Equipment, including upgraded software. Such training shall be provided at no charge to the Institution and shall have no effect on prior acceptance of Equipment installation.

POST-CONSTRUCTION PHASE

ARTICLE 13. EQUIPMENT SERVICE

Section 13.1. Actions by ESCO

Section 13.1: This section refers to the maintenance and service responsibilities of each party as they are specified in **Schedule BB (ESCO's Maintenance Responsibilities)** and **Schedule CC (Institution's Maintenance Responsibilities)**. It also states that if the Institution is at fault for causing additional maintenance or repair to the equipment, then the Institution will be charged by the ESCO for the cost of the required maintenance or repair.

ESCO shall provide all service, repairs, and adjustments to the Equipment installed under terms of this Contract pursuant to **Schedule BB (ESCO's Maintenance Responsibilities)**. Institution shall incur no cost for Equipment service, repairs, and adjustments, except as set forth in **Schedule J (Compensation to ESCO for Annual Services)**, provided, however, that when the need for maintenance or repairs principally arises due to the negligence or willful misconduct of the Institution or any employee or other agent of Institution, and ESCO can so demonstrate such causal connection, ESCO may charge Institution for the actual cost of the maintenance or repair insofar as such cost is not covered by any warranty or insurance proceeds.

Section 13.2. Malfunctions and Emergencies

Section 13.2: This section requires the Institution to notify the ESCO within a specified number of hours of actually knowing about any situation that impacts the performance of the equipment. As described here, the impacts cover both pre-existing energy related equipment and the newly installed equipment. The impacts defined here include equipment malfunction or modification, interruption of power supply or any emergency situation which may affect the Energy and Cost Savings Guarantee. If such an impact is known by the Institution to have occurred and the Institution delays in notifying the ESCO and doesn't correct the situation, it will be treated as a Material Change and the baseline will be adjusted accordingly. If the Institution makes an effort to assess the situation and incorrectly determines it doesn't have an impact, then the ESCO will not fault the Institution, although an adjustment to the baseline may still be warranted.

Institution shall use its best efforts to notify the ESCO or its designated subcontractors within 24 hours after the Institution's actual knowledge and occurrence of: (i) any malfunction in the operation of the Equipment or any preexisting energy related equipment that might materially

impact upon the guaranteed energy savings, (ii) any interruption or alteration to the energy supply to the Project Site(s), or (iii) any alteration or modification in any energy-related equipment or its operation.

Where Institution exercises due diligence in attempting to assess the existence of a malfunction, interruption, or alteration it shall be deemed not at fault in failing to correctly identify such conditions as having a material impact upon the guaranteed energy savings. Institution shall notify ESCO within twenty-four (24) hours upon its having actual knowledge of any emergency condition affecting the Equipment. ESCO shall respond or cause its designee(s) shall respond within _____ hours and shall promptly proceed with corrective measures. Any telephonic notice of such conditions by Institution shall be followed within three business days by written notice to ESCO from Institution. If Institution unreasonably delays in so notifying ESCO of a malfunction or emergency, and the malfunction or emergency is not otherwise corrected or remedied, ESCO may charge Institution for its loss, due to the delay, associated with the guaranteed savings under this Contract for the particular time period, provided that ESCO is able to show the direct causal connection between the delay and the loss.

The ESCO will provide a written record of all service work performed. This record will indicate the reason for the service, description of the problem and the corrective action performed.

Section 13.3. Actions by Institution

Section 13.3: This section states the Institution may not make any changes to the operation and maintenance of the equipment without the prior written approval of the ESCO unless otherwise indicated in **Schedule CC (Institution's Maintenance Responsibilities)** or if there is an emergency and the ESCO can't be reasonably notified. In the case of such emergency, the Institution should follow instructions provided by the ESCO for emergency action.

Institution shall not move, remove, modify, alter, or change in any way the Equipment or any part thereof without the prior written approval of ESCO except as set forth in **Schedule CC (Institution's Maintenance Responsibilities)**. Notwithstanding the foregoing, Institution may take reasonable steps to protect the Equipment if, due to an emergency, it is not possible or reasonable to notify ESCO before taking any such actions. In the event of such an emergency, Institution shall take reasonable steps to protect the Equipment from damage or injury and shall follow instructions for

emergency action provided in advance by ESCO. Institution agrees to maintain the Project Site(s) in good repair and to protect and preserve all portions thereof which may in any way affect the operation or maintenance of the Equipment.

ARTICLE 14. MODIFICATION, UPGRADE OR ALTERATION OF THE EQUIPMENT

Section 14.1. Modification of Equipment

During the Term of this Contract, Institution will not, without the prior written consent of ESCO, affix or install any accessory Equipment or device on any of the Equipment if such addition will change or impair the originally intended functions, value or use of the Equipment without ESCO's prior written approval, which shall not be unreasonably withheld.

Section 14.2. Upgrade or Alteration of Equipment

Section 14: This section describes the terms and conditions under which the ESCO may make changes to the equipment, operating procedures or take other energy savings actions. If such changes are implemented during any time during the contract they must be described in a supplemental schedule and be approved by the Institution. As well, any equipment replaced is required to be new and have the potential to produce at least as much or more savings. If computer software is updated, the licensing provisions of Section 17.1 still apply.

ESCO shall at all times have the right, subject to Institution's prior written approval, which approval shall not be unreasonably withheld, to change the Equipment, revise any procedures for the operation of the Equipment or implement other energy saving actions in the Project Site(s), provided that: (i) the ESCO complies with the standards of comfort and services set forth in **Schedule U (Standards of Comfort)** herein; (ii) such modifications or additions to, or replacement of the Equipment, and any operational changes, or new procedures are necessary to enable the ESCO to achieve the guaranteed energy and cost savings at the Project Site(s) and; (iii) any cost incurred relative to such modifications, additions or replacement of the Equipment, or operational changes or new procedures shall be the responsibility of the ESCO.

All modifications, additions or replacements of the Equipment or revisions to operating or other procedures shall be described in a supplemental Schedule(s) to be provided to the Institution for approval, which shall not be unreasonably withheld, provided that any replacement of the Equipment shall, unless otherwise agreed, be new and have equal or better potential to reduce

energy consumption at the Project Site(s) than the Equipment being replaced. The ESCO shall have the right to update any and all software to be used in connection with the Equipment in accordance with the provisions of **Section 17.1 (Ownership of Certain Proprietary Rights)** and **Schedule BB (ESCO's Maintenance Responsibilities)**. All replacements of and alterations or additions to the Equipment shall become part the Equipment described in **Schedule R (Equipment to be Installed by ESCO)** and shall be covered by the provisions and terms of **Article 8 (Construction Schedule and Equipment Installation; Approval)**.

ARTICLE 15. MATERIAL CHANGES

Article 15: This section defines the term "Material Change" which covers any condition other than weather that affects building energy use by more than the negotiated percentage (see above discussion). It is typical for the percent of deviation to be negotiated as a value ranging between 2% and 5% based on aggregate consumption costs. The lower value (2%) may be appropriate for large facilities (over \$20,000/month utility bills) and the higher value (5%) may be appropriate for small facilities (less than \$5,000/month utility bills).

Section 15.1. Material Change Defined

A Material Change shall include any change in or to the Project Site(s), whether structural, operational or otherwise in nature which reasonably could be expected, in the judgment of the Institution, to increase or decrease annual energy consumption in accordance with the provisions and procedures set forth in **Schedule B (Baseline Energy Consumption; Methodology to Adjust Baseline)** and **Schedule C (Savings Measurement and Verification Plan; Post-Retrofit M&V Plan; Annual M&V Report Requirements)** by at least ___% after adjustments for climatic variations. Actions by the Institution which may result in a Material Change include but are not limited to the following:

- (i) manner of use of the Project Site(s) by the Institution; or
- (ii) hours of operation for the Project Site(s) or for any equipment or energy using systems operating at the Project Site(s); or
- (iii) Permanent changes in the comfort and service parameters set forth in **Schedule U (Standards of Comfort)**; or
- (iv) occupancy of the Project Site(s); or
- (v) structure of the Project Site(s); or
- (vi) types and quantities of equipment used at the Project Site(s) or
- (vii) modification, renovation or construction at the Project Site(s); or
- (viii) the Institution's failure to provide maintenance of and repairs to the Equipment in accordance with **Schedule CC (Institution's Maintenance Responsibilities)**; or

- (ix) any other conditions other than climate affecting energy use at the Project Site(s) including but not limited to the replacement, addition or removal of energy and water consuming devices whether plug in or fixed assets,
- (x) casualty or condemnation of the Project Site(s) or Equipment, or
- (xi) changes in utility provider or utility rate classification, or
- (xii) any other conditions other than climate affecting energy or water use at the Project Site(s).
- (xiii) Modifications, alterations or overrides of the energy management system schedules or hours of operation, set back/start up or holiday schedules.

Section 15.2. Reported Material Changes; Notice by Institution

Section 15.2: This section requires the Institution to notify the ESCO in writing if there are any actual or planned changes to the facility which would affect energy consumption by more than the specified percentage. In the event of an emergency or situation that would prevent advance notification, the Institution has a specified number of hours to inform the ESCO that a Material Change has occurred.

The Institution shall use its best efforts to deliver to the ESCO a written notice describing all actual or proposed Material Changes in the Project Site(s) or in the operations of the Project Site(s) at least ___ days before any actual or proposed Material Change is implemented or as soon as is practicable after an emergency or other unplanned event. Notice to the ESCO of Material Changes which result because of a bona fide emergency or other situation which precludes advance notification shall be deemed sufficient if given by the Institution within ____ hours after having actual knowledge that the event constituting the Material Change occurred or was discovered by the Institution to have occurred.

Section 15.3. Other Adjustments

Section 15.3: This section states that if all building conditions and operations stay the same, then energy consumption will not vary more than the negotiated percentage during any month when compared to the baseline use for that month and after adjustments for weather are made. See above discussion. In the event such a variation occurs, the ESCO will try to determine the cause of the deviation and report its findings the Institution. The ESCO and Institution will then determine what adjustments will be made to the baseline as described in **Schedule B (Baseline Energy Consumption; Methodology to Adjust Baseline)**.

As agreed in **Section 15.1** Institution will alert ESCO of materials changes as known. Both parties have a vested interest in meeting the guaranteed savings of the Contract. As such, the ESCO will work with Institution to investigate, identify and correct any changes that prevent the guaranteed savings from being realized. As a result of such investigation, ESCO and Institution shall determine what, if any, adjustments to the baseline will be made in accordance with the provisions set forth in **Schedule C (Savings Measurement and Verification Plan; Post-Retrofit M&V Plan; Annual M&V Report Requirements)** and **Schedule B (Baseline Energy Consumption; Methodology to Adjust Baseline)**. Any disputes between the Institution and the ESCO concerning any such adjustment shall be resolved in accordance with the provisions of **Schedule JJ (Alternative Dispute Resolution Procedures)** hereto.

ARTICLE 16. PERFORMANCE BY ESCO

Section 16.1. Corrective Action; Accuracy of the Services

Section 16.1: This section directs the ESCO to protect the Project Site(s) and its contents to repair and restore to the original condition any damage caused by the ESCO in connection with this contract. Any costs incurred to correct such damage are to be paid by the ESCO. The ESCO is solely responsible for the technical professional accuracy of all work performed under this Contract including work done by subcontractors or others.

ESCO shall perform all tasks/phases under the Contract, including construction, and install the Equipment in such a manner so as not to harm the structural integrity of the buildings or their operating systems and so as to conform to the standards set forth in **Schedule U (Standards of Comfort)** and the construction schedule specified in **Schedule S (Construction and Installation Schedule)**. ESCO shall repair and restore to its original condition any area of damage caused by ESCO's performance under this Contract. The Institution reserves the right to review the work performed by ESCO and to direct ESCO to take certain corrective action if, in the opinion of the Institution, the structural integrity of the Project Site(s) or its operating system is or will be harmed. All costs associated with such corrective action to damage caused by ESCO's performance of the work shall be borne by ESCO.

ESCO shall remain responsible for the professional and technical accuracy of all services performed, whether by the ESCO or its subcontractors or others on its behalf, throughout the term of this Contract.

Section 16.2. Annual Reporting Requirements; Annual ENERGY STAR Rating

At the end of each year during the guarantee period as specified in **Schedule A (Savings Guarantee)** and no later than ninety (90) days thereafter, the ESCO shall complete and submit the data required in **Schedule C (C.4 Annual M&V Reporting Requirements)**. The ESCO shall provide an ENERGY STAR rating for each eligible facility for each year of the guarantee period if applicable.

ADMINISTRATION

ARTICLE 17. OWNERSHIP OF CERTAIN PROPRIETARY RIGHTS; EXISTING EQUIPMENT

Section 17.1. Ownership of Certain Proprietary Property Rights

Section 17.1: This provision addresses the ESCO's proprietary rights over customized (or exclusive) software used in an energy management system which may control, manage and perform other functions in conjunction with the project (there may other technical designs, processes, formulas etc., which this provision would cover). Of particular importance is the stipulation that grants the Institution a continuing license (at no charge) to use and operate the project without violating any ESCO's proprietary rights.

Institution shall not, by virtue of this Contract, acquire any interest in any formulas, patterns, devices, secret inventions or processes, copyrights, patents, other intellectual or proprietary rights, or similar items of property which are or may be used in connection with the Equipment. The ESCO shall grant to the Institution a perpetual, irrevocable royalty-free license for any and all software or other intellectual property rights necessary for the Institution to continue to operate, maintain, and repair the Equipment in a manner that will yield guaranteed utility consumption reductions for the specified contract term. ESCO shall not be liable for providing new versions of software or other enhancements if or unless such new versions or enhancements are necessary to achieve the guaranteed utility consumption reductions.

Section 17.2. Ownership of Existing Equipment

Section 17.2: This provision states that the Institution has ownership of all existing equipment and that the ESCO shall notify the Institution in writing of what equipment and materials are to be replaced. If the Institution chooses to keep the equipment to be replaced, the ESCO will be notified

and the Institution responsible for identifying the location of where the property is to be stored or relocated. The ESCO is responsible for all equipment and materials to be disposed. The exception to this is the treatment of any hazardous or environmentally sensitive materials.

Ownership of the equipment and materials presently existing at the Project Site(s) at the time of execution of this Contract shall remain the property of the Institution even if it is replaced or its operation made unnecessary by work performed by ESCO pursuant to this Contract. If applicable, ESCO shall advise the Institution in writing of all equipment and materials to be replaced at the Project Site(s) and the Institution shall within ____ days designate in writing to the ESCO which equipment and materials that should not be disposed of off-site by the ESCO. It is understood and agreed to by both Parties that the Institution shall be responsible for and designate the location and storage for any equipment and materials that should not be disposed of off-site. The ESCO shall be responsible for the disposal of all equipment and materials designated by the Institution as disposable off-site in accordance with all applicable laws and regulations regarding such disposal.

ARTICLE 18. PROPERTY/CASUALTY/INSURANCE; INDEMNIFICATION

Article 18: This section needs to reflect the individual Institution's standard requirements with regard to insurance and indemnification.

Section 18.1 Insurances. At all times during the term of this Contract, ESCO shall maintain in full force and effect, at its expense: (1) Workmen's Compensation Insurance sufficient to cover all of the employees of (ESCO) working to fulfill this Contract, and (2) Casualty and Liability Insurance on the Equipment and Liability Insurance for its employees and the possession, operation, and service of the Equipment. The limits of such insurance shall be not less than \$_____ for injury to or death of one person in a single occurrence and \$_____ for injury to or death of more than one person in a single occurrence and \$_____ for a single occurrence of property damage. Such policies shall name the Institution as an additional insured.

Prior to commencement of work under this Contract, ESCO will be required to provide Institution with current certificates of insurance specified above. These certificates shall contain a provision that coverages afforded under the policies will not be canceled or changed until at least thirty (30) days' prior written notice has been given to Institution.

Section 18.2. Damages to Equipment or Property: ESCO shall be responsible for (i) any damage to the Equipment or other property on the Project Site(s) and (ii) any personal injury where such damage or injury occurs as a result of ESCO's performance under this Contract.

Section 18.3. Indemnification. ESCO shall save and hold harmless Institution and its officers, agents and employees or any of them from any and all claims, demands, actions or liability of any nature based upon or arising out of any services performed by ESCO, its agents or employees under this Contract.

Section 18.4. Liabilities. Neither party shall be liable for any special, incidental, indirect, punitive or consequential damages, arising out of or in connection with this Contract. Further, the liability of either party under this Contract shall not exceed the Contract Sum in the aggregate.

ARTICLE 19. CONDITIONS BEYOND CONTROL OF THE PARTIES

If a party ("performing party") shall be unable to reasonably perform any of its obligations under this Contract due to acts of God, insurrections or riots, or similar events, this Contract shall at the other party's option (i) remain in effect but said performing party's obligations shall be suspended until the said events shall have ended; or, (ii) be terminated upon ten (10) days notice to the performing party, in which event neither party shall have any further liability to the other.

ARTICLE 20. EVENTS OF DEFAULT

Section 20.1. Events of Default by Institution

Each of the following events or conditions shall constitute an "Event of Default" by Institution:

- (i) any failure by Institution to pay ESCO any sum due for a service and maintenance period of more than ___ days after written notification by ESCO that Institution is delinquent in making payment and provided that ESCO is not in default in its performance under the terms of this Contract; or
- (ii) any other material failure by Institution to perform or comply with the terms and conditions of this Contract, including breach of any covenant contained herein, provided that such failure continues for ___ days after notice to Institution demanding that such failures to perform be cured or if such cure cannot be effected in ___ days, Institution shall be deemed to have cured default upon the commencement of a cure within ___ days and diligent subsequent completion thereof;

- (iii) any representation or warranty furnished by Institution in this Contract which was false or misleading in any material respect when made.

Section 20.2. Events of Default by ESCO

Each of the following events or conditions shall constitute an "Event of Default" by ESCO:

- (iv) the standards of comfort and service set forth in **Schedule U (Standards of Comfort)** are not provided due to failure of ESCO to properly design, install, maintain, repair or adjust the Equipment except that such failure, if corrected or cured within ___ days after written notice by Institution to ESCO demanding that such failure be cured, shall be deemed cured for purposes of this Contract.
- (v) any representation or warranty furnished by ESCO in this Contract is false or misleading in any material respect when made;
- (vi) failure to furnish and install the Equipment and make it ready for use within the time specified by this Contract as set forth in **Schedule R (Equipment to be Installed by ESCO)** and **Schedule S (Construction and Installation Schedule)**;
- (vii) provided that the operation of the facility is not adversely affected and provided that the standards of comfort in **Schedule U (Standards of Comfort)** are maintained, any failure by ESCO to perform or comply with the terms and conditions of this Contract, including breach of any covenant contained herein except that such failure, if corrected or cured within ___ days after written notice by the Institution to ESCO demanding that such failure to perform be cured, shall be deemed cured for purposes of this Contract;
- (viii) any lien or encumbrance upon the equipment by any subcontractor, laborer or materialman of ESCO;
- (ix) the filing of a bankruptcy petition whether by ESCO or its creditors against ESCO which proceeding shall not have been dismissed within ___ days of its filing, or an involuntary assignment for the benefit of all creditors or the liquidation of ESCO.
- (x) failure by the ESCO to pay any amount due the Institution or perform any obligation under the terms of this Contract or the Energy and Cost Savings Guarantee as set forth in **Schedule A (Savings Guarantee)**.

ARTICLE 21. REMEDIES UPON DEFAULT

Section 21.1. Remedies upon Default by Institution

If an Event of Default by Institution occurs, ESCO may, without a waiver of other remedies which exist in law or equity, elect one of the following remedies:

- (i) exercise all remedies available at law or in equity or other appropriate proceedings including bringing an action or actions from time to time for recovery of amounts due and unpaid by Institution, and/or for damages which shall include all costs and expenses reasonably incurred in exercise of its remedy;

Section 21.2. Remedies Upon Default by ESCO

In the Event of Default by ESCO, Institution shall have the choice of either one of the following remedies in law or equity:

- (i) exercise and any all remedies at law or equity, or institute other proceedings, including, without limitation, bringing an action or actions from time to time for specific performance, and/or for the recovery of amounts due and unpaid and/or for damages, which shall include all costs and expenses reasonably incurred, including attorney's fees;

ARTICLE 22. ASSIGNMENT

The ESCO acknowledges that the Institution is induced to enter into this Contract by, among other things, the professional qualifications of the ESCO. The ESCO agrees that neither this Contract nor any right or obligations hereunder may be assigned in whole or in part to another firm, without the prior written approval of the Institution.

Section 22.1. Assignment by ESCO

Section 22.1: This assignment provision first acknowledges that the Institution selected the ESCO for its unique expertise and qualifications to perform the services specified in the contract. The ESCO may not assign this contract to another ESCO without the written approval of the Institution and any ESCO assigned this contract must fully comply with all terms and conditions. In addition, the ESCO and any assignee remain contractually liable to the Institution for fulfilling all of the ESCO's obligations as specified in the contract.

The ESCO may, with prior written approval of the Institution, which consent shall not be unreasonably withheld, delegate its duties and performance under this Contract, and/or utilize ESCOs, provided that any assignee(s), delegee(s), or ESCO(s) shall fully comply with the terms of this Contract. Notwithstanding the provisions of this paragraph, the ESCO shall remain jointly and severally liable with its assignees(s), or transferee(s) to the Institution for all of its obligations under this Contract.

Section 22.2. Assignment by Institution

Section 22.2: In turn, this provision allows the Institution to transfer or assign this contract to a new building owner or occupant. The Institution and its assignee, however, still remain responsible to the ESCO for the Institution's obligations as specified in the contract.

Institution may transfer or assign this Contract and its rights and obligations herein to a successor or purchaser of the Buildings or an interest therein. The Institution shall remain jointly and severally liable with its assignees or transferees to the ESCO for all of its obligations under this Contract.

ARTICLE 23. REPRESENTATIONS AND WARRANTIES

Article 23: This boilerplate provision states that each party has the requisite authority and ability to enter into this contract.

Each party warrants and represents to the other that:

- (i) it has all requisite power, authority, licenses, permits, and franchises, corporate or otherwise, to execute and deliver this Contract and perform its obligations hereunder;
- (ii) its execution, delivery, and performance of this Contract have been duly authorized by, or are in accordance with, its organic instruments, and this Contract has been duly executed and delivered for it by the signatories so authorized, and it constitutes its legal, valid, and binding obligation;
- (iii) its execution, delivery, and performance of this Contract will not breach or violate, or constitute a default under any Contract, lease or instrument to which it is a party or by which it or its properties may be bound or affected; or
- (iv) it has not received any notice, nor to the best of its knowledge is there pending or threatened any notice, of any violation of any applicable laws, ordinances, regulations, rules, decrees, awards, permits or orders which would materially and adversely affect its ability to perform hereunder.

ARTICLE 24. ADDITIONAL REPRESENTATIONS OF THE PARTIES

Article 24: These additional representations address several areas specific to the performance contract. The Institution certifies it has or will provide the ESCO will all energy and energy-related records and all future records to be provided will be truthful and accurate. The Institution also declares it has not entered into any leases or service contracts relating to energy equipment or servicing of pre-existing equipment and will notify the ESCO within a specified period of time if it does so.

In addition, the ESCO certifies that before beginning work under this contract it will: have become licensed to business in the state; provide proof of required insurance and bonds; give Institution access to all document relating to the project (including all contracts and subcontracts) upon request; use licensed and qualified subcontractors; and is financially able to complete the project and perform under the terms of this contract. In addition, the ESCO certifies that the equipment will meet or exceed the functional design tests performed prior to Institution acceptance and the installed equipment will be compatible with existing equipment and building systems.

Institution hereby warrants, represents and promises that:

- (i) it has provided or shall provide timely to ESCO, all records relating to energy usage and energy-related maintenance of Project Site(s) requested by ESCO and the information set forth therein is, and all information in other records to be subsequently provided pursuant to this Contract will be true and accurate in all material respects; and
- (ii) it has not entered into any leases, contracts or Contracts with other persons or entities regarding the leasing of energy efficiency equipment or the provision of energy management services for the Project Site(s) or with regard to servicing any of the energy related equipment located in the Project Site(s). Institution shall provide ESCO with copies of any successor or additional leases of energy efficiency equipment and contracts for management or servicing of preexisting equipment at Project Site(s) which may be executed from time to time hereafter within ____ days after execution thereof.

ESCO hereby warrants, represents and promises that:

- (i) before commencing performance of this Contract:
 - (a) it shall have become licensed or otherwise permitted to do business in the State of _____
 - (b) it shall have provided proof and documentation of required insurance and bonds pursuant to this Contract;
- (ii) it shall make available, upon reasonable request, all documents relating to its performance under this Contract, including all contracts and subcontracts entered into;
- (iii) it shall use qualified subcontractors who are qualified, licensed and bonded in this state to perform the work so subcontracted pursuant to the terms hereof;
- (iv) The Equipment will meet or exceed the provisions set forth in **Section 8.2 (Systems Start Up and Equipment Commissioning)** and in **Schedule T (Systems Start-Up and Commissioning; Operating Parameters of Installed Equipment)**.
- (v) The Equipment is or will be compatible with all other Project Site(s) mechanical and electrical systems, subsystems, or components with which the Equipment interacts, and that, as installed, neither the Equipment nor such other systems, subsystems, or components will materially adversely affect each other as a direct or indirect result of Equipment installation or operation;

- (v) that it is financially solvent, able to pay its debts as they mature and possessed of sufficient working capital to complete the Work and perform its obligations under this Contract.

ARTICLE 25. MICELLANEOUS DOCUMENTATION PROVISIONS

Section 25.1. Waiver of Liens, Construction Performance and Payment Bonds, Labor and Material Payment Bonds

Such executed bonds are incorporated herein by reference as **Exhibit I (Performance Bond)** and **Exhibit II (Labor and Material Payment Bond, if applicable)**.

Section 25.2. Further Documents

The parties shall execute and deliver all documents and perform all further acts that may be reasonably necessary to effectuate the provisions of this Contract.

Section 25.3 Institution's Responsibilities

This provision protects both the ESCO and the Institution by establishing a method for the ESCO to supervise the Institution's compliance with the scheduled routine and preventative maintenance activities to be performed by the Institution (either by in-house personnel or existing maintenance contract). This checklist should be developed for both the newly installed and pre-existing energy-related equipment.

(a) Methods of Operation by Institution

The parties acknowledge and agree that said Energy and Cost Savings would not likely be obtained unless certain procedures and methods of operation designed for energy and water conservation shall be implemented, and followed by Institution on a regular and continuous basis.

(b) Institution Maintenance Responsibilities

Institution agrees that it shall adhere to, follow and implement the energy conservation procedures and methods of operation to be set forth on **Schedule CC (Institution's Maintenance**

Responsibilities), to be attached hereto and made a part hereof after Institution's approval, such approval not to be unreasonably withheld, conditioned or delayed.

(c) Inspection of Project Site(s)

Institution agrees that ESCO shall have the right once a month, with prior notice, to inspect Project Site(s) to determine if Institution is complying, and shall have complied with its obligations as set forth in **Section 25.3(b)**. For the purpose of determining Institution's said compliance, the checklist to be set forth at **Schedule DD (Facility Maintenance Checklist)** as completed and recorded by ESCO during its monthly inspections, shall be used to measure and record Institution's said compliance. Institution shall make the Project Site(s) available to ESCO for and during each monthly inspection, and shall have the right to witness each inspection and ESCO's recordation on the checklist. Institution may complete its own checklist at the same time. ESCO agrees to not interfere with the Institution operations during any monthly inspection.

Section 25.4. Waiver Of Liens

ESCO will obtain and furnish to Institution a Waiver of Liens from each vendor, material manufacturer and laborer in the supply, installation and servicing of each piece of Equipment.

ARTICLE 26: CONFLICTS OF INTEREST

Section 26.1 Conflicts of Interest

Conflicts of interest relating to this Contract are strictly prohibited. Except as otherwise expressly provided herein, neither party hereto nor any director, employee or agent of any party hereto shall give to or receive from any director, employee or agent of any other party hereto any gift, entertainment or other favor of significant value, or any commission, fee or rebate in connection with this Contract. Likewise, neither party hereto nor any director, employee or agent of either party hereto, shall without prior notification thereof to the other party enter into any business relationship with any director, employee or agent of the other party or of any affiliate of the other party, unless such person is acting for and on behalf of the other party or any such affiliate. A party shall promptly notify the other party of any violation of this section and any consideration received as a result of such violation shall be paid over or credited to the party against whom it was charged.

Any representative of any party, authorized by that party, may audit the records of the other party related to this Contract, upon reasonable notice and during regular business hours including the expense records of the party's employees involved in this Contract, upon reasonable notice and during regular business hours, for the sole purpose of determining whether there has been compliance with this section.

ARTICLE 27. COMPLETE CONTRACT

This Contract, when executed, together with all Schedules attached hereto or to be attached hereto, as provided for by this Contract shall constitute the entire Contract between both parties and this Contract may not be amended, modified, or terminated except by a written Contract signed by the parties.

ARTICLE 28. APPLICABLE LAW

This Contract and the construction and enforceability thereof shall be interpreted under the laws of the State of _____.

ARTICLE 29. INTERPRETATION OF CONTRACT

The Institution shall have the authority to determine questions of fact that arise in relation to the interpretation of this Contract and the ESCO'S performance hereunder. However, such determinations are subject to the Alternative Dispute Resolution procedures as described in **Schedule JJ (Alternative Dispute Resolution Procedures)**. Unless the Parties agree otherwise, or the Work cannot be continued without a resolution of the question of fact, such determinations and Alternative Dispute Resolution procedures shall not be cause for delay of the Work. The ESCO shall proceed diligently with the performance of this Contract and in accordance with the Institution's decision whether or not the ESCO or anyone else has an active claim pending. Continuation of the Work shall not be construed as a waiver of any rights accruing to the ESCO.

ARTICLE 30. NOTICE

Any notice required or permitted hereunder shall be deemed sufficient if given in writing and delivered personally or sent by registered or certified mail, return receipt requested, postage prepaid, or delivered to a nationally recognized express mail service, charges prepaid, receipt obtained, to the address shown below or to such other persons or addresses as are specified by similar notice.

TO ESCO: ***ESCO Name, Attention: Complete address.***

Include COPY TO: information for ESCO, if applicable.

TO INSTITUTION: ***Institution Name, Attention: Complete address.***

Include COPY TO: information for INSTITUTION, if applicable.

IN WITNESS WHEREOF, and intending to be legally bound, the parties hereto subscribe their names to this Contract by their duly authorized representatives on the date first above written.

(Corporate Seal)

ATTEST:

(INSTITUTION)

_____ By _____

(ESCO)

_____ By: _____

CONTRACT ATTACHMENT I: Schedules, Exhibits, and Appendices

Under a separate file, see detailed descriptions, required tables and examples.

Schedules

Savings Guarantee

- Schedule A Savings Guarantee
- Schedule B Baseline Energy Consumption; Methodology to Adjust Baseline
- Schedule C Savings Measurement and Verification Plan; Post-Retrofit M&V Plan; Annual M&V Reporting Requirements
- Schedule D-G Left blank for optional schedules

Payments and Schedule

- Schedule H Final Project Cost & Project Cash Flow Analysis
- Schedule I Financing Agreement and Payment Schedule
- Schedule J Compensation to ESCO for Annual Services
- Schedule K Rebates, Incentives and Grants
- Schedule L-P Left blank for optional schedules

Design and Construction Phase

- Schedule Q Description of Project Site(s)
- Schedule R Equipment to be Installed by ESCO
- Schedule S Construction and Installation Schedule
- Schedule T Systems Start-Up and Commissioning; Operating Parameters of Installed Equipment
- Schedule U Standards of Comfort
- Schedule V ESCO's Training Responsibilities
- Schedule W-AA Left blank for optional schedules

Post-Construction

- Schedule BB ESCO's Maintenance Responsibilities
- Schedule CC Institution's Maintenance Responsibilities
- Schedule DD Facility Maintenance Checklist
- Schedules EE – II Left blank for optional schedules

Administration

- Schedule JJ Alternative Dispute Resolution Procedures
- Schedule KK – OO Left blank for optional schedules

Optional Schedules

- Pre-Existing Service Contracts
- Energy Savings Projections
- Facility Changes Checklist
- Current and Known Capital Projects at Facility

Exhibits

- Exhibit I Performance Bond
- Exhibit II Labor and Material Payment Bond *if required*
- Exhibit III (i) Certificate of Acceptance—Investment Grade Audit Report
- Exhibit III (ii) Certificate of Acceptance—Installed Equipment
- Exhibit IV Equipment Warranties
- Optional Exhibits
 - Manifest of Ownership
 - Minority and Woman-Owned Business Certification
 - Certification that Financing Term is no Longer than the Aggregated Equipment Lifetime
 - Notice of Substantial Completion

Notice to Proceed with Construction Phase

Record of Reviews by Institution

Appendices

Appendix A RFP for ESCO Solicitation (Pre-qualification Phase; Final Selection Phase)

Appendix B ESCO Proposal (Pre-qualification Phase; Final Selection Phase)

Appendix C Investment Grade Audit and Project Development Contract

Appendix D Investment Grade Audit Report

Attachment H - Financing Solicitation Package



The Energy Services Coalition offers a collection of model procurement and contracting documents that represent Best Practices for state energy offices (SEOs) to launch and administer programs to increase energy efficiency through energy savings performance contracting. The documents draw from successful programs in various states and are continually updated to incorporate the latest strategies. They can be easily customized to meet the needs of any SEO or similar government department.

DESCRIPTION –Financing Solicitation Package

The financing agreement is a stand-alone agreement, separate from the energy savings performance contract, between the Institution and a financial organization and signed by the Institution at the same time as the performance contract. The two agreements are linked through the payment schedules and the savings guarantee provided by the ESCO that the annual guaranteed savings meet the annual debt service (plus any other related expenses imposed by the performance contract such as monitoring and verification).

Financing is typically provided by a financial organization which specializes, or has experience, in performance contracting projects. The financing instrument is typically a tax-exempt, municipal lease-purchase agreement as this instrument delivers the lowest finance rates.

This Financing Solicitation Package enables and authorizes the ESCO to seek competitive financing on behalf of the Institution. The ESCO can provide the necessary information to solicit competitive rates and can evaluate the full package of rates and services, recommending the best package for the Institution's consideration and final decision. This eliminates the Institution's need to issue a separate RFP for financing, and positions the financing as an integral part of the performance contracting approach.

As an alternative, the Institution can provide other funds or financing mechanisms to fully fund or finance the project.

This is a model document only and does not attempt to identify or address all circumstances or conditions you may encounter or desire. Consult with your legal counsel and procurement staff to adapt it to meet your needs.

Attachment H – Financing Solicitation Package

TABLE OF CONTENTS

REQUEST FOR PROPOSAL

LEASE CONTRACT (NOT INCLUDED; SAMPLES FROM FINANCE COMPANIES ARE AVAILABLE)

FINANCING PROPOSAL LETTER

SIGNATURE SHEET

OVERVIEW OF FACILITY IMPROVEMENT PROJECTS

REQUEST FOR PROPOSAL

RFP Reference: Institution Name

RFP Date: Date

RFP Closing Date: Date

ESCO - Contact: Name, Address, Phone, Fax, E-mail

Notice to Firms

Invitations are extended for proposals using the attached proposal format

Scope of Request: Provide pursuant to a tax-exempt lease purchase agreement with Institution financing for energy and water savings measures for those certain facilities located at the Institution's campus.

Properly Completed Responses will include:

1. a signed and dated proposal letter in the format included
2. a redlined copy of the Model Lease Contract With Explanation of Any Changes proposed thereto
3. a signed and completed signature sheet
4. a schedule of payments and amortization schedule including any purchase options
5. escrow information (contact, Escrow Agreement and List of All Fees)

Proposal Information

Specific Terms

- Lessee: Board of Institution
- Lessor: The Provider of the Financing or a Mutually Agreeable Nominal Lessor
- Contract: A Model Lease Contract between Lessor and the Institution. Each firm is required to review and comment on the Model Lease Contract, attached hereto as Attachment A. The extent and content of those comments will be important to the evaluation of the proposals. If any changes in the Model Lease Contract are proposed, such changes must be specifically identified in the proposal and alternate language set forth in the proposal. Also, any changes should be accompanied with an explanation clarifying the proposed change.
- Security: The Lessor will be secured by the Institution's obligation to pay the lease payments, which are subject to annual appropriations and by a security interest in the equipment purchased for the energy and water savings measures to be installed by ESCO, which can be salvaged without damage to the facility to which such equipment is attached.
- Interest Rate: A fixed rate of interest for the term of the financing. The proposal should include the relevant index and spread along with the period of time the proposed fixed interest is committed
- Prepayment: The final tax-exempt lease purchase agreement shall include certain prepayment provisions pursuant to a schedule to be agreed to by the parties

Assignment: The Lessor may assign its rights to receive lease payments and its security interest in the equipment installed pursuant to the energy savings performance contract but only with the advance written consent of the Institution. Each assignment must specifically mention the Institution's rights regarding repayment.

Amendment: The Institution reserves the right to amend the Model Lease Contract that is entered into pursuant to this Request for Proposal. Any such amendment will be in writing and subject to the mutual consent of both parties.

Cost: The proposal should identify specifically all costs associated with the transaction, if any, that would be an obligation of the Institution as either a direct payment or as additional project costs for purpose of determining the funded lease amount and/or ongoing lease payment obligation. These costs must be all-inclusive and may include commitment fees, legal counsel, trustee fees and any other costs. The Model Lease Agreement does not require the Institution to pay any supplemental financing costs, either direct (upfront) or as an addition to the project cost.

Requirement of ESCO: The proposal shall identify specifically any requirements to be imposed upon ESCO as a result of this financing.

Requirement of Lender: The Lessee will agree that Lessor will bear the risk of loss if the equipment is damaged or destroyed, and to pay lease payments from funds available for that purpose, when and if appropriated by the State Legislature.

Conditions to Proposal

Cost of Preparing

Proposal: The cost of developing and submitting the proposal is entirely the responsibility of the firms submitting a response to this Request for Proposal. This includes, but is not limited to, costs to

determine the nature of the engagement, preparation of the proposal, submitting the proposal, negotiating for the contract and other costs associated with this Request for Proposal.

No Oral or Implied

Contracts: There shall be no oral or implied contracts relating this Request for Proposal.

Acceptance or

Rejection: The Institution reserves the right to select, accept or reject any or all proposals or part of a proposal; to waive any informalities or technicalities; clarify any ambiguities in proposals; modify any criteria in this Request for Proposal; and establish financing at any time.

Contract: The successful firm will be required to enter into a tax-exempt lease purchase agreement with the Institution.

The tax-exempt lease purchase agreement shall be substantially in the form set forth on Attachment A (Model Lease Contract). Each firm is required to provide comments and specific alternate language for those items in the Model Lease Contract from which the firm wishes to deviate.

Contract Documents: This Request for Proposal and any amendments and the response and any amendments of the successful firm shall become a part of the written contract, which shall compose of the complete understanding of the parties.

In the event a conflict in terms of language among the documents, the following order of precedence shall govern:

1. written modifications to the executed contract;

2. tax-exempt lease purchase agreement signed by the parties;
3. this Request for Proposal, including any and all addenda

Contract Formation: No contract shall be considered to have been entered into by the Institution until all statutorily required signatures and certifications have been rendered and a written contract has been signed by the successful firm.

Open records Act: All proposals become the property of the Institution. State statute requires all information contained the proposals become open for public review once a contract is signed or all proposals are rejected.

Submission of Proposals: A copy of the firm's proposal shall be received on or before Time, Date, addressed as follows:

Name, Address

Responses via email or facsimile will be accepted provided that such response includes all of the requisite information.

Proposals received prior to the closing date shall be kept secured until closing. The Institution shall not be responsible for the premature opening of a proposal or for the rejection of a proposal that was not received prior to the closing date.

Signature of Proposals: Each proposal shall give the complete mailing address of the firm and be signed by an authorized representative with his or her name and legal title typed below the signature line.

Acknowledgement of

Addenda: All firms shall acknowledge receipt of any addenda to this Request for Proposal by original signature with his or her name and legal title typed below the signature line. Each proposal shall include the firm's social security number or Federal Employer Identification Number.

- Modification of Proposal:** A firm may modify a proposal by written notification at any time prior to the closing date. Any modifications received after the closing date shall not be accepted.
- Withdrawal of Proposal:** A proposal may be withdrawn on written request from the firm to the representative designed above.
- Proposal Disclosures:** At the time of closing, only the names of the firms who submitted proposals shall be made available to the public. No interest rate information will be released until there is an award and contract.
- Notice of Award:** An award is made on the execution of the written contract by the all parties. Only the Institution is authorized to issue news releases relating to this Request for Proposal, its evaluation, award and/or performance of the tax-exempt lease financing.
- Prohibition of Gratuities:** Neither the successful firm nor any person, firm or corporation employed by the successful firm in the performance of this contract shall offer or give any gift, money or anything of value or any promise of future award or compensation to any Institution employee at any time.
- Third Party Beneficiaries:** This Request for Proposal and resulting tax-exempt lease purchase agreement shall not be construed as providing an enforceable obligation to any third party.
- No Liability:** The Institution shall have no liability, obligation nor shall it be compelled to enter into any tax-exempt lease purchase agreement or any other financing arrangement as a result of issuing this Request for Proposal.

FINANCING PROPOSAL LETTER

PROPOSING FINANCING FIRMS: SUBMIT ON FIRM LETTERHEAD

Date

RE: Institution

Lender is pleased to submit the following financing proposal for Institution energy and water savings conservation project. This proposal is being submitted in response to your request for proposals dated Date.

I. Lender Information

Lender Name:

Address:

Contact:

Telephone:

Fax:

Email:

Background: Discuss experience in financing state projects and / or performance contracts, with attention given to experience in the state, and what advantages your firm offers.

II. Financing Structure

Purpose: Finance the energy and water savings conservation projects to be engineered, designed, constructed and commissioned by ESCO for Institution.

Structure: Tax-exempt Lease Purchase arrangement using the Model Lease Contract distributed with this request for proposals.

Security: First lien on the equipment
Lessee appropriations

Proceeds: Approximately \$_____ plus capitalized interest for the _____ month construction period.

Term: _____ months (_____ months of construction plus 144 months of amortization period)

Payments: Quarterly in arrears.

Prepayment: List prepayment terms / conditions / penalty

Interest Rate: _____% (This is a non-bank qualified financing)

Rate will be held until _____. After that date, the rate will be adjusted as follows: _____ (name and source of index).

Example: This rate will be held until_____. After that date, the rate will float at 75 basis points over the 10 year treasury, constant maturity, as published daily in the Federal Reserve Bulletin Statistical Release H-15.

Closing Costs: \$_____ (if any)

Escrow Account

Terms: Agent name and all costs associated with opening and maintaining the escrow, including any investment management fees, if any. Include a copy of the escrow agreement as part of the response documents.

Documents: A Model Lease Contract is included with this response and is customized for the state and the institution type, meeting all legislative requirements, and/or it contains the edits to a Model Lease Contract that we require in order to execute the agreement.

Payment and

Performance

Bonds: We do / do not require to be named as dual obligee on the payment and performance bonds.

Other Conditions

Of ESCO:_____

Credit Approval: The transaction is / is not subject to credit approval of the lender. If the financing is not approved, please list requirements and time frame required for approval.

Estimated Closing

Date: Within 60 days of the award of the financing.

Other Requirements or conditions:

III. Other Information

Please provide any other information that you would like to share regarding your firm's qualifications, references, contacts, etc.

Thank you for the opportunity to provide this proposal. If you have any questions or would like to discuss this proposal in further detail, please let us know.

Sincerely,

By: _____

Title: _____

Date: _____

SIGNATURE SHEET

Item: Tax-exempt lease financing for Institution energy and water conservation projects.

Entity: Board of Institution

We submit a proposal to furnish the financing for the term of the contract in accordance with the specifications and schedule of supplies. I hereby certify that I (we) do not have any substantial conflict of interest sufficient to influence the bidding process on this bid. A conflict of substantial interest is one, which a reasonable person would think would compromise the open competitive bid process.

Addenda: The undersigned acknowledges receipt of the following addenda:

1. Proposal letter dated ____;
2. Model Lease Contract – Attachment A;
3. List of energy and water savings measures and the associated capital cost – Attachment B;

Legal Name of Person, Firm or Corporation: _____

Telephone: _____ Fax: _____

Email: _____

Mailing Address: _____

City & State: _____ Zip: _____

FEIN Number: _____

Please indicate taxes currently registered for in the State:

Corporate Income Tax []; Sales Tax []; Withholding Tax []

Compensating Use Tax []; None []

The undersigned attests this bidder is not in arrears in taxes due the State.

Signature: _____

Date: _____

Typed Name of Signature: _____

Title: _____

If awarded a contract and purchase orders are to be directed to an address other than above, indicate mailing address and telephone number below.

Address _____

City & State _____ Zip Code _____

Telephone _____ Fax _____

Email _____

Overview of Facility Improvement Projects

ESCO:

Contractual

Arrangement: Energy Savings Performance Contract by and between ESCO and Board of Institution

Total Installed Costs: \$, subject to adjustment based upon final analysis by ESCO

Financed Capital: Approximately \$, which is the Total Installed Costs plus capitalized interest for the month construction period

Term: months (months of construction plus months of amortization period)

Payments: no more frequent than quarterly and such payment shall be in arrears

Projects: Energy and Water Savings Measures including but not limited to:

- Item 1
- Item 2

A more detailed description of these measures is included with this Request for Proposal along with an estimate of the capital cost associated with each.

Anticipated Draw

Schedule:

Woodbridge Township – Beecher Road School

Energy Conservation Measures

1. Lighting and Sensors Retrofit
 - Building Wide - Lighting Retrofit and Replacement
 - Occupancy Sensors and Daylight Harvesting
 - LED Exit Signs
 - Exterior and Pole Lights – Induction Technology
 - Vending Miser Controls

2. Boilers Replacement
 - Replace existing hot water pumps and install new variable frequency drives
 - Replace existing AHU Motors with High Efficiency and install VFDs
 - Convert 3-way valves to 2-way operations
 - Convert constant flow system to variable flow system

3. Building Control Upgrades
 - Install Full Direct Digital Control
 - Provide DDC on major (17) RTUs, AHUs, H&Vs and Exhaust Fans
 - Provide DDC on (32) Nesbitt Unit Ventilators – A,B & C wing
 - Provide DDC on (10) McQuay UVs in K Wing
 - Provide DDC for new chilled water plant (chillers, pumps, valves, etc.)
 - Provide DDC in existing boiler room, pumps, valves
 - Provide full DDC on larger exhaust fans
 - Existing valves and dampers will be re-used; unless specified
 - Conversion of AHU-8, 9, & 10 to VVT type system by modifying controls
 - Provide DDC control to implement CO2 demand control ventilation for:
 - Auditorium Unit (AHU-4)
 - Gymnasium (AHU -5)
 - Library (AHU-15)
 - Electric DHW Controls - install controllers that will turn off the hot water heaters when the buildings are scheduled to be unoccupied. The

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programmable timers are capable of override and time adjustment depending upon the use of the area.

- Programming, commissioning & check out of all new DDC controls
- State of the art Web-Based system enabled

4. Building Envelope Improvement

- Inspect and Seal doors
- Seal roof-wall intersections
- Weather-Stripping and Caulking
- Install energy wall at soffit area of doors

5. Plug Load Controls

- install remote control devices which control power to electric appliances - room air conditioners, vending machines, water heaters, water coolers, personal computers, video screens, overhead projectors and other appliances

6. Kitchen Exhaust Fans and Walk-in Freezer Controller

- Reduce fan energy usage and heating energy waste
- Reduce excessive waste heat to environment
- Improve air quality in Kitchens and surrounding areas

7. Transformer Replacement

- Replace (7) older distribution with High Efficiency Energy Star Transformers

8. Water Retrofit – Upgrade existing fixtures with high efficient

- water closets
- tank top toilets
- urinals, faucets
- shower heads
- dish sprayers

9. Swimming Pool Cover

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- Install a semi-automatic pool cover on a motor operated, wall-mounted reel. The system will make use of a remote control and a guide strap, which will be used by the pool staff to extend and retract the pool cover.

10. Micro-Turbines

- Install a 65-kW, gas-fired reciprocating Capstone or TECOGEN cogeneration plant with heat recovery. The new cogeneration plant will produce electricity and useful heat. As part of this measure, new electric switchgear, automatic transfer switch, heat recovery loops will be required to be installed.

11. Curtain Wall Replacement

- Replace a total 6,255SF of single pane window in A, B and C wing with double pane insulated units.
- Replace single doors – single 22 total
- Replace double doors – 4 total

12. Ceiling Work, relocate ductwork, sprinklers and lights

- Removal and proper disposal of 47000 sq ft of suspended ceiling material;
- Provide 4700 sq ft of 2x2 ACT suspended ceiling;
- Repaint impacted surfaces (estimated at 278,000 sq ft)
- Relocate select mains (1140 feet) in conflict w/ new ductwork;
- Relocate 380 sprinkler head pendants and 415 uprights;

13. Roof replacement

- Replace a total of 46,134 square feet of roof on the A, B and C wing with new PVC roof (1/4" slope)

Mechanical Scope of work:

The following are the scope of works for the Alternate project. Please refer to the list of assumptions and exclusions at the end of the section.

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A. New chilled water plant:

Install new central chilled water plant, pumps and associated piping

- Furnish and install (2), 200-ton air cooled chillers (located on grade in located specified in Aztech study)
- Furnish and install two primary chilled water pumps.
- Furnish and install chilled water piping distribution system to connect the new chiller to existing HW distribution system. 500-ft maximum, 8-in pipe

B. Boiler Plant Replacement:

ESG is proposing to replace the two (2) existing, oil-fired boilers with new high efficiency, dual-fuel boilers. The new boilers would substantially improve the operating efficiency of the heating of the building.

School	Existing Boiler	PROPOSED			
		New Boiler	Qty	Rating Gas MBH	Remarks
Beecher Road School	(2) English Boiler 5.0 MMBH	Condensing Boiler	2	3,000	Dual-fuel

Note: Non-condensing mode when using oil

C. Replace existing RTUs, AHUs and H&Vs:

- Remove existing RTUs, AHUs and H&Vs
- Install total of (17) new RTUs and AHUs
- Re-insulate existing piping
- Provide DDC on new units
- Re-use existing Hot Water Piping

D. Replace existing unit ventilators:

- Replace Unit Ventilators in A, B, C and K Wing (34 total)

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- Hot water distribution piping to be reused
- Use existing hot water distribution piping for chilled water
- Remove and reinsulate distribution piping, 6000 linear feet with vapor barrier

#1 Alternate – Install Ground Source Heat Pumps for about ½ of the school:

- Install eighty (80) closed-loop boreholes and eleven (11) water-to-water HPs, associated circulating pumps and auxiliary equipment
- Reduce Chiller size to 1-200 ton air chiller
- Reduce boiler heating: provide 2- 1,500 MBH boilers in lieu of two 3000MBH boilers.

E. Electrical

- New electrical service, two (2), 2000 AMP, 480/277 V, 3 phase 4-wire replacement;
- Reuse existing concrete pad and other existing infrastructure to the extent possible;
- Provide one (1) 400 AMP panel and associated wiring
- Provide one (1) 208/120 V 225 AMP panel;
- Provide one (1) 45 kVA dry-type transformer;
- Provide one (1) 225 AMP distribution panel;
- Provide service for motor load for HW boilers (2) and associated pumps (5), twelve (12) medium AHUs, five (5) small AHUs and 145 units for small FCU, UH, VAV, CUH or plumbing;
- Provide 280 low tension double duplex outlets and 140 dedicated outlets;

F. Temporary protection

Provide the following items to temporarily protect the building systems and maintain conditions acceptable for building occupancy and normal use in portions of building that are being used for routine school business. Protection to include:

- Floors, walls and ceiling;
- Safety;

Energy Systems Group Building Performance With Energy

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Indianapolis; Chicago; Atlanta; Raleigh; Richmond; St. Louis and Baltimore

- Indoor air quality (IAQ) provisions for acceptable air quality in occupied space;
- Progressive and final cleaning;
- Dumpsters
- Exclude - repair of existing damage to floors, walls and ceiling;
- Exclude IAQ impact from factors not directly associated with construction;
- Exclude Temporary heating and cooling

G. PV System

- Furnish and install a 250 kW (DC) system on the school's roof.

H. Wind turbines

- Furnish and install a wind turbine system of 20 kW total capacity; vertical or horizontal.

Agenda – Special Meeting WBOE 11/5/12 – Building Upgrade Status

1. Goal

- Review details of building upgrade, as of current date
- With understanding that a final recommendation has NOT yet been completed by the 2012 Building Committee
- Based on last WBOE meeting, members wanted detailed update, regardless of status of final recommendation.
- List questions still outstanding to forward to 2012 Building Committee after 11/5/12 meeting

2. Status

The 2012 Building Committee is still working to:

- identify final energy source
- finalize project details (each individual piece of equipment, etc)
- finalize cost (depending on project details above)
- timeline (final recommendation, review with WBOE, BOS, BOF, town meeting approval, construction begin/end dates)

2012 Building Committee process to date:

- 2012 Building Committee minutes (website: <http://www.woodbridgect.org/content/6587/6651/default.aspx>)
- AKF consultants selected (website: <http://www.akfgroup.com/>)
- Performance contracting investigated (website: <http://www.cga.ct.gov/2011/SUM/2011SUM00080-R02SB-01243-SUM.htm> and attached document – Energy Performance Contracting.
- RFQ created and two complete responses received as of end of June, 2012
 - Honeywell (website: <http://honeywell.com/Pages/Home.aspx>)
 - ESG (website: <http://www.energysystemsgroup.com/>)
 - RFQ document: **see attached PDF (TBC_RFQ)**
- ESG selected – currently finalizing project details
- Timeline for presentation and recommendation to WBOE – Dec. 2012

3. Scope

The following high-level summary of the scope of the Building Upgrade project was approved by the WBOE on 1/10/11. It is 'Scheme B' on the Newman Architects documents.

Attached is detailed **ESG Scope of Work** document

Item	Status
HVAC System: Roof mounted Hot & chilled water AHUs	Energy source still under discussion, geothermal vs. gas boiler/chiller
New Water Heaters (entire building)	No change – replacement planned
Replace Boiler Plant (sized for entire building)	No change
New Exhaust systems	No change
New DDC controls (entire building)	No change
New Pool HVAC Unit	NOT IN SCHEME B – now included
New hot water/boiler for pool	NOT IN SCHEME B – now included
New lighting at classrooms (North & Central wings only)	Now includes entire building
New lighting at corridors (North & Central wings only)	Now includes entire building
New telephone, PA and clock system (entire building)	Not yet determined (in capital budget plan for 2013-14)
Upgrade data infrastructure (entire building)	Not included in 2012 plan – Wireless infrastructure now in place replaces this item
New data backbone (entire building)	Not included in 2012 plan – Wireless infrastructure now in place replaces this item
Improvements to Fire Protection System	Not yet determined (based on need for upgrade)
Provide new Emergency Generator	NOT IN SCHEME B – now included
Replace bathroom fixtures (North & Central wings only)	Not yet determined – ESG providing separate cost info.
Replace classrooms sinks (North & Central wings only)	Not yet determined – ESG providing separate cost info.
Window replacement (1950/1960 only)	No change.
New PVC Roof (A, B, C, BK and D wings)	No change
Replace ceilings, flooring & paint (North & Central wings only)	Not yet determined – ESG providing separate cost info.
Replace pre-1990's casework (North & Central wings only)	Not yet determined – ESG providing separate cost info.
Replace markerboards/tackboards (entire building)	No included in 2012 plan.
Repair non-conforming ramp handrails (entire building)	Not included in 2012 plan.
Make bathrooms accessible (North & Central wings only)	Not included in 2012 plan

4. Cost

The cost estimate for Scheme B was 16.9 to 17.0M

The current cost estimates from ESG are net costs, based on energy & tax incentive savings:

\$13.9M (gas)	\$9.2M (gas)
\$14.9M (geothermal)	\$7.2M (geothermal)

Performance Contracting:

- Tax rebates (not available to town/school)
- Energy savings guarantee – if energy savings are less than guaranteed, performance contractor pays difference, if energy savings are greater than guaranteed, school saves that cost
- UI interest rate buy down option on lease/purchase agreements (not available to town/school) – still investigating if this is available, and how much is saved.

5. Next Steps

RFQ - Request for Qualifications
for
Comprehensive Energy Management Services

The Town of Woodbridge hereby seeks Statements of Qualifications for selection of a firm to provide a comprehensive program of Energy Management Services. The Town intends to select the most qualified responsible contractor per the evaluation criteria contained herein with whom it will enter into a Guaranteed Energy Savings Contract.

Energy Management Services are defined as a program of services, including energy audits, energy conservation measures, energy conservation projects, or a combination thereof, and building maintenance and financing services primarily intended to reduce the cost of energy in operating Beecher Road School, 40 Beecher Road, Woodbridge, CT 06525 which may be paid for in whole or in part, by cost savings attributable to a reduction in energy consumption which result from the services.

The Town may cancel this Request for Qualifications, or may reject in whole or in part any and all proposals when the Town determines that cancellation or rejection serves the best interests of the public.

All questions concerning this request including general information, instructions, etc. should be sent to:

Contact:

Anthony F. Genovese
Director of Finance and Operations
11 Meetinghouse Lane
Woodbridge, CT 06525
Phone: 203-389-3482
Fax: 203-389-3480
agenovese@woodbridgect.org

Section I. General Information

Purpose

The Town seeks Statements of Qualifications from firms interested in implementing a comprehensive, performance-based energy conservation program at Beecher Road School. The Town intends to enter into an agreement for Energy Management Services. The Town shall negotiate and execute an audit letter of commitment with the selected Energy Services Company (ESCO) as described herein. The ESCO shall develop the comprehensive program and present a detailed contract proposal for Guaranteed Energy Savings Contract.

Energy Management Services

Energy Management Services are defined as a program of services, including energy audits, energy conservation measures, energy conservation projects, or a combination thereof, and building maintenance and financing services, primarily intended to reduce the cost of energy and water in operating Beecher Road School, which may be paid for in whole or in part, by cost savings attributable to a reduction in energy and water consumption which result from the services.

Savings Guarantee

The Guaranteed Energy Savings Contract is defined as a contract for the evaluation, recommendation or implementation of 1 or more energy management services in which payments are based, in whole or in part, on any energy savings attributable to the Contract. It shall include a written guarantee of the ESCO that either the amount of the energy savings guaranteed will be achieved or the qualified provider shall reimburse the public agency for the shortfall amount. Methods for measurement and verification of guaranteed savings shall conform to the most recent standards established by the Federal Energy Management Program of the U.S. Department of Energy. The value of guaranteed savings may represent either all, or part of annual payments at the discretion of the Town. The Guaranteed Energy Savings Contract term for providing a guarantee, measurement and verification, maintenance, service and installment or lease payments shall not exceed 20 years. The guarantee shall be a first party direct guarantee from the performance contractor to the Town. **No third-party guarantee shall be accepted.**

Proposal Format

Proposal must be submitted in the format outlined in Section II of this Request. Each proposal will be reviewed to determine if it is complete prior to actual evaluation. Proposals not containing the information requested will not be considered. Respondents shall use the prescribed format to indicate their experience and qualifications, describe their approach to the project, and explain their proposed contract. In addition, the Town reserves the right to waive any irregularities and formalities in the selection of the ESCO for this project. Multiple Phases can be added to this project into the future with the approved ESCO.

Contract Responsibility

The selected ESCO will be required to assume the total responsibility for the design and implementation of the project. The ESCO will be considered the prime contractor and the sole point of contact with regard to all contractual matters for design, supervision, installation, service, maintenance, training and savings guarantee.

Required Insurance and Bonds

Before entering into a Guaranteed Energy Savings Contract, the Town shall require the ESCO to file with it a payment or a performance bond relating to the installation of energy savings measures, in an amount equal to 100 percent of the estimated contract value from a surety company licensed to do business in the State of Connecticut and whose name appears on United States Treasury Department Circular 570. The successful ESCO shall procure and maintain in effect during the life of the agreement commercial general liability insurance in amount not less than \$5,000,000 for each occurrence, comprehensive automotive liability insurance in amount not less than \$5,000,000, and workers compensation insurance. Evidence of required insurance shall be presented prior to contract execution. Insurance coverage shall not be canceled without prior written notification to the Town.

Taxes, Fees, Code Compliance, Licensing

The ESCO shall be responsible for payment of any required permits, licenses, taxes or fees associated with the execution of the performance contract. The ESCO shall be responsible for compliance with all applicable codes and laws. If there are tax credits that the Town is not qualified for but the ESCO is, those savings will be passed on to the Town.

References and Disclosure of Information

Submission of a response deems permission to make inquiries concerning the respondent to any persons or firms deemed appropriate by the Town. Disclosure of any information provided by respondents in connection with this Request by the Town shall be in strict accordance with the laws and regulations.

Use of and Information Relating to Proprietary Equipment, Controls or Services

Unless no other manner of description suffices, and the Town so determines in writing, all requirements within the Guaranteed Services Contract shall be written in a manner which describes the requirements to be met without having the effect of exclusively requiring a proprietary supply or service, or a procurement from a sole source. The Town will require that any software, passwords and other information or documents required for the operation, maintenance or upgrades of energy management systems and energy conservation measures or projects will be provided to the Town at the time of installation at no extra charge.

Description of Services to be Procured

The Town is interested in contracting for a comprehensive range of energy management systems and services including the design and installation of systems or maintenance programs to conserve energy, including, without limitation, performance-contracting energy savings projects; innovative project financing; the installation or modification of new and existing equipment which will reduce energy and water consumption associated with heating, ventilation, and air conditioning system, lighting system, building envelope, domestic hot water system, and other energy and water using devices; and the work associated with monitoring and verifying project savings and the study or design of the subject work. **Ongoing services such as and not limited to training, monitoring of equipment, service of temperature controls-DDC systems and/or measurement and verification must be provided.**

Objectives for the Program

Objectives for the program are to upgrade the facility and optimize utility and operating budgets through comprehensive infrastructure renewal and to ensure continued peak efficiency for the contract term through proactive maintenance and service programs to be customized for the school. The Town intends to leverage energy savings to fund the cost of the program to the greatest extent possible and may consider additional improvements resulting in an overall program which is paid in part from guaranteed energy savings to ensure a comprehensive renewal of facilities.

Facility Profile

Beecher Road School was constructed in phases beginning in 1960 with the last major construction completed in 1997. The construction can be summarized as follows:

Wing	Construction Year	Square Feet	% of Total S.F.
A,B,C	1960/1964	45,225	26%
D,E,S,Pool & Gym	1970	75,205	43%
Kindergarten (K)	1997	53,205	31%
	Total	174,635	100%

Mechanical, electrical, plumbing, and fire protection systems (where present) are roughly dated to their original construction periods with the oldest systems nearly 50 years old. Approximately 11% of the existing school has permanent direct expansion cooling, 9% of the school has temporary through wall AC units, leaving 80% of the building with heating/ventilating only.

Over the past 5 years there have been three studies completed assessing the building infrastructure at the Beecher Road School:

1. SBS Study completed in 2004 was designed to review the building facility in its entirety to determine what long-term building systems needed attention.
2. In 2006, the Woodbridge Board of Education hired Aztech Engineers to perform a more detailed study focusing on HVAC systems and various options for building infrastructure improvements.
3. In 2010, the Beecher Building Committee contracted with Newman Architects and Dimeo construction to develop a comprehensive plan to renovate the school. This included all HVAC equipment, new roofs, fixtures, lighting, and other infrastructure improvements.

All of these studies are available upon request.

This RFQ requests the services of an ESCO or firm with an ESCO component to develop, assess and implement a comprehensive facility improvement and energy conservation program for the Town of Woodbridge. The intent is to provide the Town of Woodbridge with the means to realize maximum utility savings and energy related improvements with limited up front capital funds.

The energy savings projects will include (but are not limited to):

- Replace inefficient equipment,

- Replace old equipment reaching end of life cycle,
- Improve workplace comfort,
- Create energy (gas, electric, oil) savings, maintenance savings, and water savings,
- Provide new capital equipment with no or limited up-front cost,
- Significant efficiency improvement of Beecher Road School,
- Reduced maintenance efforts,
- Increased reliability,
- Renewable and sustainable technology where appropriate.

Timeline

A total of ten (10) copies of the RFQ Proposals are due to be submitted no later than 3:00 PM, June 22, 2012, and should be addressed to the attention of Anthony Genovese, Finance Director, Town of Woodbridge. Proposals are to be submitted in a sealed envelope clearly marked **“PROPOSAL FOR COMPREHENSIVE ENERGY MANAGEMENT SERVICES FOR BEECHER ROAD SCHOOL”**. The Building Committee and / or Board of Selectmen may reject any and all RFQ Proposals, if in his / her opinion; it is in the best interest of the Town to do so. Equal opportunity employers are encouraged to submit a proposal.

This RFQ neither commits the Town of Woodbridge to award a Contract nor pay any costs incurred in the preparation of your respective Proposals to the RFQ nor to procure or contract for any services and / or equipment.

Should you find any omissions, discrepancies or errors in the outline for the services described above or should you be in doubt as to the meaning of such outline, you should immediately notify and seek clarification in writing from the Town of Woodbridge, c/o Anthony Genovese, Finance Director, 11 Meetinghouse Lane, Woodbridge, Connecticut 06525, which may correct, amend or clarify such outline by a written interpretation and / or Addendum. The Town must receive all requests for clarification no later than 4:00 P.M. on Monday, June 18, 2012. No oral interpretations shall be made to any Bidder and no oral statement by Town officers, employees or agents shall be effective to modify any of the provisions of the RFQ Proposal.

Section II. Statement of Qualifications, format, and Preparation Instructions

Statement of Qualifications must be submitted in the format outlined in this section. Each will be reviewed to determine if it is complete prior to evaluation. The Town reserves the right to eliminate from further consideration any response that does not follow the format or is deemed non-responsive; however, the Town reserves the right to waive any minor irregularities or informalities.

1. Table of Contents

Statements of Qualifications shall include a table of contents properly indicating the section and page numbers of the information included.

2. Contractor Qualifications Data

References

Provide references in three (3) for performance contracting projects in *Town or School facilities only*. Please only include references in Town or School facilities and ones that are located in the Northeast including Connecticut, if possible. Each reference shall describe the services and equipment provided, project cost, and benefits to the owner. Provide the owner's name, address, telephone number, and contact person for each reference. **References for projects where the responding firm was not the prime contractor are not acceptable.**

Provide detailed information on three (3) Performance Contracting projects (2 pages each) your firm has completed that can be used for references. Expand on the information provided in the previous section to give details on individual projects. Include the following information on each project as a minimum:

- Project Identification: Owner name, city/state, facility type.
- Contact Information: Names and contact information of owner(s) representatives who can serve as references.
- Project Type: Performance Guaranteed Contract
- Project Size: Number of buildings and total project square footage.
- Project Dollar Amount: Total contract amount and the total project capital expenditure amount.
- Source of funding: A description of the source of funding used for the project and the company's role (if any) in securing that funding.
- Project Dates: Actual dates of audit start and acceptance; actual construction starting and ending dates.

- Contract terms: A description of the type of financing arrangement and contract term.
- Project Personnel: A list of the names of individuals involved in the project, their role(s) and if these personnel will be assigned to the project.
- Project Schedule: Indicate if project was completed on schedule or explanation if not.
- List of Improvements: The types of retrofits and operational improvements implemented related to energy, water and other cost savings.
- Project Performance: The amounts of projected annual savings, guaranteed annual savings, and actual annual savings for each project.

Quality of Products Proposed

Describe the quality of products to be considered to improve facilities, improve comfort and efficiency in the learning/working environment while reducing energy consumption and operating costs.

Methodology of Determining and Guaranteeing Energy Savings

Describe your methodology of determining energy savings and explain how your approach will minimize risk for the Town. Describe also your approach to verifying energy savings. State type of M&V options most frequently utilized on all performance contracts in the last 5 years and percentage of methodology of Options A, B, C and D. **Provide sample M&V Audit that contains a mixture of M & V Options only.**

General Reputation and Performance Capabilities

Describe the general reputation and performance capabilities of the firm and explain how these characteristics translate to optimizing results for the Town. Please include the years in business under current name, annual revenues (most recent year) and resumes of project team members.

Time Specified in the Qualifications for the Performance of the Contract

The Town anticipates that the audit of the identified the Town facilities will be complete within three months after the date of issuance of the commitment letter.

3. Other Factors the Town Considers Reasonable and Appropriate

Annual Report or Audited Financial Statement

Submit audited financial statements of the responding organization.

Certificate of Insurance

Submit an insurance certificate listing the Town as additional insured.

Owner Training

Provide detailed information on the training programs available to the Town maintenance personnel.

Service and Maintenance

Describe your capability to provide ongoing service and maintenance with **in-house personnel and not subcontracted**. Provide number of truck-based service and maintenance professionals and describe their level of training experience. Provide location of local office and staff in office location. Provide sample operation and maintenance manuals.

Evidence of Bond Capability

Respondent must provide evidence of bonding capability.

Financing

Respondents shall include in their responses information regarding financing provided by the ESCO directly, or through a third party, however, the Town of Woodbridge reserves the right to secure financing from whichever source(s) the Town of Woodbridge determines is in its best interest. Such funding sources may include, but are not limited to: utility rebates; demand response payments; grants; sale of renewable energy, carbon or air quality emissions credits; or sale of efficiency benefits on the ISO New England Forward Capacity Market. All benefits that stem from the implementation of energy management services under the ESPC and that are deemed to have a monetary or societal value shall be the sole property of the Town of Woodbridge.

Section III . Selection Criteria

1. Completeness

Each response will be reviewed prior to the selection process for completeness and adherence to format. A response will be considered complete if all requested sections are included in the proper order.

2. Evaluation of Responses

Evaluation Process

The Town will appoint a selection committee to formally evaluate each response. The evaluation process will be used to grade the responses as described herein. The evaluation process may include verification of references, confirmation of financial information and may include other information as directed by the Town.

Minimum Required Items

Each of the items listed below must be submitted with each proposal:

- Annual report of audited financial statement
- Certificate of Insurance
- Non-collusion affidavit
- Delinquent tax affidavit

Evaluation Criteria

Each section or subsection of the response will be considered a separate selection criterion as listed below:

- General Reputation and Performance Capabilities
- References (K12-Muni in CT)
- Quality of Products Proposed
- Methodology of Determining and Guaranteeing Savings
- Time specified for Performance of the Contract
- Owner Training
- Service and Maintenance

3. Selection

The Town may contact respondents with questions on their responses, request oral interviews, or select a firm after reviewing and ranking written responses. The Town may reject any and all responses. The decision of the Town regarding the selection of a qualified provider shall be final and not subject to appeal except on the grounds of fraud or collusion.