National Aeronautics and Space Administration

Headquarters

Washington, DC 20546-0001



August 8, 2013

Reply to Attn of:

OLIA/2013-00447f:MDC

The Honorable Paul Broun Chairman Subcommittee on Oversight Committee on Science, Space, and Technology U.S. House of Representatives Washington, DC 20515

Dear Chairman Broun:

Enclosed are the responses to written questions submitted by you, Chairman Lummis and Representative Hultgren resulting from the June 27, 2013, hearing at which Dr. Whitlow testified regarding "Green Buildings – An Evaluation of Energy Savings Performance Contracts." This material completes the information requested during that hearing.

Sincerely,

L. Seth Statler

Associate Administrator

Seth Statler

for Legislative and Intergovernmental Affairs

Enclosures

HOUSE COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY SUBCOMMITTEES ON OVERSIGHT AND ENERGY

"Green Buildings - An Evaluation of Energy Savings Performance Contracts (ESPCs)"

QUESTIONS FOR THE RECORD

Dr. Woodrow Whitlow, Jr., Associate Administrator Mission Support Directorate, National Aeronautics and Space Administration

Questions submitted by Chairman Paul Broun and Chairman Cynthia Lummis:

1. Are all NASA Centers engaged in ESPCs, and if not, why not?

Response: NASA has utilized ESPCs at six of ten Field Centers. The following Centers have not used ESPCs:

- Dryden Flight Research Center, CA Pursued an ESPC project under a Department of Energy (DOE) ESPC master contract but cancelled the effort prior to awarding a task order due to limited resources to develop, administer, and maintain the project over the full contract term.
- Langley Research Center, VA, and Stennis Space Center, MS Obtain benefits similar to ESPCs by using Utility Energy Services Contracts (UESCs).
- Marshall Space Flight Center, AL Consistently implements energy conservation measures through conventional contracts.
- 2. Does NASA have staff trained in ESPCs or does the Agency rely on FEMP staff primarily to guide NASA employees through the ESPC process?

Response: Both. NASA has procurement and technical staff trained in ESPCs, and also utilizes assistance from Federal Financing Specialists and Project Facilitators contracted to DOE Federal Energy Management Program (FEMP) to develop task orders.

a. Overall, has FEMP been helpful throughout the implementation and life of ESPCs? If not, how could their interactions improve?

Response: Yes, FEMP has helpfully supported NASA ESPC efforts through providing ESPC master contracts, training, assisting task order development, and monitoring project performance during the post-installation performance period.

b. When a contract ends early, do you find that NASA staff is sufficiently trained to provide maintenance of energy efficiency improvements that have been made?

Response: Yes, in uncommon cases where NASA completed an ESPC project's loan repayment prior to the full contract term, our facilities operations and maintenance personnel were sufficiently trained to maintain systems that received ESPC energy efficiency improvements.

3. How often does NASA engage in contracts with other firms that offer energy efficiency improvements that are not included on the DOE's pre-approved list of ESCOs? Can you name a potential situation where NASA would prefer to work with an outside firm, and if so, what is the reasoning?

Response: DOE maintains a Qualified List of ESCOs; DOE competes and awards ESPC master contracts to a subset of the companies on this list. Outside of DOE's ESPC master contracts, Agencies can also directly contract for ESPCs with companies on the DOE Qualified List of ESCOs. NASA has only engaged in ESPCs through contracts with ESCOs on the DOE Qualified List of ESCOs.

Since NASA began using ESPCs in 1999, the Agency has engaged in ESPCs through four contracts outside DOE's ESPC master contracts: Two NASA contracts established in 1999 and last utilized in 2003, one United States Air Force contract including colocated NASA facilities established in 2000 and completed loan repayment in 2012, and one NASA Federally Funded Research and Development Center (FFRDC) prime contractor subcontract established in 2007 and still utilized. The first three contracts were under development while DOE developed its original ESPC master contracts. In the FFRDC example, NASA's contract with the prime contractor includes energy management requirements, and the prime contractor utilizes an ESPC subcontract as one means of fulfilling the energy management requirements.

4. What are the key advantages and limitations of ESPCs, and what suggestions do you have to improve the ESPC process – either through legislation or administrative regulation?

Response: ESPCs enable NASA to implement energy and water efficiency upgrades in funding circumstances where it could not otherwise be accomplished. A potential area for continually improving ESPCs includes requiring full transparency of all cost and revenue streams in ESCO proposals. This improvement would benefit both DOE and non-DOE ESPCs.

Questions submitted by Rep. Randy Hultgren (R-IL):

1. Has NASA experienced or noted any disadvantages when partaking in the ESPC program?

Response: Yes. Developing, administering, and maintaining ESPCs is more complex than implementing projects under conventional Federal government contracts. This complexity arises from contracting for a project with financing repaid from cost savings throughout a contract term of up to 25 years, and from measurement and verification of guaranteed cost savings throughout the contract term.

a. If so, what have those been and how often have they occurred?

Response: Smaller NASA sites with very constrained personnel resources find it difficult to implement an ESPC project—even under DOE ESPC master contracts. The Agency has experienced a site that pursued a project under a DOE ESPC master contract but cancelled the effort prior to awarding a task order due to limited resources to develop, administer, and maintain the project over the full contract term. NASA has also experienced a site that successfully implemented an ESPC project under a DOE contract, but with the impact of ESPC coordination consuming nearly all of the site's energy management personnel resource capacity.

b. Have these disadvantages dissipated over the years as the program has evolved?

Response: No, it remains challenging for personnel to conduct full-scale ESPC at smaller sites.

c. How can the program be improved to eliminate such weaknesses?

Response: DOE developed ESPC ENABLE to provide a streamlined mechanism for very small sites to implement a limited selection of energy conservation measures. This could prove helpful for agencies with such needs.