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## **Questions and Answers, No. 1**

Request for Proposals (RFP) No. S00R6400006

CUSTOMER INVESTMENT FUND  
MULTIFAMILY HOUSING ENERGY EFFICIENCY RETROFIT:  
PROJECT MANAGEMENT, ENERGY EFFICIENCY AUDITING AND QUALITY  
CONTROL, AND TRAINING SERVICES

*April 5, 2016*

The following Q&A is provided for informational purposes only. It is *not* an amendment to the RFP.

### **Vendor Question**

Are there liquidated damages for delays?

Who is responsible for maintaining work flow?

When is the cut off for the distribution of funds for the Program and work stoppage?

How many buildings will be awarded funds for the program?

What is the project management payment cycle?

Energy Conservation Measure (ECM) requisition type: how does money flow to ECM installers?

Is there a preference for Offerors who can perform multiple disciplines?

### **DHCD Answer**

No.

The project manager is responsible for maintaining the work schedule and coordinating the work of all parties. Each party has a responsibility to perform their scope in a coordinated effort. Each party should report conflicts to the Department in situations where coordination and communication are increasingly difficult.

See Exhibit 1, Section 3.A.1.

It is anticipated that between five and seven properties / buildings will receive funding.

The project manager will submit monthly invoices based on the projects percentage of completion.

The owner will contract and pay ECM contractors directly for installed work as verified by the auditor/QC inspection and project manager certified requisition. Invoicing should occur no less frequently than monthly. Stored material does not qualify for payment. ECM's will be funded in full or in part through a grant to the property owner.

Per RFP, Section 1.15. No preference will be given for offers with multiple service categories.





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What level ASHRAE audit is required?

Audits will be consistent with current Department requirements. Generally, they would be considered modified, Level 3, ASHRAE audits. See the attached "Multifamily Building Auditor Qualification Form."

Is training required for persons already certified?

Yes, it is. See Exhibit 1, Section 6. F.

Who is eligible for the training?

All program participants are eligible, including state energy employees, grantees, ECM contractors, and owner's maintenance staff. See Exhibit 1, Section 6. F for details.

Can contractors under this RFP perform installation work under the grant component of the program?

Contractors procured through the RFP cannot perform installation work on projects they are assigned through the RFP. RFP contractors may perform installation work on projects that are not assigned to them by the Department. However, they cannot utilize the same personnel. See RFP sections 3.2.2.1.4, 3.2.2.1.5, and 3.2.2.1.6.

Can owners perform the ECM work with in-house employees?

Yes, however, they may require training to install the measures properly.

Who picks the ECM installers?

The project manager solicits bids for and presents recommendations to the owner- See RFP Section 3.2.2.1.4; the owner chooses the contractor for award of an AIA contract. The auditor can also consult with the owner to assist in determining the contractor.

Is the contract only between the owner and the ECM installer?

Yes, the AIA contract for grant work is only between the owner and the ECM installer. The responsibilities of the program participants are outlined in the RFP and program guide.





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Who is responsible for, and how are costs for, engineering of HVAC and electrical design elements?

When required, a design team member and the costs associated shall be incorporated into the costs of the ECM and included as a scope item. Coordinate with the Department's Contract Monitor on feasibility of the ECM in question as a reasonable cost savings item.

Auditors and ECM installers in coordination with the project manager must work together to provide the completed work in a coordinated effort.

See RFP Section 3.2.2.2.4.5 for design personnel qualification requirements.

Note: Systems whose permitting requirements require Professional Engineer (P.E) license must be performed by a P.E. licensed in the State of Maryland.

Is the ECM work included in the \$3.7 million?

Yes. See Exhibit 1, Section 2.

Are incidental costs fundable through the grant?

No. The owner is responsible for costs not directly attributable to the ECM.





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**Multifamily Building  
Auditor Qualification Form  
January 1, 2016 – December 31, 2016**

The Maryland Department of Housing and Community Development (DHCD) accepts comprehensive energy audits for DHCD financing and energy efficiency and conservation programs from qualified energy auditors. DHCD maintains a “Qualified Energy Auditor” list on an ongoing basis and requires annual submission to reaffirm qualification.

This qualification form must be executed by a responsible individual authorized to legally bind the entity to enter into agreements.

- Current certifications for all auditors working on comprehensive energy audits for DHCD projects (finance or Retrofit) must be submitted with this application. Minimum required certifications include: BPI Multifamily Analyst **AND** at least one of the following: BPI Building Science, BPI Envelope Professional, BPI Building Analyst, or similar non-BPI building science training.
- Applicants not identified on DHCD’s June 26, 2015 [Qualified Energy Auditor List](#) are required to submit copies of three (3) comprehensive multifamily energy audit reports for DHCD to review as examples of the Applicants work. These reports will be used to determine the applicant’s qualifications in conjunction with other requested documentation (certifications etc.).

**Energy auditors are responsible for the following activities:**

1. The performance, review, accuracy, and completeness of the final report issued for DHCD project funding consideration.
2. To perform comprehensive, unbiased whole building energy audits in full compliance with program guidance;<sup>1</sup> considering all feasible energy saving opportunities, regardless of an owner’s desired work scope. When in conflict with BPI, the DHCD audit guide takes precedence but does not take precedence over state and/or local code.
3. Sign the final energy audit report and include the responsible auditors contact information IE: phone number, e-mail, and credentials.
4. Hold current required certifications throughout this period.

**During the audit, Energy Auditors must:**

- Obtain and use at least 13 months of actual utility consumption for the Owner (commercial) and Tenant (resident) for building energy modeling purposes. Obtain, direct, or assist the property management in obtaining tenant signatures on DHCD’s [Customer Consent to Obtain Energy Use Information](#) form. All tenant units are preferable, at a minimum for the representative units inspected and all owners’ accounts.

<sup>1</sup> Program Guidance consists of the current BPI Multifamily Building Analyst Professional Standards (and as amended), applicable BPI Envelope and Building Analyst standards, and the [DHCD Multifamily Energy Audit Guide](#).





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- Determine utility rates by excluding fees that do not fluctuate with consumption. Do not determine rates by calculating total annual expenditures by annual consumption. Do not determine annual usage by calculating total expenditures by the utility rate.
- Identify and define the building envelope in the audit report and develop a practical solution (scope of work) to repair air and thermal barrier deficiencies to provide a continuous and aligned building envelope (air and thermal barriers) where practical in all accessible spaces, including interstitial spaces IE: chase ways, attics, including porch overbuild areas, overhangs, and basement/crawl spaces, and individual unit compartmentalization utilizing good building science practices (do no harm to occupants or building)).
- Blower door testing is required. The report must identify reasonably achievable air sealing reduction goals in CFM50 for each similar size/type units. The report must identify if blower door testing was guarded or unguarded.
- Duct leakage testing is required<sup>23</sup> where duct work is not completely inside the building thermal envelope. Duct leakage testing must include testing ducts that run inside exterior walls. The report must identify reasonably achievable reduction goals in CFM25 for each similar size/type unit.
- Sampling: The auditor shall inspect a representative 10 percent sample of all dwelling units; or a minimum of 5, whichever is greater. The sample shall include, at a minimum, one representative dwelling unit from each unique type. In buildings where only one or two unit types exist, and testing shows little variation between similar units (no more than 10% difference), it is reasonable to reduce the sample size to no fewer than 10 units. In most cases, no more than 20 units should require inspection. However, if results are inconclusive, additional units should be sampled. This might increase the sample size.
  - Variations in basic floor plan layout, energy design, heating and/or cooling capacity of HVAC units, or the number of HVAC units located in each dwelling unit shall cause the dwelling unit to be considered a unique type.
- Test all bathroom fans in sampled units for flow; and kitchen fans for flow when feasible.
- Identify and record energy consumption for all lighting, appliances, HVAC units and any other item that may produce an energy savings measure. Products of different types or ages should be separately identified as these products will have different energy consumption.
- Determine cost of materials, equipment, and installation for a given ECM utilizing actual contractor bids prepared by the owners selected contractor(s).

### Energy auditors need to include in the report:

- Audit reports must be revised to meet DHCD program requirements<sup>1</sup>; including the requirements identified in this document.
- Model buildings and units as appropriate; and develop energy conservation measures for both using the current updated version of one of the following software programs for multifamily buildings: RemRate, eQuest, EAQUIP, or TREAT. Proprietary calculation sheets are not acceptable. Custom measures from proprietary calculation sheets must be incorporated into the energy modeling software.

<sup>2</sup> Program guidance and requirements can be located on [DHCD's Multifamily Energy Efficiency Improvement Program website](#).

<sup>3</sup> [BPI's Approved Technical Standards](#)





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- Appropriately calibrate models to within +/- 10% of actual usage.
- Include an ECM report/table showing all feasible ECM's and their SIR's, including measures with an SIR below 1.1. The ECM report must be generated directly from the approved software program. This data must not be modified in any way.
- Include a "Recommended Retrofit Package" report generated from the modeling software identifying a well thought out improvement package based on existing conditions, opportunity, practicality, and good building science. The report(s) must show interacted measure savings. The project must have a cumulative SIR  $\geq$  1.1 (consisting of measures above and below 1.1 where applicable).
- Heating savings are calculated for the period November 1- March 31 (begin October 1 in Garrett Co.); cooling savings are calculated for the period June 1 – August 31.
- Separately identify utility use, ECM, cost, savings, etc. for owner and tenant when the building is mix metered (owner and tenant metering).
- Provide project electronic energy model file, input reports, output reports, and all other information required by DHCD to verify data integrity upon request. This information becomes DHCD property and is subject to third party and public review in accordance with Maryland's Public Information Act.
- Clearly identify and describe assumptions used to develop the energy model and ECM calculations including quantities, efficiencies, operation and run times (hours in use), and resources used to justify the assumptions. (Example: attic fiberglass batt insulation measured R-30, downgraded to R-28 using the BPI Batt insulation effectiveness chart based on installation quality.)
- Include a matrix in the report identifying all mechanical equipment, lighting, etc. quantities, sizes, model numbers, and efficiencies of those items inspected. Include photos of equipment inspected and clear pictures of the equipment data plates.
- Auditors must submit an [ECM Data Sheet](#) and [Auditor Existing Conditions Form](#) with all audit reports. The Auditor must clearly identify the efficiency, size, quantities, age, hours of use, etc. of existing conditions. Example: existing double hung vinyl windows with SHGC 0.40 and U-factor 0.38.

### Energy Conservation Measures (ECM)

- Separate ECM's must be stated for tenant vs. common/commercial energy savings for non-master metered projects.
- Each ECM must be on a separate row.
- All applicable data must be input in the [ECM Data Sheet](#).
- Use [DHCD's Estimated Useful Life Chart](#) for ECM lives.
- ECM's that produce different savings MUST be separate. Examples include identifying low flow aerators separately from low flow shower heads, linear fluorescent bulbs from CFL and LED, tenant interior light fixtures from walkway light fixtures, etc. ECM's must not be combined, Example: light bulbs should not be grouped together as "lighting" as they have different expected useful lives, operating hours, bulb types, watts, etc.
- When applicable, calculate Incremental Savings by calculating the increased savings resulting from the increased cost of the higher efficiency unit over the base level product.
- Calculate appliance/system sizing based on demand/load using Manuals "J" and "S" or appropriate ASHRAE calculations based on the improved building condition.





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**Work Scope's**

- Report's must have detailed ECM work scopes specific to the immediate project for each ECM so appropriate lay persons can properly perform the identified work or project design teams can incorporate the work scope into project specifications; to achieve expected results.
  - Audit work scopes and proposals for projects must include a separate Quality Control component: review product specification sheets before materials are installed to insure products meet the efficiency standards recommended by the energy auditor and approved by DHCD for funding, perform appropriate quality control and diagnostic test-out inspections including blower door, duct, and ventilation flows as per BPI requirements.
- Entities that require revisions to energy audit reports to meet program guidance may be removed from the Qualified Auditor list at DHCD's sole discretion.

By signing this form, I hereby acknowledge that I have read this application form and agree to perform and deliver compliant energy audits and audit reports as outlined here and detailed in BPI and DHCD guidance. I represent and warrant all personnel that will perform audit activities for DHCD finance programs are aware of the requirements of this application.

I understand I will contract with the property owners and be paid by them for this service. DHCD is not contracting these services.

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Entity/Individual name

\_\_\_\_\_  
Phone number

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E-mail Address

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Signature

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Date

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Printed name

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Title

