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Energy Performance Contract – HUD Checklist

1. Energy Audit

- a. The energy audit has been completed within the last two years?

2. Energy Conservation Measures

- a. A spreadsheet ([Attachment A](#)) is provided that lists each ECM measure by project including:
- i. Energy savings, consumption and ECM cost,
 - ii. Current method of metering (master metered or retail metered).
 - iii. Verification Methodology - (IPMVP Options)

Comments:

3. Baseline Data

- a. Baseline utility consumptions, non-adjusted data, is clearly defined by utility, by month, for three years showing utility consumption and utility cost by project.
- b. The PHA has reviewed and verified that the baseline data is correct.
- c. The HUD Field Office has reviewed and verified that the baseline data correlates to the financial data as found on form HUD-52722-A.
- d. Energy savings attributed to capital fund expenditures during or after the baseline years have not skewed the baseline utility consumption data?

Comments:



4. Cost Reasonableness

- a. The ESCO can demonstrate competitive cost competition of each ECM. Recommend that three costs be obtained for each ECM and that the ESCO document their selection based upon "best value";

or

- b. A detailed cost breakdown is provided for each ECM. The cost breakdown shall comply with Federal Cost principles (similar to RS Means) and shall include:
 - i. Direct Costs. Materials (list individual items, the quantity and unit cost of each, and the aggregate cost); Transportation and delivery costs associated with materials; Labor breakdowns by hours or unit costs (identified with specific work to be performed); Construction equipment exclusively necessary for the change; Costs of preparation and/ or revision to shop drawings resulting from the change; Worker's Compensation and Public Liability Insurance; Employment taxes under FICA and FUTA; and, Bond Costs - when size of change warrants revision.
 - ii. Indirect Costs. Indirect costs may include overhead, general and administrative expenses, and fringe benefits not normally treated as direct costs.
 - iii. Profit.
- c. The PHA has reviewed and certified that the costs appear reasonable.
- d. All ESCO costs are "full and open". A cost breakdown has been provided that defines:

- Total Direct ECM Costs
- Audit Costs
- Design & Engineering
- Construction Management
- Resident Education
- Monitoring and Verification
- Overhead
- Profit

Comments:



5. Financial –

- a. An amortization schedule has been provided.
- b. The HUD Field Office has reviewed the amortization schedule.
- c. A cash flow analysis has been provided to document a positive cash flow.
 - i. Documentation has been provided to support that all “escalated” rates are reasonable. Note: If rates are escalated, then the ESCO guarantee should also be escalated.
- d. Any PHA contributing cost has been reviewed and is in compliance with 24CFR990 requirements. The HUD Engineer shall provide a written memo justifying the use of these funds as non-energy related components.

Comments:

6. Resident Paid Utilities

- a. Waiver request has been received from the Authority.
- b. Waiver request has been submitted to HUD Washington.
- c. Existing utility allowances have been reviewed in accordance with 24 CFR 965 and determined accurate.
- d. Yes No Does the contract involve the ESCO in the yearly review of the new utility allowances, ref. 25CFR965?
- e. Yes No Does the contract require that the ESCO guarantee the Resident paid “actual” energy savings?

Comments:



7. Verification Methodology –

- a. Any verification methodology other than “actual” (IPMVP, Option C) has been reviewed and approved by HUD.
- b. International Performance Measurement & Verification Protocol (www.IPMVP.org)
 - i. Option A – Partially Measured Retrofit Isolation – Requires HUD Approval
 - ii. Option B – Retrofit Isolation - Required HUD Approval
 - iii. Option C – Whole Facility – Whole Facility – Recommend Approach
 - iv. Option D – Calibration Simulation – Not Allowed.

Comments:

8. Heating Degree Day adjustments –

- a. HUD has approved the heating degree day adjustment methodology.
Note: This adjustment is subject to HUD approval.

Comments:

9. Contract - Verification of Savings {ESCO to Housing Authority}

- a. The contract clearly defines the content of the yearly reports and how the yearly energy savings will be calculated.

Comments:

10. HUD - Verification of Savings {Housing Authority to HUD}

- a. Both the HUD Field Office and the PHA clearly understand the procedural process that HUD will require to verify energy savings for each year of the contract.

Comments: