State Clean Energy-Environment Technical Forum
Using Performance Contracting for Implementing Energy Efficiency
April 10, 2008
Call Summary

Participants: 60 registered participants from 28 states and national organizations

Materials: The participant list, agenda, and all presentation materials from this call are available at http://keystone.org/Public_Policy/2007_8DOCS_CLEANENERGY/2007_8DOCS.html. Please refer to these documents for additional background information and detail on presentations.

Key Issued Discussed

- Performance contracting process and advantages for implementing state and municipal energy efficiency projects
- Best practices for working with Energy Service Companies on state renewable and emission reduction projects
- Challenges in using performance contracting including the cost and resources needed for M&V

Presentation Summaries and Discussion

A. Welcome/Introduction – Julia Miller, EPA; Catherine Morris, The Keystone Center

Ground rules for the call discussed, followed by a brief introduction of the speakers.

B. Guaranteed Energy Savings Act, Bruce Stultz, Pennsylvania Department of General Services (see website above for presentation)

Mr. Stultz described the PA GESA program which currently has 18 qualified energy service companies (ESCOs), 45 completed projects, 11 participating state agencies, and 26 projects under contract. The program has generated $44 million in net savings. The projects include 1) standard energy conservation measures, 2) LEED certification, 3) emission reduction projects, and 4) renewable and green energy projects.

Mr. Stultz highlighted the advantages of performance contracting for Pennsylvania including avoided capital expenditures in acquiring new equipment, deferred maintenance savings and increased staff commitment. He also pointed out some of the barriers to effective use of performance contracting including lack of staff commitment and internal resources to oversee performance contracting, lack of awareness of the program, and loss of funding based on the level of savings achieved. Pennsylvania has created an interagency task force to help increase the use of performance contracting and is also extending support to municipalities.

Q&A

How does Pennsylvania account for operational savings that come from using performance contracting?

By avoiding materials and labor costs for installing and replacing inefficient products, an organization can save on operational costs. Pennsylvania tracks these costs and estimates; they have accrued to approximately $25.2 million so far.

Why do Energy Service Companies (ESCOs) seem to avoid bidding on buildings that have low Energy Star ratings?
Sometimes the costs of updating an old structure are not justified by the benefits; there are big differences in the complexity and difficulty of updating old and new structures, and ESCOs are looking to make a profit.

How does PA divvy up work between pre-qualified ESCOs?
Every project solicits letters of interest from ESCOs. The Department of General Services considers factors such as their past experience with similar projects and their in-house capabilities in the decision-making process. Minority participation and equitable distribution are also important to the selection process.

Is it important that the ESCO guarantee the savings?
Colorado thinks it is important to hold contractors to a firm estimate of savings, even though it requires additional costs to monitor and verify the results.

Is there a distinction between state and city performance contracting?
A city may not need to develop a comprehensive program, but can also use performance contracting effectively to implement individual projects. Maryland has used performance contracting extensively at the local level.

C. Hatim Jabaji, Office of Energy Performance and Conservation, MD Dept. of General Services

State of Maryland has been using performance contracting since 1993. The Governor has recently set a goal of achieving a 15% reduction in energy use in the state, and performance contracting will be one tool to achieve it. As the Energy Manager in Baltimore, Mr. Jabaji also used performance contracting on 10 major municipal office buildings, fire stations, traffic signal replacement, waste water treatment plants and school systems. All these projects were paid for with guaranteed energy savings.

- Mr. Jabaji cited 17 projects in the state of Maryland including stadiums, universities, bridges that have used performance contracting. Any facility or agency that uses energy or electricity in their operations can benefit from performance contracting. MD is also trying to use performance contracting for renewal energy projects on state properties.

- To be successful using performance contracting, you need a “champion” and upper management support (mayor, governor’s attention) to get things moving faster. Don’t wait to develop your own process—use a neighboring state or county’s plan. A good project management team is essential. A good maintenance team is a great asset.

- Steps to developing project:

1) Select ESCO and submit phase 1 proposal.
2) ESCO develops proposal for construction and negotiates final price.
3) Arrange for financing. Does ESCO provide loan or do you get it on your own?
   - It's plausible to get 10-15 year financing.
   - There are different rules on using a master lien.
   - Every agency pays for its own performance contracting.

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Q&A:

Do you have any performance contracting experience with domed sports complexes? Any advice on how to use monitoring and verification for those types of facilities?

MD made EE investments in the Baltimore Convention Center but did not use performance contracting. It's hard to get an adequate payback for a convention center because of the irregular use of the building. You need to get good data on the current and expected energy use pattern to make sure of getting good savings. There's good potential but it requires careful analysis.

Have you had any experience with setting terms in contracting agreements to address ownership of greenhouse gas credits?

There are no contractual terms in Maryland on GHG reductions or credits, but we can document the emission reductions using regional energy data from PJM. In California it is more difficult to track emissions due to the importation of energy into the state. Pennsylvania is starting to investigate this issue and it will become more important with the development of the Regional GHG Initiative – RGGI. It may be possible to roll carbon credits into a carbon market when it develops. Chicago Climate Exchange may be writing terms for doing this. If ESCO takes credit for reductions, make sure the state gets something out of it. CA has been grappling with the question of ownership. Massachusetts takes ownership of pollution credits through their performance contracts, but then needs someone on staff to participate in the emissions market to cash in on the value.

How does the state take advantage of solar tax credits?

MA would like to take advantage of federal solar tax credits to help offset some of the costs of state projects, and perhaps performance contracting could be the taxable entity to make it work. There may be restrictions in federal and state tax credit provisions that require the "owner" of the solar project to receive the credits, which would require a third party to own the project and sell power to the state through a purchased power agreement.

D. Using Performance Contracting for Implementing Energy Efficiency, Linda Smith, Energy Services Coalition (see website above for presentation)

Ms. Smith gave an overview of how performance contracting works and the many advantages for the facility owner and the state. She described the Energy Services Coalition which was formed to increase the awareness and use of performance contracting by $2 billion per year. Energy Services Coalition has compiled guidance on best practices for state performance contracting programs, Ms. Smith highlighted some of these best practices, examples of states that have implemented them, and other tools states can take advantage of through ESC. She also talked about some of the challenges and opportunities ahead:

- Need to get renewables industry familiar with performance contracting—explore "speed dating" approach to get two parties together.

- Federal tax credits together with rebates in states like CA with active solar programs can mean substantial paybacks. ESCO could make solar more economical. ESCO needs to be pushed out of the box a little bit and customer driven.

Q&A

In terms of savings measurement protocols, should a stipulated or measured approach be used?

Stipulated savings, which shifts the risk to the consumer, is appropriate in some cases (lighting and water, for example). But in complex applications such as building management systems, measured savings (metered or modeled) should be used. There is a need to be flexible however; in the case of a fire station for instance, there are a lot of variables that affect energy use such as how often the doors open and close and the number of calls the department responds to. ESCOs would typically require stipulated or negotiated protocols in this instance. Good past records are important for a stipulated approach.

Ms. Smith argued that using a measured savings approach is preferred. Some states are using established international M&V protocols and making adjustments for state-specific circumstances. The basis for the measuring the savings should be stated up front in the contract and agreed to before an audit. This sets the stage for third party verification.

What assurances are in place to make sure that the ESCO is doing a good job, from the design stage to commissioning?

Maryland has an in-house review of the proposal. Yet during construction, ESCOs use subcontractors who don't have a strong stake in the outcome of the project. Thus, there is a need to have regular inspections, proper commissioning and to keep a close eye on the process as it unfolds.

NEXT TECHNICAL FORUM CALL: Thurs., May 22, from 2:00 p.m. to 3:30 p.m. ET
TOPIC: Acquiring and using state-level energy data.