

ENERGY WEATHERIZATION QUALITY ASSURANCE INSPECTIONS

REQUEST FOR PROPOSAL

2022-RFP-97



State of California
Department of Community Services and Development
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1. **PURPOSE AND DESCRIPTION OF SERVICES**

A. **Background**

The Department of Community Services and Development (CSD) is a department under the California Health and Human Services Agency (CalHHS).

The mission of CSD is to reduce poverty by administering energy and community service programs that result in an improved quality of life for low-income Californians. CSD fosters strong partnerships with local community organizations to provide high impact programs and leverage strategic resources resulting in ever-increasing hope, dignity, and economic security for low-income Californians.

CSD manages statewide energy saving weatherization programs for low-income households through a network of 40 contracted Local Service Providers (LSPs). The programs are described below:

1) **Low Income Home Energy Assistance Program (LIHEAP)**

The U.S. Department of Health and Human Services (HHS) funded LIHEAP provides assistance to eligible low-income households to help meet their immediate home heating and/or cooling needs. There are several components of the program that help accomplish this goal such as: the Home Energy Assistance Program (HEAP) which provides one-time financial assistance to help balance an eligible household's utility bill; the Energy Crisis Intervention Program (ECIP) which provides assistance to low-income households that are in danger of having their utilities turned off or in other crisis situations. This includes repair or replacement of heating/cooling, or water heating appliances that could be deemed potentially life-threatening in the household; and LIHEAP weatherization which provides free energy efficiency upgrades to low-income households to lower their monthly utility bills while also improving the health and safety of household occupants. LIHEAP weatherization includes attic insulation, weather-stripping, minor housing repairs, caulking, water heater blankets, refrigerator replacement, water heater repair or replacement, heating and cooling system repair/replacement, hardwired LED fixtures, LED bulbs and torchiere lamps, thermostats, and related energy conservation measures. A more extensive list of measures can be found in Exhibit E and F of this Request for Proposal (RFP). CSD strategically leverages its LIHEAP weatherization funding with the more extensive U.S. Department of Energy (DOE) Weatherization Assistance Program (WAP) described below.

2) **Weatherization Assistance Program (WAP)**

The U.S. Department of Energy (DOE) WAP, which includes both the annual DOE WAP and supplemental program established under the Bipartisan Infrastructure Law (BIL) DOE WAP, provides eligible low-income households with services designed to improve the energy

efficiency of their homes and reduce energy usage and costs, while safeguarding the health and safety of the households. Households are also educated on basic energy efficiency practices and instructed on the proper use and maintenance of the measures installed. Typical weatherization measures may include weather-stripping, insulation, caulking, water heater blankets, refrigerator replacement, water heater repair or replacement, heating and cooling system repair or replacement, LED bulbs, thermostats, and related energy conservation measures. A more extensive list of measures may be found in Exhibit F of this RFP.

B. Purpose of Request for Proposal

CSD seeks to identify a qualified home inspection Contractor to perform quality assurance field inspections of single-family homes, including mobile homes, and small and large multi-family apartment buildings weatherized by CSD's contracted network of LSPs. This Contractor will help to ensure that services provided are in conformance with applicable DOE WAP, BIL DOE WAP and LIHEAP federal, state, and local laws, regulations, and local building codes as required to meet program requirements and objectives. The Scope of Work described in Section 2 includes more detail on the type of inspection services, training, data collection, and reporting required of the Proposer. In addition, any current or future Contractor (or affiliates) awarded the Energy Weatherization Quality Assurance Inspection contract will be deemed ineligible to submit bids or proposals for CSD's Training and Technical Assistance (T&TA) contract, as doing so may create a conflict of interest.

It is expected that the successful Proposer will have knowledge and experience conducting weatherization inspections, energy retrofit inspections, and/or residential home inspections in compliance with local, state, and federal building codes and program requirements. It is also expected that the successful Proposer will be willing to learn the state and federal standards, policies and applicable laws, and have the ability to incorporate revised and new standards into inspections and reviews they conduct. CSD will provide training up to 156 hours per Inspector (dependent on the Proposer's prior experience conducting weatherization, energy retrofit inspections, or home inspections) to staff of the successful Proposer to meet stringent state and federal program and documentation requirements. If the Proposer has all required training as identified within Exhibit B, or existing training or certifications that have been approved by CSD to meet the training requirements, only additional training specific to new standards will be required and provided by CSD.

CSD will need approximately 5,691 weatherization inspections (not including file review-only inspections) throughout the state under three (3) separate programs including LIHEAP, DOE WAP, and BIL DOE WAP over the contract term. See Exhibit A for a listing of Local Weatherization Service Providers and their location. See Exhibit C for a listing of the estimated number of inspections needed statewide for each program within the contract term. The successful

Proposer shall provide inspection services to LSPs for the entire state and submit a proposal covering the entire state.

C. Term of Agreement and Maximum Amount

The anticipated term of the agreement(s) is from July 1, 2023, through June 30, 2026, contingent on budget approval from year-to-year. The anticipated maximum amount available for services under this procurement for the initial term is \$2,190,620.

2. SCOPE OF WORK

A. Training and Qualifications

- 1) Upon Contract award, the successful Proposer and CSD shall together review the experience of Proposer's staff assigned to this project to determine the level of training needed on CSD's Inspection Policies and Procedures, Technical Reference Manual (TRM), Energy Program Policies and Procedures, and all other field-related policies, prior to commencing inspections. See Exhibit B, Training and Preparation of Inspector Candidates, for listings and description of training courses.
 - a. The successful Proposer and CSD will collaborate on the course of necessary training for the Proposer's assigned staff. CSD shall make the final determination on levels of training to be required.
 - b. The Contractor shall require assigned staff to attend CSD-approved classes based on the course of training developed by CSD and as identified in Exhibit B.

For individuals that have not received any of the training as identified in Exhibit B, the total time investment for the training is estimated to be 276 hours. Additional in-field training by CSD's Quality Assurance Inspection staff will be required and is expected to average three weeks depending on experience evaluation of each candidate by CSD's Quality Assurance Inspector. These monitored field inspections are not included in the 276 hours of allotted training time and will be part of standard inspections and re-inspections.

- c. All Contractor inspection staff shall be required to be certified as a Building Performance Institute (BPI) Home Energy Professional (HEP) Energy Auditor (EA) with a QCI add-on for the duration of the contract.

The following DOE link describes the National Renewable Energy Laboratory (NREL) Job Task Analysis for the Single-Family Quality Control Inspector and HEP Energy Auditor with QCI add-on:

<http://energy.gov/eere/wipo/guidelines-home-energy-professionals-accredited-training#ita>

- d. Additional training may be required during the term of the agreement as standards are updated and new courses and certifications become available.
- e. The full cost of Contractor staff participation at CSD-approved training centers, field training, and additional training shall be reimbursed on an hourly basis. The tuition for core courses and new courses, and the consultant costs for field training will be paid by CSD. In the event additional staff are needed to meet inspection requirements due to an unforeseen increase in unit production numbers, CSD will provide and pay for the same level of training and reimbursement as outlined above for newly-hired staff.

During the contract term, if inspection staff who have been provided CSD-paid training are terminated by the Contractor, it is the responsibility of the Contractor to pay for the required training of newly-employed inspection staff needed to meet contractual inspection goals, unless pre-approved by CSD. While the new employee is being trained the Contractor will be required to maintain the same level of service described in the contract.

- 2) After training has been completed, the Contractor shall ensure that inspection staff are qualified to provide services as required by CSD under this agreement. Staff shall be knowledgeable in and have access to CSD technical and programmatic manuals and policies including, but not limited to the following:
 - a. CSD Technical Reference Manual (TRM);
 - b. CSD Energy Crisis Intervention Program (ECIP) Policies and Procedures;
 - c. CSD Weatherization Inspection Policies and Procedures;
 - d. Current California Code of Regulations Title 24 requirements including but not limited to: California Residential Building Code, California Plumbing Code, California Mechanical Code, and California Building Energy Efficiency Standards for Residential and Non-Residential Buildings, and applicable to CSD programs.
 - e. Current CSD contracts for:
 - i. Low Income Home Energy Assistance Program (LIHEAP);

- ii. Department of Energy Weatherization Assistance Program (DOE WAP); and
- iii. Bipartisan Infrastructure Law Department of Energy Weatherization Assistance Program (BIL DOE WAP).

B. Inspections

1) Dwelling Inspections

CSD shall provide the Contractor with the number of units to be inspected based on work completed by LSPs. A minimum of 5 percent and up to 25 percent of all units weatherized by the LSPs shall be inspected. The Contractor shall inspect the designated number of weatherized dwellings in accordance with CSD program requirements. Exhibit C contains an estimation of the number of inspections, enhanced inspections, Residential Energy Model (REM)/Audit/Quality Assurance / Quality Control (QAQC) Inspections, file review only, and re-inspections needed for each contract during the term of agreement. Inspections shall take place in specific areas of the state where weatherization services have been performed and within approximately 90 days of completion of weatherized units by LSPs.

The inspections shall include assessments of work performed and program compliance for the following areas:

- a. Dwelling assessments and post-weatherization inspections;
- b. Application of DOE WAP and LIHEAP policies;
- c. Lead Safe Weatherization;
- d. Environmental Testing;
- e. Duct Blaster and Blower Door testing;
- f. Combustion Appliance Safety testing;
- g. HERS Rater testing;
- h. Billing irregularities of work performed as documented in client files;
- i. Identification of additional training needed for weatherization staff;
- j. Identification of trends toward excessive deficiencies or critical health and safety issues; and

- j. Installation, workmanship, and feasibility of weatherization measures for DOE WAP and LIHEAP including but not limited to the measures listed in Exhibit E and F.

2) **Enhanced Dwelling Inspections**

- a. The Contractor shall conduct enhanced inspections for a minimum of 10 percent of the subset of inspected units selected under LIHEAP and 100 percent of units selected under DOE WAP, or as determined by CSD. The enhanced inspections will be used to evaluate each LSP's ability to perform diagnostic and Combustion Appliance Safety (CO) testing.

Enhanced inspections shall include the following diagnostic tests when testing is performed by the LSP as part of weatherization installation services:

- i. Combustion Appliance Safety diagnostics (CO test);
 - ii. Whole house pressure diagnostics (Blower Door Test);
 - iii. Duct leakage pressure diagnostics (Duct Blaster Test); and
 - iv. Mechanical Ventilation cubic feet per minute (CFM) verification (Pressure Fan Test).
- b. CSD retains the right to adjust the number of inspections required of a LSP if excessive deficiencies are identified, or if other data trends necessitate additional oversight. CSD will collaborate with the Contractor to identify the number of initial inspections.
 - c. When scheduling inspections, the Contractor shall provide notice of the intended inspection to the LSP at least 30 calendar days in advance of the inspection(s). Once scheduled, the Contractor shall provide written confirmation of the inspection visit to the LSP and CSD. All units shall be randomly selected by CSD, or its designee (LSP) for inspection. For the purposes of this agreement, the Contractor is not responsible for selection of units to be inspected, however, the Contractor shall be responsible for determining whether the units selected for inspection are in compliance with CSD quality assurance inspection requirements during the file review process.
 - d. The Contractor shall conduct a client file review and evaluation at LSP offices prior to visiting homes for inspection. The Contractor shall review the supporting weatherization documents in the client files to document the LSP's compliance with program requirements.

- e. The Contractor shall conduct a review of the REM/Design Energy Audit using the REM/Design Energy Audit QA/QC checklist when assigned by the CSD Quality Assurance Unit in accordance with Exhibit D, REM/Design Energy Audit QA/QC checklist, and REM/Design Energy Audit QA/QC checklist instructions. The reviews are conducted in order to evaluate the LSP's ability to assess a dwelling using the REM/Design energy audit tool. The Contractor shall confirm with the LSP that REM QA/QC jobs have been scheduled for inspection at least one week prior to the inspection visit.
- f. The Contractor shall conduct work-in-progress monitoring inspections of units as assigned by CSD. Work-in-progress monitoring inspections are conducted to evaluate the LSP's ability to assess for and install feasible weatherization measures and to adhere to CSD's standards and procedures for weatherization installation.
- g. The Contractor shall check the calibration of all CO Analyzer equipment utilized by the LSP during the field visit to ensure equipment is properly calibrated in accordance with manufacturer standards.
- h. Although LSPs typically provides Blower Door and Duct Testing Equipment, and Combustion Safety Testing Equipment, the Contractor shall be equipped to provide the necessary equipment including, but not limited to:
 - Transportation necessary to perform LSP on-site reviews, dwelling inspections, re-inspections, and work-in-progress inspections.
 - Approved Blower Door Testing Equipment.
 - Approved Combustion Safety Testing Equipment.
 - Approved Duct Testing Equipment.
 - Calculator.
 - Clip Board.
 - Current CSD TRM Documents.
 - Digital Camera.
 - Drop Cloth(s).
 - Dust Mask, N95, or other PPE as required by Cal OSHA and CDC guidance.
 - Flashlight.
 - Gloves.
 - Hard Hat.
 - Ladders.
 - Name Badge with Company Information.
 - Personal CO monitor.

- Ruler/Tape Measures.
- Screwdrivers.
- Tablet Computer.
- Utility Knife and Blades.

3) Re-inspections

CSD requires its LSPs to immediately address, remove, or contain any hazardous conditions discovered as a result of weatherization installation services, within 18 hours of discovery. When hazardous conditions are noted by the Contractor during an initial dwelling inspection and where the LSP's staff is present, it is anticipated that the condition can often be resolved by the LSP's staff and re-inspected by the Contractor on the spot, or within the scheduled inspection visit. All hazardous conditions identified must be completely eliminated within five (5) working days. At the discretion of CSD, the Contractor shall perform re-inspections for 100 percent of all hazardous corrections by the end of the inspection visit if hazardous corrections cannot be made during the inspection of the unit to ensure that the hazardous condition is no longer present. In some cases, also at the discretion of CSD, the LSPs may provide documentation including photographs and other forms of documentation to confirm the hazardous condition has been resolved. The Contractor shall notify CSD that the LSP has remedied the hazardous condition. Unresolved hazardous condition inspections requiring a second visit will be conducted at the re-inspection rate.

In some situations, CSD may request, and the Contractor shall perform, re-inspections of non-hazardous corrections that are more serious in nature or when a significant number of deficiencies by a particular LSP have been identified. These re-inspections are typically scheduled within 30 to 120 days of the initial inspection visit. These non-hazardous re-inspections will be conducted at the regular initial inspection rate for inspections and may also include Enhanced inspections and work-in-progress inspections.

4) File Review Only Inspections

At the discretion of CSD, the Contractor shall perform a file review of weatherized dwellings that have been scheduled for inspection by the LSP but, due to client cancellation or other extenuating circumstances beyond the control of the Contractor, were unable to be inspected during the visit.

5) Calibration Records

The Contractor shall review and track each LSP's CO Analyzer and manometer calibration logs to determine compliance with CSD's provider contract standards.

6) **Exit Interviews**

Upon completion of the inspections and re-inspections, the Contractor shall conduct an exit interview with each LSP to review any noted workmanship issues, areas of strength and weakness associated with workmanship/quality of installation and recommendations for improvement. Contractor shall also communicate any training recommendations and referrals as part of the exit interview. The Contractor shall document a summary of findings, corrections, and training referrals on required CSD forms. The current Exit Interview format is included in Exhibit D.

7) **DOE WAP – Certified Quality Control Post-Inspection Services**

Contractor may be asked to perform quality control inspections at designated LSPs for weatherized households where there is no certified inspector for DOE inspection purposes. CSD or LSPs may also utilize other approved quality control inspectors within the State to assist in performing DOE quality control post-inspections.

DOE quality control inspections conducted on behalf of the LSPs are not included in the services and inspections to be performed on behalf of CSD in this agreement and shall not impede on the Contractor's obligations under this Agreement.

In addition, to avoid potential conflicts of interest, any QCI Inspections performed by the Contractor's inspectors, on behalf of LSPs, shall not later be inspected by that same QCI inspector as part of CSD's 3rd party quality assurance program.

Quality control post-inspection services provided for purposes of this section are subject to the following requirements.

- a. Contractor shall perform post-weatherization inspections on dwellings receiving services under DOE WAP as contracted by individual LSPs.
- b. The LSP requesting services shall be responsible for coordination of the inspection scheduling, confirming number of units to be inspected, and re-inspections.
- c. Post-weatherization inspections shall be conducted for the purpose of assessing the quality and completeness of performed weatherization services and compliance with CSD weatherization guidelines. The post-inspections shall meet the following standards:

- i. Review the Dwelling Assessment and Weatherization Building Assessment and Job Checklist (CSD 540) to ensure that all feasible weatherization measures identified during the assessment were installed.

In the event weatherization crews identified and performed additional weatherization measure installations not disclosed during the dwelling assessment, then the Inspector shall ensure that these measures conform to CSD TRM guidelines and are notated on the Weatherization Building Assessment and Job Checklist.

- ii. Verify that all measures were completely installed in accordance with said terms and conditions of the CSD LSP's Agreement. In addition, installed measures shall be reviewed to determine the absence of any feasible Mandatory Measure not installed or the installation of a measure (non-feasible measure) that may not be in compliance with said standards and the terms and conditions of the CSD LSP's Agreement and/or any health and safety hazards.
- iii. Verification and re-testing of blower door and duct leakage testing, and Mechanical Ventilation CFM;
- iv. Verification that required Combustion Appliance Safety (CAS) testing of eligible combustion appliances was performed and inspection of combustion appliances to verify the safe operating condition of combustion appliances within the dwelling residence; and
- v. Inspection of the unit dwelling to ensure that all identified health and safety hazards, whether pre-existing or resulting from the performance of weatherization services, have been successfully remedied.
- vi. The Quality Assurance Inspector shall certify the performance of Post-Weatherization Inspections of dwelling units by completing and signing Contractor Post-Weatherization Inspection Report (CSD 611).
- vii. CSD may identify additional protocols to be utilized by the Contractor to ensure compliance with CSD's Energy Programs.
- viii. If Contractor is engaged for QCI inspections by an LSP, to avoid potential conflict of interest or appearances of such, Contractor may not utilize the same inspector at this dwelling

weatherized by said LSP when performing a 3rd Party QCI inspection on behalf of CSD.

- d. Contractor shall be responsible for ensuring that the performance issues that were identified during the post-inspection process are addressed by the LSP at the time of the inspection visit if possible or upon the re-inspection that may be performed at a later date. Corrections, when completed, shall be re-inspected, and documented on approved CSD Post-Weatherization inspection Report (CSD 611).
- e. Contractor shall ensure that Post-Weatherization Inspections are performed by trained staff successfully completing all required training and certifications as specified in Exhibit B and meet DOE Quality Control Inspector requirements.
- f. Reimbursement of such services shall be the responsibility of the CSD LSPs. Costs for such services shall be coordinated directly with LSPs and shall not exceed CSD's approved reimbursement rate for post-inspection services.

8) Monthly Report

The Contractor shall prepare and submit a monthly report to CSD utilizing standardized formatting approved by CSD. The report shall include a summary of:

- a. The number of inspections originally planned for the reporting month.
- b. The number of inspections and re-inspections completed for the reporting month.
- c. The number of inspections requiring corrections by LSPs that could not be completed by the end of the inspection visit.
- d. The number of inspections with identified hazardous corrections for the reporting month.
- e. The number of inspections completed for each state and federal program funding weatherization (DOE WAP and LIHEAP).
- f. Barriers to meeting inspection goals.
- g. The status of all completed and outstanding corrections from previous reporting periods.

- h. Electronic transfer of all data included in Weatherization Inspection Reports (WIR) (format is in Exhibit D).
- i. Monthly Executive Management Report, which identifies the inspection pass rate by LSP, major issues identified during the last three (3) inspection visits, and training referrals.
- j. Monthly Master Report, which identifies inspection quantities by housing type, measure quantities, measure fail rates, paper fail rates, and inspection failures by agency.

The monthly report shall be submitted to CSD on Contractor's letterhead on or before the fifth calendar day following the reporting month irrespective of the level of activity. In the event the report due date falls on a weekend or holiday, the due date shall be the next business day immediately following the scheduled due date. Monthly payments will be approved upon acceptance of both an approved invoice and a completed monthly report. Monthly billings shall clearly identify the number of inspections completed under each program, including DOE WAP, BIL DOE WAP, and LIHEAP. The format for Monthly Reporting is included in Exhibit D.

9) Quarterly Trends Report

A Quarterly Trends Report shall be submitted to CSD on the Contractor's letterhead on or before the 15th calendar day following the last reporting month for each quarter. The Quarterly Trends Report will provide a summary of statewide inspection trends.

10) Close-out Report

The Contractor shall submit to CSD, within 30 calendar days of the end of the Contract Period, a Close-out Report, evaluating the Contractor's perspective on the entire project. Final payment under the Contract is contingent on the Contractor's submission of this report.

11) Other Reporting As Needed

In order to identify significant issues during the inspection of units for all energy contracts including LIHEAP and DOE WAP, the Contractor will be required to report inspection findings that have identified hazardous conditions, and/or major policy or program failures. This reporting shall occur through immediate verbal communication to CSD Quality Assurance Inspection Unit Management, and followed up through electronic communication within 24 to 48 hours and must include all associated support documents regarding the identified findings.

3. Minimum Qualifications for Proposers

The description of the Proposer's firm and résumés of Proposer's key staff shall demonstrate the possession of weatherization, energy retrofit, and/or home inspection experience, capacities, and abilities. To qualify for consideration, proposers must meet the following criteria:

- A. The Proposer's firm shall have a minimum of five years of experience performing quality-control inspections and reviews of residential housing receiving improvement renovations or equivalent types of residential-based construction activity, including but not limited to: repairs, remodeling alterations, addition and/or installation of energy efficiency measures, HERS testing.
- B. The Proposer's firm shall have a minimum of five years of experience demonstrating the expertise and capacity in the development and direct management of quality-assurance programs related to residential housing improvement renovation, residential energy efficiency and renewable energy, or equivalent residential-based construction activity.
- C. The Proposer's firm shall certify knowledge in the application of current state and local building codes, including the standards of Title 24 of the California Code of Regulations.
- D. The Proposer's firm must be in good standing and currently qualified to conduct business in California. CSD will contact the Secretary of State to determine the current standing of a proposing corporation. If the bidding firm is not incorporated, the firm shall submit a copy of its local business license.
- E. The Proposer shall certify that the firm has the required computer skills and proficiency with Microsoft Office Suite or equivalent software applications to facilitate the aggregation of dwelling inspection data, the documentation of contractor evaluations, the reporting of data to CSD weatherization staff and for the purpose of providing recommendations to LSP staff and/or CSD as applicable.

4. Proposal Requirements and Information

A. Proposal Submission Requirements

- 1) **Background.** Tell us about your firm. Be sure to include, in a short narrative:
 - a. How long the firm has been in business.
 - b. The specific types of inspections that your firm has experience in performing. Include any experience inspecting or performing weatherization services or "green energy" projects and code compliance inspections for single family and multi-family. Also

provide specific experience conducting inspections for residential solar photovoltaic and solar thermal projects.

- c. Any experience performing services for state or local government or government-funded projects. If the firm has experience, what were the reporting requirements for these projects?
- d. Any experience providing services to low-income communities and/or non-profit organizations.
- e. Explain any current or prior formal relationships that your firm has or has had with any of the LSPs listed in Exhibit A.
- f. What kind of equipment does your firm currently own that will be relevant to and available for this project? What equipment will need to be purchased for the project?
- g. List any relational database programs your firm currently uses and explain how you use database programming for inspections, evaluations, reporting, or other work performed. Provide a sample report based on relational database technology.
- h. The firm's current primary service area (be specific by county, city, or region). How often does the firm service areas outside the primary service area?
- i. Explain how your firm is currently organized and structured. Provide a current organization chart.

2) Staffing. Tell us about your staffing. Be sure to include the following in a short summary and in the resumes supplied for current staff that will be working on this project:

- a. Years of housing inspection and/or quality control evaluation experience for each staff member to be assigned to the project; include any experience specifically focused on weatherization or "green energy" evaluations and code compliance inspections.
- b. Professional education, licenses or certifications in the housing inspection and evaluation field or related fields. This could include engineering or architectural degrees, contractor licenses, and exam-based certifications from professional associations such as the California Real Estate Inspection Association, the National Association of Home Inspectors, the American Society of Home Inspectors, and/or the Building Performance Institute.
- c. Indicate if you plan to hire staff for this project and the level of additional hiring. Whether or not you expect to hire additional staff,

explain how you would recruit qualified and experienced staff, and prepare and submit a formal job description that you would use in hiring, focused on this project.

- d. Provide resumes of all current staff who will be involved in this project that fully cover their credentials and experience. If assigned staff has already received training in CSD-required courses and training as identified in Exhibit B, provide the specific training received including certifications, date of training, and expiration date (if applicable). Provide a copy of certifications if available.
- e. Based on the course list included in Exhibit B, estimate the number of training hours each currently available staff person would need to become a knowledgeable inspector for this project. Be sure the estimate is supported by details in the staff resumes.

3) Work Plan. Prepare and submit a Work Plan, in ten pages or less, that details your approach to this project. Include the following information:

- a. Explain your plan for achieving full state coverage. Include how you would restructure your firm to complete the project and how you would find qualified staff for the project; include any plans for subcontracting or alliance building with other qualified firms. Explain how you would service California's rural and remote locations. Explain how you would direct staff and equipment resources to make the most efficient use of time and distance over a large geographic area. Explain how you would monitor and evaluate the inspection processes to assure quality work by project inspectors.
- b. Explain how you would utilize information technology resources in which you have experience to maximize coverage, assure timely and detailed reporting, and foster communication with LSPs and CSD.
- c. Explain how you would use tasks in the scope of work, such as LSP client file reviews, work-in-progress inspections and re-inspections to assure the maximum learning potential for LSP management and staff.
- d. As part of the Work Plan, prepare and submit a ramp-up schedule, including your plan to get staff trained through CSD-sponsored weatherization inspection training and into the field performing inspections.
- e. As part of the Work Plan, prepare and submit your plan for achieving inspection goals, as well as your capabilities of inspecting multiple statewide locations each week for multiple units.

B. Cost Detail Format and Requirements

The Contractor shall be reimbursed on a unit cost basis for standard inspections, enhanced inspections, REM/Energy Audit QA/QC reviews, re-inspections, and file review inspections only, and an hourly rate basis for CSD-authorized training and CSD-sponsored meetings (as requested by CSD). The unit cost shall include all travel costs to and from inspection sites and LSP sites, the cost of all necessary equipment and company overhead, and all other costs associated with contract service delivery including reporting requirements. The hourly cost for authorized training and CSD-sponsored meetings shall be paid on a basis of actual time in training, or meetings, include time spent traveling, travel costs to and from the training or meetings, and any company overhead related to the training or state-sponsored meetings. CSD will pay for the tuition costs and consultant training costs directly to CSD's training provider. Please submit five (5) Unit Costs for Item A. within Attachment 4. The first unit cost is based on 4,260 Standard Inspections, the second unit cost is based on 1,296 Enhanced Inspections, the third unit cost is based on 30 Re-Inspections conducted during the same inspection visit, the fourth unit cost is based on 105 REM/Design Energy Audit QA/QC reviews, and the fifth unit cost is based on 75 File Review Only Inspections during the Contract term. See Exhibit C for a detailed breakdown of estimated inspection units for this project. The Proposer shall submit inspection unit costs, a training unit cost, a CSD-sponsored meeting cost, and a budget narrative as follows:

- 1) The Unit Cost to include primary Dwelling Inspections, including Standard Inspections, and Work-In-Progress Inspections described in the Scope of Work shall include the file review, the calibration log review, physical on-site dwelling inspections, inspection report documentation, and exit interviews shall be reimbursed at the same rate for Standard Dwelling Inspections.

The Unit Cost for Enhanced Inspections described in the Scope of work shall include the file review, the calibration log review, physical on-site inspections, re-testing of all diagnostic testing, inspection report documentation, and exit interviews.

The Unit Cost for Re-Inspections described in the Scope of Work which include re-inspection of primary dwellings shall include re-inspection of primary dwellings identified for re-testing during the same inspection visit.

The Unit Cost for a REM/Energy Audit QA/QC review described in the Scope of Work shall include the electronic energy audit report review, file review, Enterprise Combined Output Reporting Engine (eCORE) full file review, associated energy audit documentation, inspection report documentation, re-testing of all diagnostic testing, on-site inspection, and exit interviews.

The Unit Cost for File Review Only inspections shall include the file review, inspection report documentation, and exit interviews.

- 2) The Hourly Training Cost for each staff person attending CSD-authorized training and CSD-sponsored meetings shall be submitted on Item 2B within Attachment 4.
- 3) A Budget Narrative explaining how the Proposer developed and determined the Unit Cost rates hourly training rate, and hourly CSD-sponsored meeting rate shall be submitted on Item C, of Attachment 4. The narrative detail shall explain and justify the above inspection unit and training hour unit cost figures. Provide enough detail to explain:
 - a. The major cost categories considered in reaching the unit costs for inspections, training, and CSD-sponsored meetings.
 - b. An explanation of the costs based on either actual experience of your organization under a specific timeframe or an estimate of costs with the sources of information and assumptions used in the estimate.
 - c. Any cost considerations included in your unit cost that are unique to your approach to this project.
- 4) The Proposer’s Cost Detail Proposal shall be submitted using the form in Attachment 4.

C. Key Action Dates

It is recognized that time is of the essence. All Proposers are hereby advised of the following schedule and will be expected to adhere to the required dates and times.

RFP Available to Prospective Proposers	April 10, 2023
Written Question Submittal Deadline <i>(Please email questions to CSD’s Procurement Unit at BNCS@csd.ca.gov by the deadline)</i>	April 14, 2023 2:00 p.m.
Response to Questions Deadline	April 19, 2023 2:00 p.m.
Deadline for Proposers’ Intent to Submit Proposal Request to BNCS@csd.ca.gov	April 23, 2023 5:00 p.m.
Final Date for Proposal Submission – 5:00 p.m.	April 28, 2023 5:00 p.m.
Initial Proposal Evaluations Completed	May 12, 2023
Potential Interview of Finalists	TBD
Notice of Intent to Award Posted by CSD	May 26, 2023
Last Day to Submit Intent to Protest the Award	June 5, 2023
Last Day to Submit detailed Protest statement	June 12, 2023

Contract to be Awarded	June 16, 2023
Projected Contract Term (Upon approval by the Department of General Services)	July 1, 2023 – June 30, 2026

D. Submission of Proposal

- 1) Proposals should provide straightforward and concise descriptions of the Proposer's ability to satisfy the requirements of this RFP. The Proposal must be complete and accurate. Omissions, inaccuracies, or misstatements will be sufficient cause for rejection of the Proposal.
- 2) Failure to deliver a response by the date and time listed in the Key Action Dates will be cause for rejection of the Proposal. It is the responsibility of the Proposer to ensure documents are submitted on time. CSD is not responsible for errors or delays.
- 3) CSD requires Proposers to provide solicitation responses electronically via a secure drop box. All Proposers shall send an email to BNCS@csd.ca.gov at least five business days prior to the proposal submission due date, stating their intention to submit a Proposal prior to the Final Date for Proposal Submission. The subject line of this email must read:
 - a. **Response to 2022-RFP-97: Quality Assurance Inspections**
- 4) Upon receipt, CSD will issue each Proposer a private link and instructions to submit all Proposal documents in PDF form (unless instructed otherwise) and gain access to the bidder's library. A complete Proposal must be submitted by the date and time indicated in the Key Action Dates. Failure to submit a timely request for a private link will disqualify submission.
- 5) Proposals and attachments must be submitted in a searchable format and must be named the following:
 - a. **2022-RFP-97 Proposal** (Company Name) (Document name, number, or other specific document ID).
- 6) All Proposal documents must have an electronic signature signed by a person who is authorized to bind the proposing firm.
- 7) Proposals must be provided electronically in not less than 12-point font and have a minimum of one-inch margins. The narrative portion of the proposal shall not exceed a total of 40 pages. Attachments, résumés of key staff, certifications and other required and optional documents are not included in the 40-page limitation.
- 8) If the Proposal is made under a fictitious name or business title, the actual legal name of Proposer must be provided.

- 9) All Proposals shall include the documents identified in Attachment 1, *Required Attachment Checklist*. Proposals not including the proper required attachments shall be deemed nonresponsive. A nonresponsive Proposal is one that does not meet the basic Proposal requirements.
- 10) Proposals must be submitted for the performance of all the services described herein. Any deviation from the requirements shall be deemed nonresponsive.
- 11) A Proposal may be rejected if it is conditional or incomplete, or if it contains any alterations of form or other irregularities of any kind. The State may reject any or all Proposals and may waive any immaterial deviation in a proposal at its discretion. The State's waiver of an immaterial defect shall in no way modify the RFP document or excuse the Proposer from full compliance with all requirements if awarded the agreement.
- 12) Costs incurred for developing Proposals and in anticipation of award of the agreement are entirely the responsibility of the Proposer and shall not be charged to the State of California.
- 13) An individual who is authorized to legally bind the proposing firm shall sign Attachment 2, Proposal/Proposer Certification Sheet. The signature must indicate the title or position that the individual holds in the firm. An unsigned Proposal may be rejected.
- 14) A Proposer may modify a Proposal after its submission by withdrawing its original Proposal and resubmitting a new Proposal prior to the submission deadline as set forth in the Key Actions Dates. Proposal modifications offered in any other manner, oral or written, will not be considered.
- 15) A Proposer may withdraw its Proposal by submitting a written withdrawal request to the State, signed by the Proposer or an agent authorized in accordance with above. A Proposer may thereafter submit a new Proposal prior to the Proposal submission deadline. Proposals may not be withdrawn without cause subsequent to the Proposal submission deadline.
- 16) As the awarding department, CSD may modify the RFP prior to the submission date of Proposals by the issuance of an addendum to the original posting of the RFP. Notice shall be given to all known prospective Proposers.
- 17) CSD reserves the right to reject all Proposals for the entire procurement or for particular project tasks. CSD is not required to award an agreement pursuant to this RFP.

- 18) Before submitting a response to this solicitation, Proposers should review their responses, correct all errors, and confirm compliance with the RFP requirements.
- 19) Where applicable, Proposer should carefully review the Scope of Work, the locations of LSPs listed in Exhibit A, Training Requirements listed in Exhibit B, State-wide inspection estimates provided in Exhibit C, and all other work and specifications contained in this RFP. No additions or increases to the agreement amount will be made due to a lack of careful examination of work sites and specifications.
- 20) More than one Proposal from an individual, firm, partnership, corporation, or association under the same or different names will not be considered.
- 21) The State does not accept alternate contract language from a prospective contractor. A Proposal with such language will be considered a counterproposal and will be rejected. The State's General Terms and Conditions (GTC 04/2017), is not negotiable.
- 22) No oral understanding or agreement shall be binding on either party.
- 23) The bidder's library contains various documents, forms, and reports for reference as identified within this RFP. Proposer must request access to the bidder's library to view documents by contacting CSD at BNCS@csd.ca.gov. These documents, forms, and reports in the bidder's library include:
 - a. CSD Technical Reference Manual;
 - b. CSD ECIP Policies and Procedures;
 - c. CSD Weatherization Inspection Policies and Procedures;
 - d. LIHEAP and DOE WAP model contracts;
 - e. Bidder Declaration;
 - f. Payee Data Record. STD. 204;
 - g. Work in Progress Report (WIPR) Form;
 - h. Weatherization Inspection Report (WIR) Form;
 - i. REM/Design Audit QA/QC Checklist;
 - j. REM/Design Audit QA/QC Checklist Instructions;
 - k. Department of Energy (DOE) Priority List Form;
 - l. Comprehensive Inspection Report (CIR) Form;
 - m. Monthly Issues Report;
 - n. Year to Date Report;
 - o. Units by Funding Source Report;
 - p. Inspection Correction Transmittal Report;
 - q. Inspection Quantity by Housing Type Report;
 - r. Inspection Measure quantities Report;
 - s. Agency Measure Fail Rates Report;
 - t. Agency Paper Fails Report;
 - u. Agency Inspection Failures Report;

- v. Exhibit E, 2023 LIHEAP Measure Matrix;
- w. Exhibit F, 2022 DOE WAP Measure Matrix.

- 24) On March 4, 2022, Governor Newsom issued [Executive Order N-6-22](#) (the EO) regarding Economic Sanctions against Russia and Russian entities and individuals. “Economic Sanctions” refers to sanctions imposed by the U.S. government in response to Russia’s actions in Ukraine, as well as any sanctions imposed under state law. By submitting a bid or proposal, Contractor represents that it is not a target of Economic Sanctions. Should the State determine Contractor is a target of Economic Sanctions or is conducting prohibited transactions with sanctioned individuals or entities, that shall be grounds for rejection of the Contractor’s bid/proposal any time prior to contract execution, or, if determined after contract execution, shall be grounds for termination by the state.

E. Evaluation Process

The selection method for this procurement is a Secondary Request for Proposal (RFP). This method is being used because the quality of expertise, approaches, and methods may differ significantly from one Proposer to another.

Phase I

At the time of Proposal opening, each Proposal will be checked for the inclusion of required information in conformance with the submission requirements of this RFP. Each Proposal will also be reviewed to determine if the Proposer meets the minimum experience requirements. Proposals that are determined to be responsive will continue on to Phase II.

Phase II

Each responsive Proposal will be scored by a panel of reviewers, first individually and then collaboratively. Reviewers will be CSD employees familiar with CSD’s weatherization programs and the goals and objectives of federal agencies that fund weatherization. Reviewers will review each Proposal and assign an initial point value based on the scoring criteria listed below. After discussions among the evaluation panel, each panel member will do an initial scoring. The initial total scores will be added, then divided by the number of panelists to determine an average score. Proposers who score 75 percent or more of the available points (158 out of 210 points) will move on to Phase III, the Interview Phase, if applicable.

Phase III

If additional clarifying information is needed, CSD will invite no more than two principal staff persons from each top scoring firm to an interview at CSD’s headquarters in Sacramento. One of the principals should be the head of the proposing firm or the designated project manager. The interview panel will

consist of members of the scoring panel and may be augmented by CSD management staff. The Interview Phase will consist of a brief presentation by the proposing firm of their strengths, based on the written proposal, followed by questions from the interview panel probing for better understanding of the proposal and its strengths and weaknesses. This will be followed by several structured questions, to be asked of all interviewed firms. The questions are to determine the potential of each firm to manage a high quality, statewide, cost-effective project. If, at this point, the panel determines that a proposing firm has grossly misrepresented the experience of the firm or its staff, the firm may be disqualified.

Final Scoring

If CSD determines that the Phase III interviews are not necessary, the award will be based on the Phase II panel scoring. Any available preference points for vendors who qualify as a Certified Small Business, the Target Area Contract Preference Act Program (TACPA), or a Disabled Veteran Business Enterprise (DVBE) will be added to the score. The firm with the highest score will be recommended for the award.

If CSD determines that the Phase III interview is necessary, the initial panel may award up to 20 additional points based on responses to the structured questions. Small Business incentives if applicable will be added to the score. The firm with the highest score will be recommended for the award.

The rating categories are on the following two pages:

PROPOSAL EVALUATION POINT SCORING CRITERIA

CATEGORY	SUBJECT AREA AND CRITERIA	MAXIMUM POINTS
4.A.	Capability of Organization (Background)	
1) a. through i.	In comparison to other Proposers, the length and scope of organization experience in providing home inspections, inspections of weatherization or “green energy” improvements, and inspections for code compliance, and the relevance of that experience in meeting project needs.	15
	Scope of experience dealing with government or government-funded housing programs and with low-income communities, and the relevance of that experience in meeting project needs.	10
	The organization’s ability to provide the necessary equipment for the project.	5
	Scope of experience with relational database technology and the relevance of that experience in meeting project needs.	10
	The organization’s experience in serving a broad service area and the potential for expanding to state-wide coverage.	5
	The potential of the current organization structure to serve or expand to serve a statewide project.	5

Subtotal Category 1)50

4.A.	Capability of Staff	
2) a. through e.	In comparison to other Proposers, the scope of current staff experience in performing home inspections, inspections of weatherization or “green energy” improvements, and inspections for code compliance, and the relevance of those experiences in meeting project needs.	10
	The professional education, licenses and certifications held by current staff and the relevance of the credentials to meet project needs.	10
	The level of hiring necessary to provide adequate project staffing. The ability to recruit, hire and train additional staff as reflected in the recruitment narrative and formal job description.	5
	The estimated levels of training needed. The Proposal estimates of training are supported by the experience and credential information in submitted resumes.	5

Subtotal Category 2)..... 30

4.A.	Work Plan	
3) a.	The comparative strength of approach to achieving state-wide inspection goals, including the ability to serve remote locations. Demonstration that the firm will deliver services in a timely, productive, high quality and cost-effective manner.	20
3) b.	The comparative strength of approach in using information technology to maximize project reporting, communications efficiency and effectiveness.	10
3) c.	The comparative strength of approach in using project tasks and activities to improve the skills and abilities of the Local Weatherization Service Providers and their staff.	10
3) d.	The comparative strength and adequacy of getting the quality assurance project up to full capacity as reflected in the ramp-up schedule and how it demonstrates the ability to get staff fully trained.	10
3) e.	The comparative strength in achieving inspection goals and capabilities of inspecting multiple statewide locations weekly for multiple units.	10

Subtotal Category 3)..... 60

4.B.	Cost Detail	
Cost Detail 1)	The relative proposed cost of the unit rate for Standard Inspections, Enhanced Inspections, REM/Energy Audit QA/QC reviews, Re-Inspections, and File Review Only Inspections. The Proposal with the lowest proposed unit inspection cost will be awarded the highest score.	40
Cost Detail 2)	The relative proposed cost of the hourly rate for CSD-sponsored weatherization inspection training and CSD-sponsored meetings.	20
Cost Detail 3)	The ability to demonstrate that the proposed unit costs will be fully adequate to cover the costs of the project, as reflected in how well those costs were determined through the Budget narrative.	10

Subtotal Cost Detail..... 70

Minimum Initial Points to proceed to the Phase III interview..... 158

Additional Points to be earned if there is a Phase III interview... 20

**TOTAL POSSIBLE POINTS BEFORE PREFERENCE..... 210
(230 with Phase III Interview)**

Certified Small Business Preference: A certified small business will have its total points increased by 5 percent of the total points awarded to the highest scored non-small business proposer.

Target Area Contract Preference Act (TACPA): Vendors who have provided proof of qualification for the TACPA Program will have the 60 points for Cost Detail Items 1) and 2) increased by 5 percent (No more than three (3) Points).

The Disabled Veteran Business Enterprise (DVBE) Incentive may result in the increase of a firm’s total points. The Incentive may be reached by the Proposer having certified DVBE status, or through the use of certified DVBE sub-contractors or suppliers of goods and services for this contract, who have been identified in Exhibit 3 of the Proposal. Application of DVBE Incentive will be based on the percentage of participation as specified below.

Confirmed DVBE Participation	Possible Points Calculation (210 total possible points)
5% and over	5% x 210 = 10.5 points
4% - 4.99% inclusive	4% x 210 = 8.4 points
3% - 3.99 % inclusive	3% x 210 = 6.3 points
2% - 2.99% inclusive	2% x 210 = 4.2 points
1% - 1.99% inclusive	1% x 210 = 2.1 points

Links to information on qualifying for these preference programs are contained in Item 5. Preference/Incentive Programs, on page 38.

F. Award and Protest

- 1) Notice of the proposed award shall be posted in a public place in the office of the Department of Community Services and Development, 2389 Gateway Oaks Drive, Sacramento, 95833 and on CSD's Internet site at www.csd.ca.gov for five working days prior to awarding the agreement.
- 2) Protests of the proposed award must demonstrate that the protesting Proposer would have been awarded the contract had CSD correctly applied the evaluation standard in the RFP, or if the department followed the evaluation and scoring methods in the RFP. If any Proposer, prior to the award of agreement, files a protest with CSD, the protest must include the solicitation number and the awarding agency's name. An intent to protest shall be e-mailed to CSD at BNCS@csd.ca.gov no later than June 5, 2023. The Agreement shall not be awarded until either the protest has been withdrawn or the CSD has decided the matter.
- 3) Within five working days after filing the intent to protest, the protesting Proposer shall file with CSD a detailed statement specifying the grounds for the protest by June 12, 2023. The written protest must be emailed to the CSD at BNCS@csd.ca.gov.

G. Disposition of Proposals

- 1) Upon proposal opening, all documents submitted in response to this RFP will become the property of the State of California, and they will be regarded as public records under the California Public Records Act (Government Code Section 7920.000 et seq.) and subject to review by the public.

H. Agreement Execution and Performance

- 1) The Contractor shall have current staff available for CSD-sponsored training at the starting date of the contract. Inspection services shall be available not later than 30 days of the starting date of the contract, or on the express date set by CSD and the Proposer, after all approvals have been obtained and the agreement is fully executed. Should the Proposer fail to commence work at the agreed-upon time, CSD reserves the right to terminate the agreement upon five days written notice to the Proposer. In addition, the Proposer shall be liable to the State for the difference between Proposer's Proposal price and the actual cost of performing work by the second lowest Proposer or by another contractor.

- 2) All performance under the agreement shall be completed on or before the termination date of the agreement.
- 3) The State does not accept alternate contract language from a prospective contractor. A proposal with such language will be considered a counterproposal and will be rejected. The State's General Terms and Conditions (GTC) are not negotiable.
- 4) No oral understanding or agreement shall be binding on either party.

5. **Preference / Incentive Programs**

Information about qualifying for State of California preference and DVBE incentive programs can be found at the web sites listed below:

- A. Small Business Preference –
<https://www.dgs.ca.gov/PD/Services/Page-Content/Procurement-Division-Services-List-Folder/Certify-or-Re-apply-as-Small-Business-Disabled-Veteran-Business-Enterprise>.
- B. Target Area Contract Preference Act (TACPA) –
<https://www.dgs.ca.gov/PD/Services/Page-Content/Procurement-Division-Services-List-Folder/Request-a-Target-Area-Contract-Preference>.
<http://www.pd.dgs.ca.gov/edip/lambra.htm>
- C. Disabled Veteran Business Enterprise (DVBE) requirement and incentive:

The Department elects to waive the DVBE Program Requirements, however the DVBE incentive still applies.

<https://www.dgs.ca.gov/PD/Services/Page-Content/Procurement-Division-Services-List-Folder/Certify-or-Re-apply-as-Small-Business-Disabled-Veteran-Business-Enterprise>.

6. **Statement of Economic Interests**

All Contractor staff providing services to CSD must complete the Statement of Economic Interests form. CSD will assess Contractor's key personnel assigned to provide services based on contractual duties and other factors that are required to complete the form.

The Statement of Economic Interests form can be reviewed at [Form 700 \(ca.gov\)](#).

7. Required Attachments

ATTACHMENT 1

REQUIRED ATTACHMENT CHECKLIST

A complete Proposal or Proposal package will consist of the items identified below. Complete this checklist to confirm the items in your proposal. Place a check mark or "X" next to each item that you are submitting to the State. For your proposal to be responsive, all required attachments must be returned. This checklist should be returned with your proposal package.

Narrative Portion of Proposal

<u>Attachment</u>	<u>Attachment Name/Description</u>
_____ Attachment 1	Required Attachment Checklist
_____ Attachment 2	Proposal/Proposer Certification Sheet
_____ Attachment 3	Bidder Declaration https://www.documents.dgs.ca.gov/DGS/FMC/GS/PD/GSPD05-105.pdf
_____ Attachment 4	Cost Proposal
_____ Attachment 5	Payee Data Record, STD. 204 https://www.dgs.ca.gov/PD/Forms
_____ Attachment 6	Contractor Certification Clauses (CCC 04/2017). The CCCs can be found on the Internet at https://www.dgs.ca.gov/OLS/Resources/Page-Content/Office-of-Legal-Services-Resources-List-Folder/Standard-Contract-Language . Page 1 must be signed and submitted prior to the award of the agreement, but it is not required if the Proposer has submitted this form to the awarding agency within the last three years.
_____ Attachment 7	Darfur Contracting Act
_____ Attachment 8	Proposer's Written Proposal and résumés of Key Personnel
_____ Attachment 9	California Civil Rights Law Attachment (Required for contracts > \$100,000)
_____ Attachment 10	Iran Contracting Act (Required for contracts > \$1,000,000)

- _____ Attachment 11 Most Recent Audited Financial Records
- _____ Attachment 12 Small Business Preference *If applicable -
<https://www.dgs.ca.gov/PD/Services/Page-Content/Procurement-Division-Services-List-Folder/Certify-or-Re-apply-as-Small-Business-Disabled-Veteran-Business-Enterprise>
- _____ Attachment 13 Target Area Target Area Contract Preference Act (TACPA) – <https://www.dgs.ca.gov/PD/Services/Page-Content/Procurement-Division-Services-List-Folder/Request-a-Target-Area-Contract-Preference>
- _____ Attachment 14 DVBE Incentive *If applicable –
<https://www.dgs.ca.gov/PD/Services/Page-Content/Procurement-Division-Services-List-Folder/Certify-or-Re-apply-as-Small-Business-Disabled-Veteran-Business-Enterprise>

ATTACHMENT 2

PROPOSAL/PROPOSER CERTIFICATION SHEET

This Proposal/Proposer Certification Sheet must be signed by a person authorized to contractually bind the proposing firm and submitted electronically to include required signatures. The proposal must be transmitted electronically in accordance with RFP instructions. Do not submit Section 4, Proposal Requirements, and Information, or any "Sample Agreement" pages at the end of this RFP.

- A. By signing this Certification Sheet, the Proposer certifies knowledge within the firm of the application of the building standards of Title 24 of the California Code of Regulations.
- B. By signing the Certification Sheet, the Proposer certifies knowledge of the State's standards for the Class B General Contractors License.
- C. By signing this Certification Sheet, the Proposer certifies that the firm has basic computer skills and proficiency with Microsoft Office Suite or its equivalent, including Professional software applications, i.e., Word, Excel, Email, Outlook, and Access or their equivalents.
- D. By signing this Certification Sheet, the Proposer certifies that it reviewed Executive Order N-6-22, certifies Proposer is not the subject of any economic sanctions, and agrees to comply with any requests to report information to CSD as set forth therein.
- E. The signature affixed hereon and dated certifies compliance with all the requirements of this proposal document. The signature below authorizes the verification of this certification.

An Incomplete or Unsigned Proposal/Proposer Certification Sheet May Be Cause for Rejection

1. Company Name	2. Telephone ()	2a. Fax Number ()
3. Address		
Indicate your organization type: 4. <input type="checkbox"/> Sole Proprietorship 5. <input type="checkbox"/> Partnership 6. <input type="checkbox"/> Corporation		
Indicate the applicable employer and/or corporation number: 7. Federal Employer ID No. (FEIN) 8. California Corporation No.		
9. Indicate applicable license and/or certification information:		
10. Proposer's Name (Print):	11. Title:	
12. Signature:	13. Date:	
14. Are you certified with the Department of General Services, Office of Small Business Certification and Resources (OSBCR) as: a. California Small Business Enterprise b. Disabled Veteran Business Enterprise Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, enter certification number: If yes, enter certification number:		
NOTE: A copy of your Certification is required to be included if either of the above items is checked "Y." Date application was submitted to OSBCR, if an application is		

Instructions for Proposal/Proposer Certification Sheet

Complete the numbered items on the Proposal/Proposer Certification Sheet by following the instructions below.

Item Numbers	Instructions
1, 2, 2a, 3	Must be completed. These items are self-explanatory.
4	Check if your firm is a sole proprietorship. A sole proprietorship is a form of business in which one person owns all the assets of the business in contrast to a partnership and corporation. The sole proprietor is solely liable for all the debts of the business.
5	Check if your firm is a partnership. A partnership is a voluntary agreement between two or more competent persons to place their money, effects, labor, and skill, or some or all of them, in lawful commerce or business, with the understanding that there shall be a proportional sharing of the profits and losses between them. An association of two or more persons to carry on, as co-owners, a business for profit.
6	Check if your firm is a corporation. A corporation is an artificial person or legal entity created by or under the authority of the laws of a state or nation, composed, in some rare instances, of a single person and their successors, being the incumbents of a particular office, but ordinarily consisting of an association of numerous individuals.
7	Enter your federal employer tax identification number.
8	Enter your corporation number assigned by the California Secretary of State's Office. This information is used for checking if a corporation is in good standing and qualified to conduct business in California.
9	Complete, if applicable, by indicating the type of license and/or certification that your firm possesses and that is required for the type of services being procured.
10, 11 12, 13	Must be completed. These items are self-explanatory.
14	If certified as a Small Business Enterprise, place a check in the "Yes" box and enter your certification number on the line. If certified as a Disabled Veterans Business Enterprise, place a check in the "Yes" box and enter your service code on the line. If you are not certified to one or both, place a check in the "No" box. If your certification is pending, enter the date your application was submitted to OSBCR.

ATTACHMENT 3

BIDDER DECLARATION FORM

All bidders must complete the Bidder Declaration GSPD-05-105 and include it with the bid response. When completing the declaration, bidders must identify all subcontractors proposed for participation in the contract. Bidders awarded a contract are contractually obligated to use the subcontractors for the corresponding work identified unless the State agrees to a substitution, and it is incorporated by amendment to the contract.

At the State's option prior to award, bidders may be required to submit additional written clarifying information. Failure to submit the requested written information as specified may be grounds for bid rejection.

https://www.energy.ca.gov/sites/default/files/2020-02/Attachment_04_RFP-20-801_DVBE_Bidder_Declaration_ADA.pdf

BIDDER DECLARATION

1. Prime bidder information (Review attached Bidder Declaration Instructions prior to completion of this form):

- a. Identify current California certification(s) (MB, SB, NVSA, DVBE): _____ or None (If "None," go to Item #2)
- b. Will subcontractors be used for this contract? Yes No (If yes, indicate the distinct element of work your firm will perform in this contract e.g., list the proposed products produced by your firm, state if your firm owns the transportation vehicles that will deliver the products to the State, identify which solicited services your firm will perform, etc.). Use additional sheets, as necessary.

- c. If you are a California certified DVBE: (1) Are you a broker or agent? Yes No
 (2) If the contract includes equipment rental, does your company own at least 51% of the equipment provided in this contract (quantity and value)? Yes No N/A

2. If no subcontractors will be used, skip to certification below. Otherwise, list all subcontractors for this contract. (Attach additional pages if necessary):

Subcontractor Name, Contact Person, Phone Number & Fax Number	Subcontractor Address & Email Address	CA Certification (MB, SB, NVSA, DVBE or None)	Work performed or goods provided for this contract	Corresponding % of bid price	Good Standing?	51% Rental?
					<input type="checkbox"/>	<input type="checkbox"/>
					<input type="checkbox"/>	<input type="checkbox"/>
					<input type="checkbox"/>	<input type="checkbox"/>

CERTIFICATION: By signing the bid response, I certify under penalty of perjury that the information provided is true and correct.

BIDDER DECLARATION Instructions

All prime bidders (the firm submitting the bid) must complete the Bidder Declaration.

- 1.a. Identify all current certifications issued by the State of California. If the prime bidder has no California certification(s), check the line labeled "None" and proceed to Item #2. If the prime bidder possesses one or more of the following certifications, enter the applicable certification(s) on the line:

- Microbusiness (MB)
- Small Business (SB)
- Nonprofit Veteran Service Agency (NVSA)
- Disabled Veteran Business Enterprise (DVBE)

- 1.b. Mark either "Yes" or "No" to identify whether subcontractors will be used for the contract. If the response is "No," proceed to Item #1.c. If "Yes," enter on the line the distinct element of work contained in the contract to be performed or the goods to be provided by the prime bidder. Do not include goods or services to be provided by subcontractors.

Bidders certified as MB, SB, NVSA, and/or DVBE must provide a commercially useful function as defined in Military and Veterans Code Section 999 for DVBEs and Government Code Section 14837(d)(4)(A) for small/microbusinesses.

Bids must propose that certified bidders provide a commercially useful function for the resulting contract or the bid will be deemed non-responsive and rejected by the State. For questions regarding the solicitation, contact the procurement official identified in the solicitation.

Note: A subcontractor is any person, firm, corporation, or organization contracting to perform part of the prime's contract.

- 1.c. This item is only to be completed by businesses certified by California as a DVBE.

(1) Declare whether the prime bidder is a broker or agent by marking either "Yes" or "No." The Military and Veterans Code Section 999.2 (b) defines "broker" or "agent" as a certified DVBE contractor or subcontractor that does not have title, possession, control, and risk of loss of materials, supplies, services, or equipment provided to an awarding department, unless one or more of the disabled veteran owners has at least 51-percent ownership of the quantity and value of the materials, supplies, services, and of each piece of equipment provided under the contract.

(2) If bidding rental equipment, mark either "Yes" or "No" to identify if the prime bidder owns at least 51% of the equipment provided (quantity and value). If **not** bidding rental equipment, mark "N/A" for "not applicable."

2. If no subcontractors are proposed, do not complete the table. Read the certification at the bottom of the form and complete "Page ____ of ____" on the form.

If subcontractors will be used, complete the table listing all subcontractors. If necessary, attach additional pages and complete the "Page ____ of ____" accordingly.

2. (continued) Column Labels

Subcontractor Name, Contact Person, Phone Number & Fax Number—List each element for all subcontractors.

Subcontractor Address & Email Address—Enter the address and if available, an Email address.

CA Certification (MB, SB, NVSA, DVBE or None)—If the subcontractor possesses a current State of California certification(s), verify on this website (www.eprocure.pd.dgs.ca.gov).

Work performed or goods provided for this contract—Identify the distinct element of work contained in the contract to be performed or the goods to be provided by each subcontractor. Certified subcontractors must provide a commercially useful function for the contract. (See paragraph 1.b above for code citations regarding the definition of commercially useful function.) If a certified subcontractor is further subcontracting a greater portion of the work or goods provided for the resulting contract than would be expected by normal industry practices, attach a separate sheet of paper explaining the situation.

Corresponding % of bid price—Enter the corresponding percentage of the total bid price for the goods and/or services to be provided by each subcontractor. Do not enter a dollar amount.

Good Standing?—Provide a response for each subcontractor listed. Enter either "Yes" or "No" to indicate that the prime bidder has verified that the subcontractor(s) is in good standing for all of the following:

- Possesses valid license(s) for any license(s) or permits required by the solicitation or by law
- If a corporation, the company is qualified to do business in California and designated by the State of California Secretary of State to be in good standing
- Possesses valid State of California certification(s) if claiming MB, SB, NVSA, and/or DVBE status

51% Rental?—This pertains to the applicability of rental equipment. Based on the following parameters, enter either "N/A" (not applicable), "Yes" or "No" for each subcontractor listed.

Enter "N/A" if the:

- Subcontractor is NOT a DVBE (regardless of whether or not rental equipment is provided by the subcontractor) or
- Subcontractor is NOT providing rental equipment (regardless of whether or not subcontractor is a DVBE)

Enter "Yes" if the subcontractor is a California certified DVBE providing rental equipment and the subcontractor owns at least 51% of the rental equipment (quantity and value) it will be providing for the contract.

Enter "No" if the subcontractor is a California certified DVBE providing rental equipment but the subcontractor does NOT own at least 51% of the rental equipment (quantity and value) it will be providing.

Read the certification at the bottom of the page and complete the "Page ____ of ____" accordingly.

(Estimate Based on 156 hours
per person for 7 staff)

Cost Per CSD Sponsored Meeting Hour \$_____ 100 Estimated Hours

C. Budget Narrative

Prepare and attach a brief Budget Narrative explaining how you developed and determined the Inspection Unit Rates and Training Hourly Rate. The narrative detail shall explain and justify the above inspection unit and training hour unit cost figures. Provide enough detail to explain:

1. The major cost categories considered in reaching the unit costs for both inspections and training.
2. An explanation of the costs based on either actual experience of your organization under a specific timeframe or an estimate of costs with the sources of information and assumptions used in the estimate.
3. Any cost considerations included in your unit cost that are unique to your approach to this project.

Name of Proposer:

Authorized Signature: _____

Date Signed: _____

The Department of Community Services and Development reserves the right to reject any or all Cost Proposals.

ATTACHMENT 6

CONTRACTOR CERTIFICATION CLAUSES CCC 04/2017

Refer to the Internet web site, <https://www.dgs.ca.gov/OLS/Resources/Page-Content/Office-of-Legal-Services-Resources-List-Folder/Standard-Contract-Language>

CCC 04/2017

CERTIFICATION

I, the official named below, CERTIFY UNDER PENALTY OF PERJURY that I am duly authorized to legally bind the prospective Contractor to the clause(s) listed below. This certification is made under the laws of the State of California.

<i>Contractor/Bidder Firm Name (Printed)</i>		<i>Federal ID Number</i>
<i>By (Authorized Signature)</i>		
<i>Printed Name and Title of Person Signing</i>		
<i>Date Executed</i>	<i>Executed in the County of</i>	

CONTRACTOR CERTIFICATION CLAUSES

1. **STATEMENT OF COMPLIANCE:** Contractor has, unless exempted, complied with the nondiscrimination program requirements. (Gov. Code §12990 (a-f) and CCR, Title 2, Section 11102) (Not applicable to public entities.)

2. **DRUG-FREE WORKPLACE REQUIREMENTS:** Contractor will comply with the requirements of the Drug-Free Workplace Act of 1990 and will provide a drug-free workplace by taking the following actions:

a. Publish a statement notifying employees that unlawful manufacture, distribution, dispensation, possession or use of a controlled substance is prohibited and specifying actions to be taken against employees for violations.

b. Establish a Drug-Free Awareness Program to inform employees about:

- 1) the dangers of drug abuse in the workplace;
- 2) the person's or organization's policy of maintaining a drug-free workplace;
- 3) any available counseling, rehabilitation and employee assistance programs; and,
- 4) penalties that may be imposed upon employees for drug abuse violations.

c. Every employee who works on the proposed Agreement will:

- 1) receive a copy of the company's drug-free workplace policy statement; and,
- 2) agree to abide by the terms of the company's statement as a condition of employment on the Agreement.

Failure to comply with these requirements may result in suspension of payments under the Agreement or termination of the Agreement or both and Contractor may be ineligible for award of any future State agreements if the department determines that any of the following has occurred: the Contractor has made false certification, or violated the certification by failing to carry out the requirements as noted above. (Gov. Code §8350 et seq.)

3. **NATIONAL LABOR RELATIONS BOARD CERTIFICATION:** Contractor certifies that no more than one (1) final unappealable finding of contempt of court by a Federal court has been issued against Contractor

within the immediately preceding two-year period because of Contractor's failure to comply with an order of a Federal court, which orders Contractor to comply with an order of the National Labor Relations Board. (Pub. Contract Code §10296) (Not applicable to public entities.)

4. CONTRACTS FOR LEGAL SERVICES \$50,000 OR MORE- PRO BONO REQUIREMENT: Contractor hereby certifies that Contractor will comply with the requirements of Section 6072 of the Business and Professions Code, effective January 1, 2003.

Contractor agrees to make a good faith effort to provide a minimum number of hours of pro bono legal services during each year of the contract equal to the lessor of 30 multiplied by the number of full time attorneys in the firm's offices in the State, with the number of hours prorated on an actual day basis for any contract period of less than a full year or 10 percent of its contract with the State.

Failure to make a good faith effort may be cause for non-renewal of a state contract for legal services, and may be taken into account when determining the award of future contracts with the State for legal services.

5. EXPATRIATE CORPORATIONS: Contractor hereby declares that it is not an expatriate corporation or subsidiary of an expatriate corporation within the meaning of Public Contract Code Section 10286 and 10286.1, and is eligible to contract with the State of California.

6. SWEATFREE CODE OF CONDUCT:

a. All Contractors contracting for the procurement or laundering of apparel, garments or corresponding accessories, or the procurement of equipment, materials, or supplies, other than procurement related to a public works contract, declare under penalty of perjury that no apparel, garments or corresponding accessories, equipment, materials, or supplies furnished to the state pursuant to the contract have been laundered or produced in whole or in part by sweatshop labor, forced labor, convict labor, indentured labor under penal sanction, abusive forms of child labor or exploitation of children in sweatshop labor, or with the benefit of sweatshop labor, forced labor, convict labor, indentured labor under penal sanction, abusive forms of child labor or exploitation of children in sweatshop labor. The contractor further declares under penalty of perjury that they adhere to the Sweatfree Code of Conduct as set forth on the California Department of Industrial Relations website located at www.dir.ca.gov, and Public Contract Code Section 6108.

b. The contractor agrees to cooperate fully in providing reasonable access to the contractor's records, documents, agents or employees, or premises if reasonably required by authorized officials of the contracting agency, the Department of Industrial Relations, or the Department of Justice to determine the contractor's compliance with the requirements under paragraph (a).

7. DOMESTIC PARTNERS: For contracts of \$100,000 or more, Contractor certifies that Contractor is in compliance with Public Contract Code section 10295.3.

8. GENDER IDENTITY: For contracts of \$100,000 or more, Contractor certifies that Contractor is in compliance with Public Contract Code section 10295.35.

DOING BUSINESS WITH THE STATE OF CALIFORNIA

The following laws apply to persons or entities doing business with the State of California.

1. CONFLICT OF INTEREST: Contractor needs to be aware of the following provisions regarding current or former state employees. If Contractor has any questions on the status of any person rendering services or involved with the Agreement, the awarding agency must be contacted immediately for clarification.

Current State Employees (Pub. Contract Code §10410):

1). No officer or employee shall engage in any employment, activity or enterprise from which the officer or employee receives compensation or has a financial interest and which is sponsored or funded by any state agency, unless the employment, activity or enterprise is required as a condition of regular state employment.

2). No officer or employee shall contract on his or her own behalf as an independent contractor with any state agency to provide goods or services.

Former State Employees (Pub. Contract Code §10411):

- 1). For the two-year period from the date he or she left state employment, no former state officer or employee may enter into a contract in which he or she engaged in any of the negotiations, transactions, planning, arrangements or any part of the decision-making process relevant to the contract while employed in any capacity by any state agency.
- 2). For the twelve-month period from the date he or she left state employment, no former state officer or employee may enter into a contract with any state agency if he or she was employed by that state agency in a policy-making position in the same general subject area as the proposed contract within the 12-month period prior to his or her leaving state service.

If Contractor violates any provisions of above paragraphs, such action by Contractor shall render this Agreement void. (Pub. Contract Code §10420)

Members of boards and commissions are exempt from this section if they do not receive payment other than payment of each meeting of the board or commission, payment for preparatory time and payment for per diem. (Pub. Contract Code §10430 (e))

2. LABOR CODE/WORKERS' COMPENSATION: Contractor needs to be aware of the provisions which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions, and Contractor affirms to comply with such provisions before commencing the performance of the work of this Agreement. (Labor Code Section 3700)

3. AMERICANS WITH DISABILITIES ACT: Contractor assures the State that it complies with the Americans with Disabilities Act (ADA) of 1990, which prohibits discrimination on the basis of disability, as well as all applicable regulations and guidelines issued pursuant to the ADA. (42 U.S.C. 12101 et seq.)

4. CONTRACTOR NAME CHANGE: An amendment is required to change the Contractor's name as listed on this Agreement. Upon receipt of legal documentation of the name change the State will process the amendment. Payment of invoices presented with a new name cannot be paid prior to approval of said amendment.

5. CORPORATE QUALIFICATIONS TO DO BUSINESS IN CALIFORNIA:

a. When agreements are to be performed in the state by corporations, the contracting agencies will be verifying that the contractor is currently qualified to do business in California in order to ensure that all obligations due to the state are fulfilled.

b. "Doing business" is defined in R&TC Section 23101 as actively engaging in any transaction for the purpose of financial or pecuniary gain or profit. Although there are some statutory exceptions to taxation, rarely will a corporate contractor performing within the state not be subject to the franchise tax.

c. Both domestic and foreign corporations (those incorporated outside of California) must be in good standing in order to be qualified to do business in California. Agencies will determine whether a corporation is in good standing by calling the Office of the Secretary of State.

6. RESOLUTION: A county, city, district, or other local public body must provide the State with a copy of a resolution, order, motion, or ordinance of the local governing body which by law has authority to enter into an agreement, authorizing execution of the agreement.

7. AIR OR WATER POLLUTION VIOLATION: Under the State laws, the Contractor shall not be: (1) in violation of any order or resolution not subject to review promulgated by the State Air Resources Board or an air pollution control district; (2) subject to cease and desist order not subject to review issued pursuant to Section 13301 of the Water Code for violation of waste discharge requirements or discharge prohibitions; or (3) finally determined to be in violation of provisions of federal law relating to air or water pollution.

8. PAYEE DATA RECORD FORM STD. 204: This form must be completed by all contractors that are not another state agency or other governmental entity.

ATTACHMENT 7

DARFUR CONTRACTING ACT CERTIFICATION

Public Contract Code Sections 10475 -10481 applies to any company that currently or within the previous three years has had business activities or other operations outside of the United States. For such a company to bid on or submit a proposal for a State of California contract, the company must certify that it is either a) not a scrutinized company; or b) a scrutinized company that has been granted permission by the Department of General Services to submit a proposal.

If your company has not, within the previous three years, had any business activities or other operations outside of the United States, you do **not** need to complete this form.

OPTION #1 - CERTIFICATION

If your company, within the previous three years, has had business activities or other operations outside of the United States, in order to be eligible to submit a bid or proposal, please insert your company name and Federal ID Number and complete the certification below.

I, the official named below, CERTIFY UNDER PENALTY OF PERJURY that a) the prospective proposer/bidder named below is **not** a scrutinized company per Public Contract Code 10476; and b) I am duly authorized to legally bind the prospective proposer/bidder named below. This certification is made under the laws of the State of California.

<i>Company/Vendor Name (Printed)</i>		<i>Federal ID Number</i>
<i>By (Authorized Signature)</i>		
<i>Printed Name and Title of Person Signing</i>		
<i>Date Executed</i>	<i>Executed in the County and State of</i>	

OPTION #2 – WRITTEN PERMISSION FROM DGS

Pursuant to Public Contract Code section 10477(b), the Director of the Department of General Services may permit a scrutinized company, on a case-by-case basis, to bid on or submit a proposal for a contract with a state agency for goods or services, if it is in the best interests of the state. If you are a scrutinized company that has obtained written permission from the DGS to submit a bid or proposal, complete the information below.

We are a scrutinized company as defined in Public Contract Code section 10476, but we have received written permission from the Department of General Services to submit a bid or proposal pursuant to Public Contract Code section 10477(b). A copy of the written permission from DGS is included with our bid or proposal.

<i>Company/Vendor Name (Printed)</i>	<i>Federal ID Number</i>
<i>Initials of Submitter</i>	
<i>Printed Name and Title of Person Initialing</i>	

ATTACHMENT 8

CONTRACTOR'S WRITTEN PROPOSAL AND RESUMES FOR KEY PERSONNEL

Please include the following, in this order:

- Section 1. Capability of Organization (Background). (Refer to 4.A.1)
- Section 2. Capability of Staff. (Refer to 4.A.2)
- Section 3. Work Plan. (Refer to 4.A.3)
- Section 4. Cost Detail Attachment 4 Budget Narrative (Refer to 4.B.)
- Section 5. Resumes of Key Personnel

ATTACHMENT 9

CALIFORNIA CIVIL RIGHTS LAW

Pursuant to Public Contract Code section 2010, a person that submits a bid or proposal to, or otherwise proposes to enter into or renew a contract with, a state agency with respect to any contract in the amount of \$100,000 or above shall certify, under penalty of perjury, at the time the bid or proposal is submitted, or the contract is renewed, all of the following:

1. **CALIFORNIA CIVIL RIGHTS LAWS**: For contracts executed or renewed after January 1, 2017, the contractor certifies compliance with the Unruh Civil Rights Act (Section 51 of the Civil Code) and the Fair Employment and Housing Act (Section 12960 of the Government Code); and
2. **EMPLOYER DISCRIMINATORY POLICIES**: For contracts executed or renewed after January 1, 2017, if a Contractor has an internal policy against a sovereign nation or peoples recognized by the United States government, the Contractor certifies that such policies are not used in violation of the Unruh Civil Rights Act (Section 51 of the Civil Code) or the Fair Employment and Housing Act (Section 12960 of the Government Code).

CERTIFICATION

I, the official named below, certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

<i>Proposer/Bidder Firm Name (Printed)</i>	<i>Federal ID Number</i>
<i>By (Authorized Signature)</i>	
<i>Printed Name and Title of Person Signing</i>	
<i>Executed in County of</i>	<i>Executed in the State of</i>
<i>Date Executed</i>	

ATTACHMENT 10

IRAN CONTRACTING ACT

Public Contract Code sections 2202-2208

Prior to bidding on, submitting a proposal or executing a contract or renewal for a State of California contract for goods or services of \$1,000,000 or more, a vendor must either: a) certify it is not on the current list of persons engaged in investment activities in Iran created by the California Department of General Services (“DGS”) pursuant to Public Contract Code section 2203(b) and is not a financial institution extending twenty million dollars (\$20,000,000) or more in credit to another person, for 45 days or more, if that other person will use the credit to provide goods or services in the energy sector in Iran and is identified on the current list of persons engaged in investment activities in Iran created by DGS; or b) demonstrate it has been exempted from the certification requirement for that solicitation or contract pursuant to Public Contract Code section 2203(c) or (d). The DGS list of entities prohibited from contracting with public entities in California per the Iranian Contracting Act, 2010, can be found at: Department of General Services Procurement Division Iran Contracting Act List ()

To comply with this requirement, please insert your vendor or financial institution name and Federal ID Number (if available) and complete one of the options below. Please note: California law establishes penalties for providing false certifications, including civil penalties equal to the greater of \$250,000 or twice the amount of the contract for which the false certification was made; contract termination; and three-year ineligibility to bid on contracts. (Public Contract Code section 2205.)

OPTION #1 - CERTIFICATION

I, the official named below, certify I am duly authorized to execute this certification on behalf of the vendor/financial institution identified below, and the vendor/financial institution identified below is not on the current list of persons engaged in investment activities in Iran created by DGS and is not a financial institution extending twenty million dollars (\$20,000,000) or more in credit to another person/vendor, for 45 days or more, if that other person/vendor will use the credit to provide goods or services in the energy sector in Iran and is identified on the current list of persons engaged in investment activities in Iran created by DGS.

OPTION #2 – EXEMPTION

Pursuant to Public Contract Code sections 2203(c) and (d), a public entity may permit a vendor/financial institution engaged in investment activities in Iran, on a case-by-case basis, to be eligible for, or to bid on, submit a proposal for, or enters into or renews, a contract for goods and services.

If you have obtained an exemption from the certification requirement under the Iran Contracting Act, please fill out the information below, and attach documentation demonstrating the exemption approval.

EXHIBIT A

DIRECTORY OF LOCAL WEATHERIZATION SERVICE PROVIDERS

Agency	Service Area
Amador Tuolumne Community Action Agency (ATCAA)	Amador, Calaveras, Tuolumne
Campeños Unidos, Inc. (CUI)	Imperial, San Diego
Central Coast Energy Services (CCES)	Marin, Monterey, San Benito, Santa Clara, Santa Cruz, San Francisco and San Mateo
Central Valley Opportunity Center (CVOC)	Stanislaus
Community Action Agency of Butte County	Butte
Community Action Commission of Santa Barbara County	Santa Barbara
Community Action of Ventura County, Inc.	Ventura and Los Angeles Area D
Community Action Partnership of Kern	Kern
Community Action Partnership of Madera County	Madera (LIHEAP only)
Community Action Partnership of Orange County	Orange
Community Action Partnership of Riverside County	Riverside
Community Action Partnership of San Bernardino County	San Bernardino
Community Resource Project, Inc. (CRP)	Sacramento, Sutter, Yuba
Community Services and Employment Training, Inc. (CSET)	Tulare
Contra Costa Community Services Bureau	Contra Costa
Del Norte Senior Center	Del Norte
Community Action Partnership of San Luis Obispo County	San Luis Obispo
El Dorado County Dept. of Human Services	Alpine, El Dorado
Fresno County Economic Opportunities Commission	Fresno
Glenn County Health and Human Services Agency	Colusa, Glenn, Trinity
Great Northern Corporation (GNC)	Siskiyou
Inyo Mono Advocates for Community Action (IMACA)	Inyo, Mono

Agency	Service Area
Kings Community Action Organization, Inc.	Kings
Lassen Economic Development Corporation	Lassen
Long Beach Community Action Partnership	Los Angeles Area C*
Maravilla Foundation	Los Angeles Area A*
Mariposa County Dept. of Human Services	Mariposa
Merced County Community Action Agency	Madera (DOE), Merced
Metropolitan Area Advisory Committee (MAAC)	San Diego*
North Coast Energy Services (NCES)	Lake, Marin, Mendocino, Napa, Solano, Sonoma, Yolo
Pacific Asian Consortium in Employment (PACE)	Los Angeles Area B*
Plumas County Community Development Commission	Plumas, Sierra
Project Go, Inc.	Placer and Nevada
Redwood Community Action Agency	Humboldt, Modoc
San Joaquin County Dept. of Aging and Community Services	San Joaquin
Self-Help Home Improvement Project (SHHIP)	Shasta, Tehama
Spectrum Community Services, Inc.	Alameda

* A detailed map of service areas by county and city can be found at www.CSD.CA.GOV.

EXHIBIT B

TRAINING AND PREPARATION OF QA INSPECTOR CANDIDATES

1. SUMMARY

The Weatherization Assistance Program (WAP) has provided assistance to low-income households through a statewide program targeting energy conservation and customer education to: 1) reduce energy use; 2) encourage low-income customers to make educated energy decisions; and 3) Reduce Green House Gas Emissions. This program is administered throughout California by weatherization contractors known as “Agencies” or “Sub grantees”. In order to ensure the quality of the installation work these contractors perform, the inspector has become a central and vital participant in the process.

This training plan outlines the necessary educational path that a qualified candidate must take in order to meet the minimum criteria for the title of Third-Party Quality Assurance Inspector under the Weatherization Assistance Program managed by the Department of Community Services and Development. This training plan will also form the basis for training deemed necessary under the Energy Weatherization Quality Assurance Inspection contract.

TRAINING ADMINISTRATOR RESPONSIBILITIES

CSD has an existing Training and Technical Assistance (T&TA) Consultant which assists CSD in designing, delivering, coordinating and scheduling the Weatherization Inspector Training Program. The training will be delivered in a variety of formats and through approved training centers and field or classroom locations, as determined by CSD in collaboration with the QA Inspection Contractor, CSD Quality Assurance Inspection Unit staff, and the T&TA Consultant.

The T&TA Consultant will provide the training program as a single coordinated effort over a specific period of time, to a group of pre-qualified inspectors selected and approved by CSD. The T&TA Consultant and/or CSD Quality Assurance Inspection Unit staff will provide the following under the Training Program:

- A. Design the training program and schedule.
- B. Act as the training administrator:
 - 1) Provide all necessary communications between, candidates, training centers, trainers, sub-grantees and CSD, as it pertains to coordinating and delivering the training.
 - 2) Act as training administrator for the CSD approved online training program. Provide technical assistance, scheduling, and

certifications to candidates. Designate a T&TA staff member to act as a virtual proctor to review candidate training reports to ensure ethical compliance and produce certificates.

- 3) Coordinate between training centers and candidates to ensure classroom training is completed in coordination with other trainings.
- 4) Coordinate and schedule all field training between sub-grantees, the T&TA Consultant inspection teams, and other stakeholders.
- 5) In collaboration with CSD, customize any needed curriculum specific to the candidate profiles.
- 6) Provide CSD Online Weatherization/Installer Training consisting of approximately 20 hours
- 7) Conduct four-day Duct Testing and Blower Door Diagnostics Training.
- 8) Conduct three-day Combustion Appliance Safety Training
- 9) Conduct one and a half-day field inspection policy and procedures training.
- 10) Conduct two and a half-day Quality Assurance Inspector Training with introductory field practice.
- 11) Conduct two-day Assessor training with introductory field practice.
- 12) Conduct 15 days of monitored field/inspector work per two inspector trainees (leading; then monitoring).
- 13) Assemble training files, results, and distribute certifications to candidates.
- 14) Send final reports to CSD.

2. INSPECTOR SCOPE OF WORK

The role of the Weatherization Assistance Program Quality Assurance inspector is twofold:

- 1) To monitor quality assurance.
- 2) To provide accurate and timely reporting and feedback regarding the inspection results. In fulfilling the role of a quality control inspector, well-trained personnel should perform the following tasks:

- A. Review of weatherized units and their accompanying client files for compliance with program criteria (standards, policies, and procedures).
- B. Analyze the assessment, diagnostic forms, and other paperwork for program compliance.
- C. Evaluate the weatherization units for the quality of the assessment and subgrantee post-inspection.
- D. Evaluate the weatherization units for safety conditions not identified during the assessment and Subgrantee post-inspection.
- E. Inspect all combustion appliances that received combustion appliance safety testing.
- F. Verify that required tests were properly completed and results appear in the client's permanent file.
- G. Evaluate the weatherization units ensure that non-feasible measures were not installed.
- H. Evaluate the weatherization units to ensure that all feasible measures were installed with a high degree of quality and in accordance with program criteria.
- I. Confirm that correct quantities were invoiced.

The inspection process serves two purposes as well. Inspections are intended to serve as a means of strengthening the program by identifying quality or programmatic issues in the field and providing measurable results to CSD for analysis and follow up. Additionally, inspectors act as representatives of and ambassadors for CSD. Therefore, it is critical to the quality assurance program that inspectors have both the technical skill as well as the interpersonal and professional sensitivities to engage with the sub-grantees, as well as individual homeowners.

The protocol and curricula for the training of inspectors include installation standards, policies, testing procedures trainings, and proctored field inspections. These were developed and customized for WAP through years of experience and thousands of inspections, and have been designed to promote and support the statewide Weatherization Installation policies and standards described in the:

- CSD Technical Reference Manual
- Weatherization Inspection Policy and Procedures Manual

4. TRAINING REQUIREMENTS & CERTIFICATION

4.1 Training Materials, Equipment, and Supplies

Participating inspector candidates should possess the following equipment for the field portion of each module:

- Calculator
- Digital Camera
- Clip Board
- Drop Cloth(s)
- Dust Mask
- Flashlight
- Gloves
- Hard Hat
- Ruler/Tape Measures
- Screwdrivers
- Utility Knife and Blades
- Ladders
- Current Copies of TRM and P&P documents
- Approved Duct Testing Equipment
- Approved Blower Door Testing Equipment
- Approved Combustion Safety Testing Equipment
- Personal CO monitor
- Misc. inspection tools
- Personal Name Badge with Company Information

4.2. Inspector Certification

Inspectors shall complete all training Modules and pass the post-test of each Module with an 80 percent score or greater. Inspector candidates are required to attend all courses in their entirety but may challenge portions of the technical course requirements by: 1) showing successful completion of another equivalent course, or 2) completing a challenge “competency exam” administered by CSD through the T&TA Consultant. CSD’s weatherization management will have the final say for determining course work equivalency and/or challenge exam content.

5. INSPECTOR TRAINING OVERVIEW

The inspector training session shall be comprised of three phases, including:

Phase 1: Online Weatherization/Installer Training

Phase 2: Classroom Lecture, Hands-on Laboratories, and Written Exams (provided at a CSD-approved training center), and Field Training

Phase 3: Field Mentoring and Monitored Inspections

Classroom portions are taught in a lecture format consisting of discussion,

demonstration, and audio-visual presentation(s) complemented with props, samples and displays to facilitate learning. Following the classroom portion, inspector candidates should also participate in field training to reinforce the classroom material. Field training consists of shadowing existing inspectors and conducting supervised (proctored) field inspections. The final evaluation is provided by a senior inspector and constitutes completion of the certification program.

5.1 Training Modules

Trainings will be coordinated according to the proposed training modules outlined below.

Module 1 is completed online. Modules 2 and 3, can be completed at the following CSD authorized State Training Center:

Pacific Gas & Electric (PG&E) Training Center in Stockton

Module 5 is conducted by the T&TA Consultant in a combination of classroom and field trainings.

Modules 4 and 6 are conducted by CSD Quality Assurance Inspection Unit in a combination of classroom and field trainings.

The tuition and training consultant costs for all Modules will be borne by CSD. The costs of attending the training shall be borne by the QA Contractor through the hourly training rate.

CSD also requires that inspector staff be certified as an Environmental Protection Agency (EPA) Renovator OR may take the CSD Lead Safe Alternative Training in lieu of the EPA RRP Renovator Training. For EPA RRP Renovator Training the QA Contractor must arrange for certification training for non-certified staff. Many training sites are available. The following U.S. Housing and Urban Development link describes the certification requirement and links to trainers: <http://www.hud.gov/offices/lead/training/rrp/rrp.chm>.

Module 1: CSD Online Weatherization/Installer Training

Duration: Approximately 20 hours.

Module 2: Duct Testing and Blower Door Diagnostics (Training Center)

Duration: Four (4) Days.

Module 3: Combustion Appliance Safety (Training Center)

Duration: (3) Three days.

Module 4: Inspection Policy and Procedures/Paperwork

Duration: Four days (1.5 Days Policy; 2.5 Days Field Training).

Module 5: Assessor Training

Duration: Two Days (One Day Field Training).

Module 6: Monitored Field Inspections

Duration: Average three weeks, depending upon rating of candidate by CSD inspector.

Module 7: REM Energy Audit Training

Duration: Average four days.

Module 1: Online Weatherization / Installer Training

This Module consists of 10 separate e-learning courses. The instruction is video based, with associated quizzes and exams. The e-learning courses consist of several video-based lessons each and include:

- Environmental Hazards.
- Worker Safety.
- Introduction to Weatherization and the TRM.
- Building Science Introduction.
- Weatherization Installer Basics.
- Duct Sealing for Installers.
- Infiltration Reduction for Installers.
- Client Relations.
- Deferrals and Critical Decisions.
- CSD Lead-Safe Weatherization Alternative Training (can be taken in lieu of EPA's Lead Renovation, Repair and Painting Program (RRP)).
- Each video concludes with a study guide and a quiz.
- Online final exams are provided at the completion of each primary module.
- The certification is provided upon the successful completion of all the modules.

Module 2: Blower Door and Duct Diagnostics (Training Center)

Taught as three (3) day training at approved training centers, Blower Door/Duct Blaster Diagnostics courses are intended to define the procedures and documentation to be followed by all weatherization contractors when conducting pre and post evaluations of homes. The classroom portion of the class covers the required building science principles, terminology, documentation, and procedures associated with duct testing and building shell leakage testing (Blower Door Testing). Instructors also provide hands on training in the proper operation of the testing equipment. This 3-day class is designed as an initial skills development class and is intended to prepare students for immediate field training and practice.

Module 3: Combustion Appliance Safety (Training Center)

Weatherization programs include Combustion Appliance Safety (CAS) testing of those homes with combustion appliances. Testing includes a visual inspection of each gas appliance, and instrument measure carbon monoxide (CO) levels and draft. This is done because improperly operating appliances may produce CO, which could enter the living space, and have potentially harmful effects upon the health and well-being of the occupants.

Taught as three (3) day training at an approved CSD training center, the CAS

course is intended to define the roles and procedures to be followed by all weatherization contractors when confronted by functioning natural gas appliances. Inspector candidates further define the fundamentals of natural gas appliances, exploring the properties of combustion and of gas distribution systems. They are led through hands-on activities involving water heaters, furnaces, ranges/ovens, dryers, and gas logs.

The classroom portion of the training will also consist of an in-depth review of carbon monoxide measurement and equipment. Inspector candidates are provided with a plethora of laboratory exercises that define their skill. Students also practice and become familiar with the makeup of heat exchange systems and learn to troubleshoot these components through a discussion of questions and problems that may be encountered in the field. Through this on-going discussion session, inspector candidates will learn to critique their own diagnoses, as well as those of fellow participants.

The class culminates in a final written exam. This course requires additional field mentoring and proctored inspections.

Module 4: Inspection Policy and Procedures/QA Field Inspector Course

The inspector training is designed to prepare Weatherization Inspectors to assist in the in-house weatherization quality assurance process of WAP subcontractors, and to conduct the post-inspection of units to ensure that the work completed meets program requirements.

The in-house four (4) day training will include a brief overview of relevant portions of the CSD Technical Reference Manual (TRM), the CSD Weatherization Inspection Policies and Procedures document, and relevant inspection policies, with essential sections presented on transparency slides. Pictorial examples of non-feasibility issues typically found in the field will be presented via computer graphics. In addition, field assessment and technical inspection training will be addressed through the evaluation of measure installation feasibility and subsequent quality assurance inspection procedures. The majority of the training is spent in the field, providing guided and supervised quality assurance inspections. The field evaluation of students will determine the level and need for follow up proctored inspections.

Module 5: Assessment Procedures

The Assessment Procedures training curricula prepares inspector candidates to analyze each home from the perspective of the assessment, thereby strengthening their ability to determine which measures should be installed in a customer's home. This in-house training will build each candidate's knowledge of the CSD measures, the non-feasibility criteria, and develop competencies in conducting weatherization assessments to ensure that the work completed meets program requirements.

The training includes several virtual walk-through assessments in the classroom, and exercises completing assessment forms. The classroom training is six to

eight hours in length and followed up with field evaluations.

For the purpose of this training program, the field evaluations will be transferred to the monitored field inspections, to consolidate the training program.

Module 6: Monitored Field Inspections

Inspection practice by inspector candidates (known as Monitored Field Inspections) will be conducted at selected sites to ensure that inspector candidates are able to identify and verify that:

1. Applicable TRM, Program policies and procedures, and health and safety requirements were met.
2. Required forms were properly completed and placed in the client's permanent file.
3. Correct quantities were billed.
4. All feasible measures were installed.
5. Non-feasible measures were not installed.
6. Testing, and any remediation determined necessary by the testing, has been completed properly and in accordance with Program policy.

The coordination of monitored inspections will be a combined effort between the CSD Quality Assurance Inspection Unit and the LSP, where inspection visit dates and times will be scheduled prior to the field training. Appointments with individual customers shall be scheduled for customers' homes where the Quality Assurance Inspection Unit and QA Contractor inspector candidates have selected files for review based upon the measures installed, and upon completion of the weatherization installation work.

Module 7: REM/Design Energy Audit Training

The REM/Design energy audit training is designed to provide prospective energy auditors with the required criteria for development of a site-specific energy audit designed to justify the cost-effectiveness for specific weatherization measures in single-family dwellings (including mobile homes) under CSD's programs. This four-day course consists of classroom and field components, with a focus on three main processes which include: 1) On-site visit/data collection; 2) Energy modeling with energy savings analysis; and 3) Report submittal.

EXHIBIT C

ESTIMATION OF NUMBER OF INSPECTIONS/RE-INSPECTIONS TO BE PERFORMED

Contract Year	LIHEAP Standard Inspections	LIHEAP (Enhanced)	DOE (Enhanced)	DOE (Enhanced) REM/Audit QA/QC Review	DOE BIL (Enhanced)	DOE BIL (Enhanced) REM/Audit QA/QC Review	Re-Inspections	File Review Only Inspections	Total Estimated Inspections
Year 1	1,420	142	150	15	140	20	10	25	1,922
Year 2	1,420	142	150	15	140	20	10	25	1,922
Year 3	1,420	142	150	15	140	20	10	25	1,922
Total	4,260	426	450	45	420	60	30	75	5,766

EXHIBIT D

REPORTING REQUIREMENT FORMAT

- 1. Work in Progress Inspection Report Form (WIPR)**
Inspections performed to assist an LSP's quality control efforts with immediately identification any observed deficiencies back to the agency.
- 2. Weatherization Inspection Report Form (WIR)**
To be completed for each weatherized unit inspected and reports the status of all measures improved in that unit.
- 3. DOE Priority List or REM Audit Activity Inspection Report Form**
To be completed only for DOE funded units or where DOE funding was leveraged for weatherization. It provides any finding of failed items with the DOE approved Priority List or REM Audit action compliance for the installation of energy saving measures.
- 4. Comprehensive Inspection Report Form (CIR)**
To be completed for units inspected at any single physical location including reporting on the quality of work performed. The CIR also has a listing of all failed items detected on an inspection visit. The report is forwarded to CSD upon verification that all failed items have been remedied.
- 5. REM/Design Audit QA/QC Checklist and Instructions**
To be completed only for DOE funded units where a REM/Design Audit was conducted. The REM/Design Audit QA/QC checklist has specific items associated with the REM/Design Audit that must be verified using multiple data points. The REM/Design Audit QA/QC checklist instructions provides direction when completing the checklist.
- 6. Monthly Summary Reports**
The attached samples show the format and content of monthly summary data reports which will include:
 - A. Monthly Issues Report
 - B. Year to Date Report
 - C. Units by Funding Source Reports
 - D. ICT Standard Reports
 - E. Master Reports

(WIPR) Form

Ver 03.02.17 State of California Department of CSD WORK IN PROGRESS REPORT (WIPR)		Agency Name		Agency Job #	
Assessment Type:		1st Inspection Date:			
Inspection Stage:		Re-Inspection Date:			
Client's Last Name		First Name		Phone Number	
RESIDENCE/UNIT INFORMATION					
				CA	
Address (# and Street)		Unit #	City	State	Zip Code
Housing Type:			Housing Area:		
Funding Source:					
LEAD SAFE WEATHERIZATION					
A. Is the home Pre-1978?					
B. EPA Requirements Implemented Correctly?					
MEASURES		Assessed	Feasible	Paperwork	Workmanship
1.					
2.					
3.					
ASSESSMENT					
Name of Assessor(s):					
Was Mechanical Ventilation Assessed As Required?:					
DOE PRIORITY LIST/ AUDIT					
PAPERWORK					
WORKMANSHIP					
Post Inspector's name:					
Name of Crew Members:					
AGENCY FOLLOW UP					
Agency signature only acknowledges receipt of information			QA Inspector's signature required on all forms		
Agency Signature & Date			QA Signature & Date		

DOE Priority List Form

CSD DOE Priority List/Energy Audit Inspection Report 07.09.19			
Agency Name:		Agency Job#:	
Agency Contact:		Climate Zone:	
Client Name:			
*** "NO" answers will require a note/action item ***			
	QUESTION	ANSWER	NOTES/ ACTION ITEMS
1	Was Mechanical Ventilation assessed as required?		
2	If MV was not installed, did non-feasibility comply with policy requirements?		
3	Was a Post-Weatherization Inspection conducted?		
4	Was the Post-Wx Inspection conducted properly?		
5	Name of Post Inspector:		
6	Was the Post-Wx conducted by a QCI Certified Inspector?		
7	Is the Priority List (CSD Form 710) or an approved Energy Audit in the Client File or electronically available?		
8	Did Contractor utilize 1) Priority List or 2) Energy Audit or both? In Notes List Type (Priority, Audit, or both)		
9	If Energy Audit was conducted, did Audit comply with policy requirements?		
10	Does the Priority List identify the correct Climate Zone and type of the unit weatherized?		
11	Were all DOE Priority List or Energy Audit measures with the highest SIRs installed in SIR order (highest to lowest)?		
12	If any DOE Priority List or Energy Audit measures with higher SIRs were skipped, was there adequate written justification?		
13	If client refused any Priority List or Energy Audit measure, did the agency stop installing any lower SIR measures below the initially refused measure?		
14	If any Priority List or Energy Audit measure were not feasible, is the nonfeasibility justification documented in the Client File?		
15	Did all measures installed and billed to DOE have an SIR of 1.0 or higher?		
Agency's Representative Signature & Date		QA Inspector's Signature & Date	

(CIR) Form

CSD COMPREHENSIVE INSPECTION REPORT (CIR) <small>Ver12.19.19</small>					
Agency's Name					
Agency Representative		Title of Representative		Representative Phone Number	
Inspector & BPI/QCI ID#			Primary Reason For Visit		
CSD Representative's Name			CSD Representative Present		
Additional Personnel Attending The Exit Interview					
Inspection Dates		Exit Interview Date		Last Inspection Date	
From	Thru			From	Thru
Inspection Results Totals					
	Standard	Enhanced	Re-Inspection	Total	
Total Units Inspected	0	0	0	0	
"Fail" Units	0	0	0	0	
"Haz-Fail" Units	0	0	0	0	
"Paper Fail" Units	0	0	0	0	
"Remedied" Units	0	0	0	0	
"File Review" Units	0				
"Fail" Measures	0	0	0	0	
"Haz-Fail" Measures	0	0	0	0	
"Paper Fail" Measures	0	0	0	0	
"Remedied" Measures	0	0	0	0	
"File Review" Measures	0				
Single Family Units	0	Multi Family Units	0	Mobile Home Units	0
Total WIPS Completed		0	Assessment Stage WIPS		0
Weatherization Stage WIPS		0	Post Inspection Stage WIPS		0
Total # of Inspection During This Visit (QA + WIPS)		0			
Training Referral					
Subject of Training					
Names of Individuals Referred for Training					
Quality of Work Since Last Inspection					

Agency's Name	Inspection Dates	
0	01/00/00	01/00/00
CAS - Knowledge of test protocols - Accuracy of tests performed - Feasibility of tests performed		
Rating		
BLOWER DOOR - Knowledge of test protocols - Accuracy of tests performed - Feasibility of tests performed		
Rating		
DUCT BLAST - Knowledge of test protocols - Accuracy of tests performed - Feasibility of tests performed		
Rating		
LOT FILES AND DOCUMENTATION - Organization of documentation - Accuracy of documentation - Completeness of files	Equipment Calibration Logs Present and Complete?	
Rating		
WORKMANSHIP - General quality of work - Appropriate material selection - Customer Satisfaction		
Rating		

REM/Design Audit QA/QC Checklist

REM/Design Audit Quality Assurance/Quality Control (QA/QC) Checklist

To properly complete this checklist, please refer to the REM/Design QA/QC Checklist Instructions.

Agency:			
Agency Auditors Name:			
Reviewer Name:			
Dwelling Information:	Client Name:	Click or tap here to enter text.	
	Address:	Click or tap here to enter text.	
	Dwelling Type: <input type="checkbox"/> SFD <input type="checkbox"/> MH <input type="checkbox"/> MUD Attic: <input type="checkbox"/> Y <input type="checkbox"/> N Crawlspace: <input type="checkbox"/> Y <input type="checkbox"/> N		
	Combustion Appliance: <input type="checkbox"/> Y <input type="checkbox"/> N Ducts: <input type="checkbox"/> Y <input type="checkbox"/> N		
	Dwelling Being Charged to: <input type="checkbox"/> LIHEAP ONLY <input type="checkbox"/> DOE ONLY <input type="checkbox"/> DOE & LIHEAP		

Table 1: AUDIT CHECKLIST

- Mark each item with “Y” if condition is met or “N” if condition is not met. Add comments to explain “N” answers where indicated.
- Use eCORE documentation, justification photos, and REM/Design submission to make determinations.

Y	N	VERIFY THAT:	COMMENTS
<input type="checkbox"/>	<input type="checkbox"/>	1. The climate location is appropriate for the dwelling.	Click or tap here to enter text.
<input type="checkbox"/>	<input type="checkbox"/>	2. The utility rate is entered correctly.	Click or tap here to enter text.
<input type="checkbox"/>	<input type="checkbox"/>	3. The general design of the home is input correctly.	Click or tap here to enter text.
<input type="checkbox"/>	<input type="checkbox"/>	4. The building envelope characteristics match existing conditions.	Click or tap here to enter text.
<input type="checkbox"/>	<input type="checkbox"/>	5. The type of infiltration measurement is “Blower door”. <i>*Enter infiltration rate information in Table 2.</i>	Click or tap here to enter text.
<input type="checkbox"/>	<input type="checkbox"/>	6. The number and types of windows.	Click or tap here to enter text.
<input type="checkbox"/>	<input type="checkbox"/>	7. All shading related properties are entered correctly.	Click or tap here to enter text.
<input type="checkbox"/>	<input type="checkbox"/>	8. Mechanical equipment properties are modeled correctly.	Click or tap here to enter text.
<input type="checkbox"/>	<input type="checkbox"/>	9. The duct system was modeled when a ducted heating/cooling system exists. <i>*Enter leakage information in Table 2.</i>	Click or tap here to enter text.

Y	N	VERIFY THAT:	COMMENTS
<input type="checkbox"/>	<input type="checkbox"/>	10. The type of duct leakage is set to "Quantitative Duct Leakage to Outside".	Click or tap here to enter text.
<input type="checkbox"/>	<input type="checkbox"/>	11. The interior LED input is set to 100 percent.	Click or tap here to enter text.
<input type="checkbox"/>	<input type="checkbox"/>	12. There are no errors present that would prevent report generation.	Click or tap here to enter text.
<input type="checkbox"/>	<input type="checkbox"/>	13. Feasible Audit Driven Measures (ADM) are included in the improvement analysis.	Click or tap here to enter text.
<input type="checkbox"/>	<input type="checkbox"/>	14. The proposed measure characteristics reflect actual installed measures. <i>*Enter measure improvements for all measures included in the audit in Table 2.</i>	Click or tap here to enter text.
<input type="checkbox"/>	<input type="checkbox"/>	15. The improvement analysis criteria selections align with CSD program policy.	Click or tap here to enter text.
<input type="checkbox"/>	<input type="checkbox"/>	16. All installed measures have a Measure SIR and ADM Package SIR ≥ 1.0 .	Click or tap here to enter text.
<input type="checkbox"/>	<input type="checkbox"/>	17. The reimbursed ADM costs are less than or equal to the ADM costs on the IAR.	Click or tap here to enter text.
<input type="checkbox"/>	<input type="checkbox"/>	18. The final Measure(s) and ADM Package SIR are included on the CSD 710 form.	Click or tap here to enter text.

Table 2: MEASURE INFORMATION FROM THE AUDIT TO CONFIRM ON-SITE

- **Reviewer:**
 - Mark each item with "Y" if measure was modeled or "N" if measure was not modeled.
 - For all ADMs, enter both the existing and improved measure values (if applicable) for on-site verification.
- **On-site Inspector:**
 - For installed measures, verify the improved values noted by the reviewer match the on-site conditions.
 - Document if there are any discrepancies.

Y	N	AUDIT-DRIVEN MEASURES	ON-SITE CONFIRMATION
<input type="checkbox"/>	<input type="checkbox"/>	Air Sealing (Infiltration Reduction) <input type="checkbox"/> Billed to DOE <i>Modeled Infiltration Rate:</i> Existing: _____ CFM50 Improved: _____ CMF50	Using the CSD 704, does the initial shell leakage test (existing) reading and final shell leakage test (improved) reading match values in audit? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A If No , document actual readings: Initial shell leakage test (existing): _____ CFM50 Final shell leakage test (improved): _____ CFM50
<input type="checkbox"/>	<input type="checkbox"/>	Attic/Ceiling Insulation Existing R-value: _____ Improved R-value: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A If No , document actual installed R-value: _____

Y	N	AUDIT-DRIVEN MEASURES	ON-SITE CONFIRMATION
<input type="checkbox"/>	<input type="checkbox"/>	Duct Repair and Sealing <input type="checkbox"/> Billed to DOE <i>Modeled Leakage Rate:</i> Existing: _____ CFM25 Improved: _____ CMF25	Using the CSD 706, does the initial duct leakage test (existing) reading and final duct leakage test (improved) reading match values in audit? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A If No , document actual readings: Initial duct leakage test (existing): _____ CFM25 Final duct leakage test (improved): _____ CFM25
<input type="checkbox"/>	<input type="checkbox"/>	Cooling Replacement Existing Efficiency: _____ Improved Efficiency: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A If No , document actual installed efficiency: _____
<input type="checkbox"/>	<input type="checkbox"/>	Door Repair or Replacement Existing Type: _____ Improved Type: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A If No , document actual installed type: _____
<input type="checkbox"/>	<input type="checkbox"/>	Heating Replacement Existing Efficiency: _____ Improved Efficiency: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A If No , document actual installed efficiency: _____
<input type="checkbox"/>	<input type="checkbox"/>	Water Heater Replacement Existing Efficiency: _____ Improved Efficiency: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A If No , document actual installed efficiency: _____
<input type="checkbox"/>	<input type="checkbox"/>	Window Repair or Replacement Existing Type: _____ Improved Type: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A If No , document actual installed type: _____
<input type="checkbox"/>	<input type="checkbox"/>	Floor Insulation Existing R-value: _____ Improved R-value: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A If No , document actual installed R-value: _____
<input type="checkbox"/>	<input type="checkbox"/>	Programmable Thermostat	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
<input type="checkbox"/>	<input type="checkbox"/>	Smart Thermostat	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
<input type="checkbox"/>	<input type="checkbox"/>	Wall Insulation Existing R-value: _____ Improved R-value: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A If No , document actual installed R-value: _____

AUDIT REVIEW NOTES

Audit Review Findings:

Click or tap here to enter text.

General Comments:

Click or tap here to enter text.

**Printed Name of
Reviewer:**

Click or tap here to enter text.

Signature of Reviewer:

ON-SITE REVIEW NOTES

ON-SITE Review Findings:

Click or tap here to enter text.

General Comments:

Click or tap here to enter text.

**Printed Name of
Inspector:**

Click or tap here to enter text.

Signature of Inspector:

REM/Design Audit QA/QC Checklist Instructions

REM/Design Audit Quality Assurance/Quality Control (QA/QC) Checklist Instructions

Instructions

The following checklist instructions outline the steps to perform a REM/Design energy audit QA/QC review. For successful completion of the checklist, please note the following:

- The QA/QC checklist sections should be completed in order.
- It is recommended to obtain client file documentation prior to starting the QA/QC review. Documents recommended to be used are included in a table below. In some cases, items will have to be confirmed by the CSD quality assurance inspector once the inspector is on-site.
- The REM/Design audit software has two input modes: Simplified and Detailed. This checklist assumes review of an audit performed using Simplified input mode. Detailed input mode will follow the same instructions, except when noted.
- Any special modeling instructions related to mobile homes (e.g., MH Specific) or multi-family buildings (MF Specific) are noted with these headings.


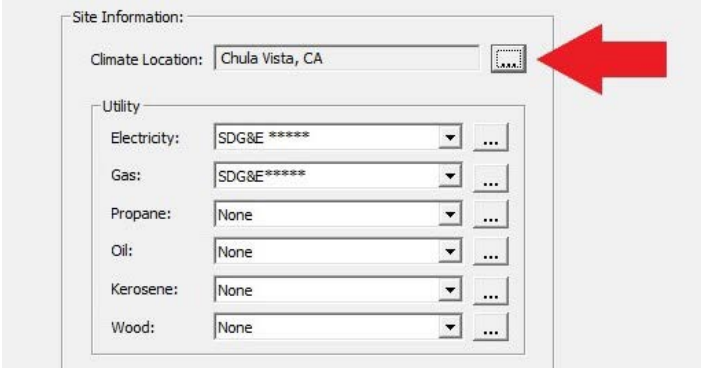
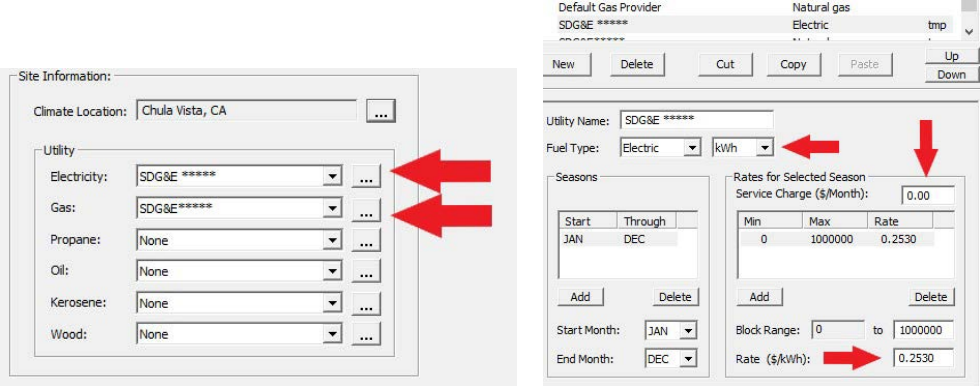
Documents Recommended to Perform QA/QC Review

Document	Document Description
REM/Design Digital Building File (.blg)	This is the digital REM/Design audit file. All building inputs are entered into the REM/Design audit software. The software creates the Improvement Analysis Reports (IAR) and calculates the Measure and Package SIR values. The current version of the software is v.16.0.2.
Measure Level (All) IAR	The Measure Level (All) Improvement Analysis Report is created in REM/Design and documents all measures included in the initial audit. Measures included in this report may have SIR values less than, equal to, or greater than 1.0.
Measure Level (Final) IAR	The Measure Level (Final) Improvement Analysis Report is created in REM/Design and documents the measures installed (included in the audit-driven measure or ADM Package) and their SIR values. All measures included in this report should have an SIR ≥ 1.0 , with the possible exception of air sealing measures (infiltration-

Document	Document Description
	reduction).
ADM Package (All) IAR (Dwelling SIR [All])	The Audit Driven Measure Package (All) Improvement Analysis Report is created in REM/Design and documents the initial SIR value of the package of audit driven measures. This SIR value will determine if: 1) all initial measures may be installed, 2) measures need to be removed from the package, or 3) leveraging is feasible.
ADM Package IAR (Dwelling SIR IAR)	The Audit Driven Measure Package Improvement Analysis Report is created in REM/Design and documents the final Package SIR value comprised of the audit driven measures to be installed.
Building File Report	The Building File Report is created in REM/Design and documents all audit software inputs. This document can be used in conjunction with the CSD 544 Energy Audit Input Report Form to verify that the information entered into the audit software is the same information that is collected at the dwelling.
CSD 540 (or agency equivalent)	The CSD 540 Dwelling Assessment Form documents the findings of the onsite dwelling assessment. Assessments include a safety check for potentially hazardous issues, measure feasibility evaluations, and identification of existing materials/conditions. The CSD 540 is only available for on-site file review by the third-party QA inspector.
CSD 544	The CSD 544 Energy Audit Input Report Form is a paper representation of the REM/Design fields, which allows the auditor/assessor to collect the required modeling data from the building and transfer it to the energy audit software at a later time. This document can be used in conjunction with the Building File Report to verify that the information entered into the audit software is the same information as collected at the dwelling. The CSD 544 is typically only available for on-site file review by the third-party QA inspector.
CSD 700 (if applicable)	The CSD 700 Combustion Appliance Safety Inspection Form documents any health and safety (H&S) issues with combustion appliances. DOE requires all H&S issues to be audited as an ECM prior to billing as a H&S measure. The CSD 700 series forms are only available for on-site file review by the third-party QA inspector.
CSD 704 (if applicable)	The CSD 704 Shell Leakage Data Sheet captures the measurement of shell leakage in CFM50 before sealing begins and at required increments including the final CFM50/ACH50 reading. These values may be included in the audit if the auditor decides to include infiltration reduction measures in the dwelling's work scope. The CSD 704 is only available for on-site file review by the third-party QA inspector.

Document	Document Description
CSD 706 (if applicable)	The CSD 706 Duct Leakage Data Sheet captures the measurement of duct leakage in CFM25 before sealing begins and at required increments including the final CFM25 reading. These values may be included in the audit if the auditor decides to include duct sealing in the dwelling's work scope. The CSD 706 is only available for on-site file review by the third-party QA inspector.
CSD 710 (if applicable)	The CSD 710 DOE Priority List Checklist form is used to verify the decision-making process relative to the use of the energy audit and the priority list. All energy conservation measure (ECM) SIRs are documented on this form. For audit driven measures, the SIRs on the CSD 710 should match the SIRs on the Measure Level (Final) IAR.
Job Sheet Detail (or equivalent billing document)	This billing document is specific to the agency or installation subcontractor, and it documents all measures installed at the dwelling regardless of funding source. Costs documented on this form should match what is billed to the eCORE system. The job sheet detail billing document is only available for on-site file review by the third-party QA inspector.
Justification Images	Justification images (photos) portray the characteristics of key conditions of the dwelling. These images help the reviewer to better understand the audit inputs, check for accuracy, and aid in answering questions.
eCORE Export	eCORE is CSD's electronic billing system and includes all information related to the dwelling including measures installed, costs, etc. Costs included in eCORE reflect the actual reimbursements for work performed. The CSD QA Inspections Unit will provide an eCORE export report to the QA inspector.

REM/Design Building File Review – Table 1: Audit Checklist

Site Information	
Task	Reference Picture
<p>1. Verify the climate location is appropriate for the dwelling.</p> <ul style="list-style-type: none"> The selected Climate Location should be in the same climate zone where the audited dwelling is located. If there is more than one Climate Location listed in the same climate zone, the location closet to the audited dwelling should be selected. <p>Use: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/climate-zone-tool-maps-and</p> <div style="text-align: center;">  <p>REM Climate Location List.pdf</p> </div>	
<p>2. Verify the utility rate is entered correctly.</p> <ul style="list-style-type: none"> Check Electric or Natural Gas Rates - Refer to the TRM Appendix D, page 39 for the current blended rates. Check that the selected fuel type(s) are appropriate for the home and units are matched correctly (Electric = kWh, Natural Gas = Therms, Propane = Gallons, Fuel Oil = Gallons, Kerosene = Gallons, Wood = Cords) 	

Site Information

Task

Reference Picture

General Design Characteristics

Task

Reference Picture

3. **Verify the general design of the home is input correctly.**
- Use the justification images and online sources (i.e., Zillow) to verify the House Type and Foundation Type inputs.

Detailed Mode: Similar to Simplified mode, with additional selection options.

MF Specific: Ensure the total number of bedrooms equals the total number of bedrooms in the building.

MH Specific: When a dwelling is defined as a mobile home, the conditioned floor area and other characteristics inputs will be disabled and the mobile home length, width, and height are required to be entered.

Simplified Input Mode

Simplified Inputs: General Design Characteristics

House Type: View Conditioned Floor Area:

Foundation Type: Number of Bedrooms:

	Heated Basement	First Level	Mid Level	Second Level	Third Level
Distribution of Cond. Floor Area:	<input type="text" value="0"/> %	<input type="text" value="100"/> %	<input type="text" value="0"/> %	<input type="text" value="0"/> %	<input type="text" value="0"/> %

Characteristics of Each Floor Level

	Heated Basement	First Level	Mid Level	Second Level	Third Level
Number of Corners:	<input type="text" value="4"/>	<input type="text" value="4"/>	<input type="text" value="4"/>	<input type="text" value="4"/>	<input type="text" value="4"/>
Percent Open to Level Above:	<input type="text" value="0"/> %	<input type="text" value="0"/> %	<input type="text" value="0"/> %	<input type="text" value="0"/> %	<input type="text" value="0"/> %
Nominal Flat Ceiling Height:	<input type="text" value="0.0"/>	<input type="text" value="8.0"/>	<input type="text" value="0.0"/>	<input type="text" value="0.0"/>	<input type="text" value="0.0"/>
Percent Vaulted Ceiling:	<input type="text" value="0"/> %	<input type="text" value="0"/> %	<input type="text" value="0"/> %	<input type="text" value="0"/> %	<input type="text" value="0"/> %

Conditioned Floor Area Over Garage is % of Level's Floor Area.

Mobile Home: Length (ft): Width (ft): Height (ft):

Detailed Input Mode

General Building Information

Conditioned Floor Area (sq ft): Year Built:

Infiltration Volume (cu ft):

Housing Type:

Level Type [Apartments Only]:

Number of Units (Multi-Family Whole Buildings only):

Number of Floors Above Grade (incl walkout bsmts):

Number of Bedrooms:

Foundation Type:

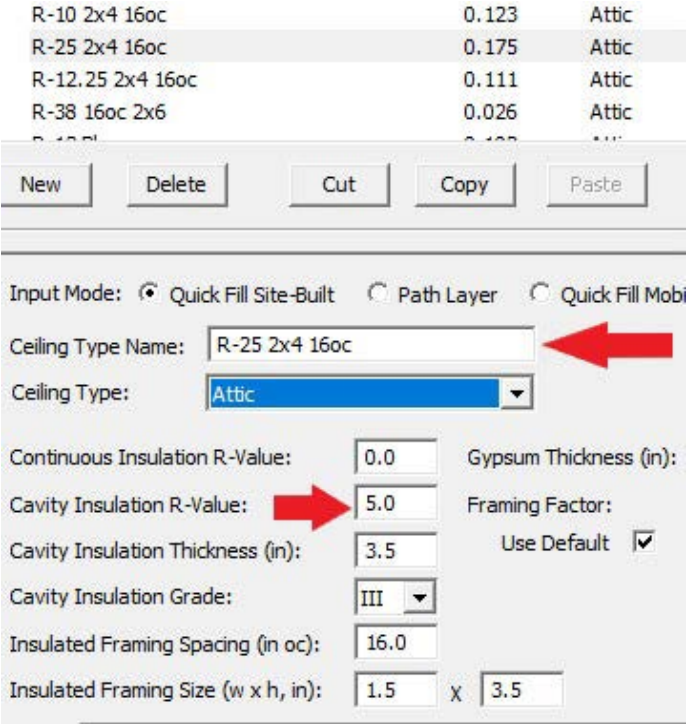
Foundation is w/in Infiltration Volume:

Enclosed Crawl Space Type:

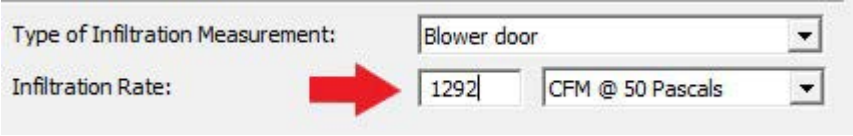
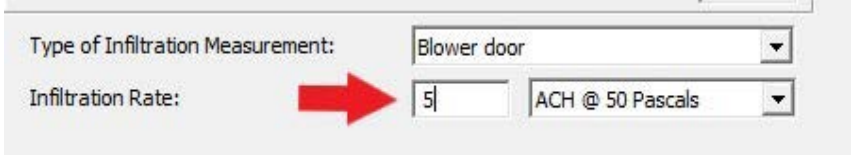
Number of Stories Including Conditioned Basement:

Thermal Boundary Location:

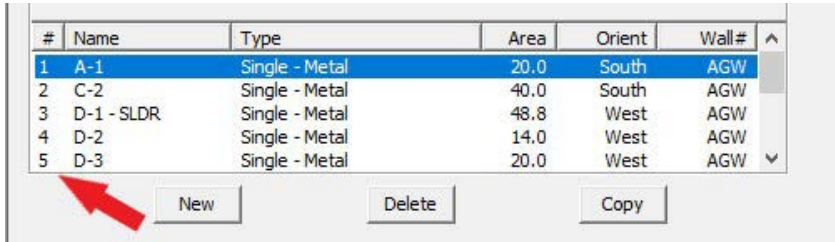
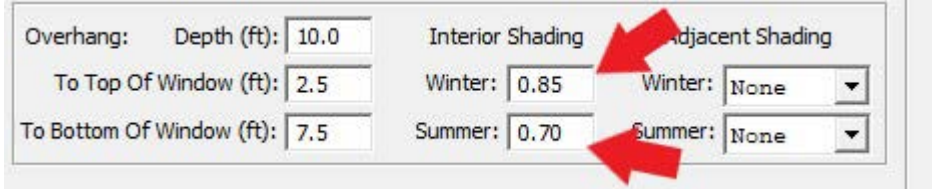
Building Envelope Characteristics

Task	Reference Picture															
<p>4. Verify the building envelope characteristics match existing conditions.</p> <ul style="list-style-type: none"> Use the justification images to compare documented existing conditions that were modeled in the audit. When measure leveraging is utilized, base case characteristics in the audit may not match assessment documentation. When alternative funds are used to install a measure, the base case model is updated to reflect the installed measure. A note stating leveraging was used should be included in the audit and can be verified using eCORE documentation. Compare the name of all selected library measure names with the actual values in the library (e.g., Attic insulation with R-25 in name, but the actual reported value is R-5). <p>Detailed Mode: The above verification still applies. Each of the building characteristics will have its own screen to allow for more than one envelope type.</p> <p>MF Specific: There may be many different types of building envelope characteristics. Each individual unit may have a different type of floor, ceiling, or wall. Verify the entries for all units.</p> <p>MH Specific: When a dwelling is defined as a mobile home, the floor and ceiling characteristics should be modeled using the mobile home specific inputs “Quick Fill Mobile Home”.</p>	 <table border="1" style="margin-bottom: 10px; border-collapse: collapse; width: 100%;"> <tbody> <tr><td>R-10 2x4 16oc</td><td style="text-align: right;">0.123</td><td>Attic</td></tr> <tr><td>R-25 2x4 16oc</td><td style="text-align: right;">0.175</td><td>Attic</td></tr> <tr><td>R-12.25 2x4 16oc</td><td style="text-align: right;">0.111</td><td>Attic</td></tr> <tr><td>R-38 16oc 2x6</td><td style="text-align: right;">0.026</td><td>Attic</td></tr> <tr><td>R-12.5</td><td style="text-align: right;">0.100</td><td>Attic</td></tr> </tbody> </table> <p> <input type="button" value="New"/> <input type="button" value="Delete"/> <input type="button" value="Cut"/> <input type="button" value="Copy"/> <input type="button" value="Paste"/> </p> <hr/> <p>Input Mode: <input checked="" type="radio"/> Quick Fill Site-Built <input type="radio"/> Path Layer <input type="radio"/> Quick Fill Mobile Home</p> <p>Ceiling Type Name: <input style="border: 1px solid gray;" type="text" value="R-25 2x4 16oc"/> ←</p> <p>Ceiling Type: Attic ▼</p> <p>Continuous Insulation R-Value: <input style="width: 50px;" type="text" value="0.0"/> Gypsum Thickness (in): <input style="width: 50px;" type="text"/></p> <p>Cavity Insulation R-Value: → <input style="width: 50px;" type="text" value="5.0"/> Framing Factor: <input type="checkbox"/> Use Default</p> <p>Cavity Insulation Thickness (in): <input style="width: 50px;" type="text" value="3.5"/></p> <p>Cavity Insulation Grade: III ▼</p> <p>Insulated Framing Spacing (in oc): <input style="width: 50px;" type="text" value="16.0"/></p> <p>Insulated Framing Size (w x h, in): <input style="width: 50px;" type="text" value="1.5"/> x <input style="width: 50px;" type="text" value="3.5"/></p>	R-10 2x4 16oc	0.123	Attic	R-25 2x4 16oc	0.175	Attic	R-12.25 2x4 16oc	0.111	Attic	R-38 16oc 2x6	0.026	Attic	R-12.5	0.100	Attic
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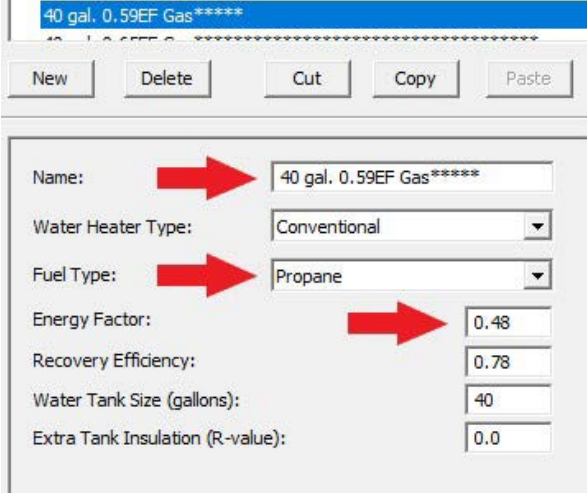
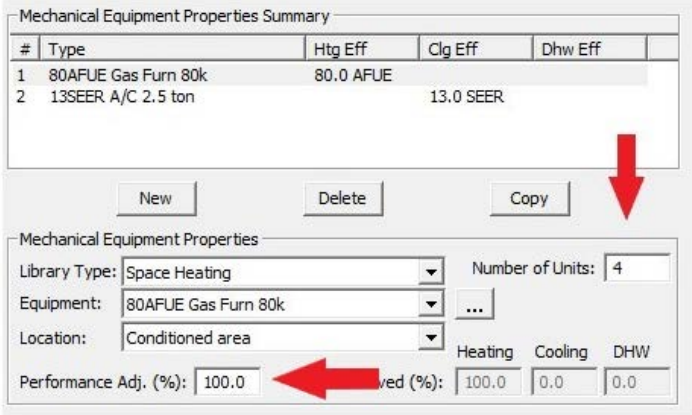
Building Envelope Characteristics

Task	Reference Picture
<p>5. Verify the type of infiltration measurement is “Blower door”.</p> <ul style="list-style-type: none"> Use the eCORE documentation to check the program infiltration reduction was billed. <ul style="list-style-type: none"> When billed to DOE, the infiltration rate should match the initial shell leakage test reading (CFM50). Verify that an appropriate infiltration number is used and not the assumed ACH number. When billed to LIHEAP, the infiltration rate should be entered as <u>5 ACH50</u>. Refer to the TRM Appendix D, page 24 for a detailed explanation on how to model infiltration. <p>Detailed Mode: When an audit was completed in detailed mode, there will be a screen for Whole Dwelling Infiltration. Ensure the following inputs were used:</p> <ul style="list-style-type: none"> Input Type = Blower Door Shelter Class = 1 Code Verification = tested <p>MF Specific: The sum of all the units’ infiltration rates (CFM50/ACH50), will be entered in the audit.</p>	<div style="text-align: center; margin-bottom: 20px;">DOE</div>  <div style="text-align: center; margin-bottom: 20px;">LIHEAP</div> 

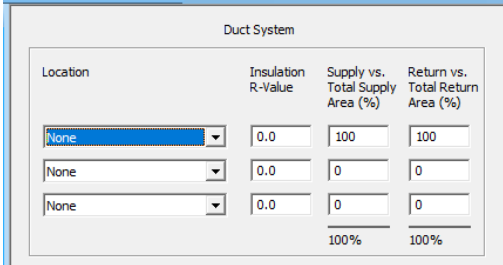
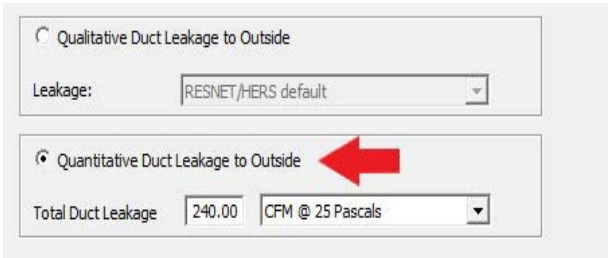
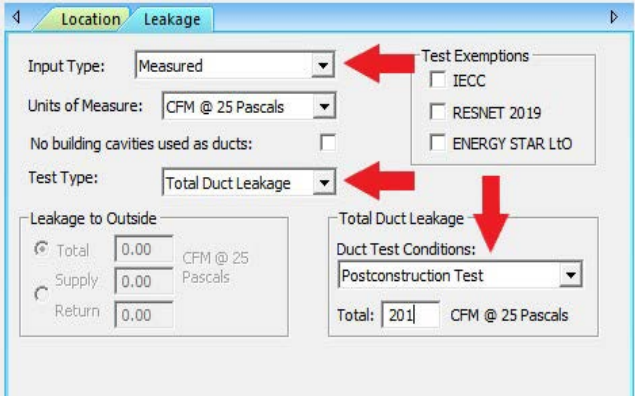
Windows and Glass Door Properties Summary

Task	Reference Picture																																				
<p>6. Verify the number and types of windows.</p> <ul style="list-style-type: none"> Verify the number and types of windows entered in the audit using the justification photos and online sources. All windows must be included in the audit. Using the eCORE documentation, verify if any of the windows were replaced for catastrophic leakage using LIHEAP funds. When installed in this way, the audit needs to show the new dual pane windows as the base case. 	 <table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th>#</th> <th>Name</th> <th>Type</th> <th>Area</th> <th>Orient</th> <th>Wall#</th> </tr> </thead> <tbody> <tr style="background-color: #0070c0; color: white;"> <td>1</td> <td>A-1</td> <td>Single - Metal</td> <td>20.0</td> <td>South</td> <td>AGW</td> </tr> <tr> <td>2</td> <td>C-2</td> <td>Single - Metal</td> <td>40.0</td> <td>South</td> <td>AGW</td> </tr> <tr> <td>3</td> <td>D-1 - SLDR</td> <td>Single - Metal</td> <td>48.8</td> <td>West</td> <td>AGW</td> </tr> <tr> <td>4</td> <td>D-2</td> <td>Single - Metal</td> <td>14.0</td> <td>West</td> <td>AGW</td> </tr> <tr> <td>5</td> <td>D-3</td> <td>Single - Metal</td> <td>20.0</td> <td>West</td> <td>AGW</td> </tr> </tbody> </table>	#	Name	Type	Area	Orient	Wall#	1	A-1	Single - Metal	20.0	South	AGW	2	C-2	Single - Metal	40.0	South	AGW	3	D-1 - SLDR	Single - Metal	48.8	West	AGW	4	D-2	Single - Metal	14.0	West	AGW	5	D-3	Single - Metal	20.0	West	AGW
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4	D-2	Single - Metal	14.0	West	AGW																																
5	D-3	Single - Metal	20.0	West	AGW																																
<p>7. Verify all shading related properties are entered correctly.</p> <ul style="list-style-type: none"> Overhang: Use the justification images to confirm the window overhangs reported. Interior Shading: Use the justification images to confirm the interior shading values (i.e., blinds, curtains). These are the only allowable values: <ul style="list-style-type: none"> With interior shading = 0.85 for Winter and 0.70 for Summer Without interior shading = 1.0 for Winter and Summer Adjacent Shading: Accounts for shading by exterior objects. Use justification images to determine appropriate selections for Winter and Summer. 	 <table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td>Overhang: Depth (ft):</td> <td><input type="text" value="10.0"/></td> <td>Interior Shading</td> <td>Adjacent Shading</td> </tr> <tr> <td>To Top Of Window (ft):</td> <td><input type="text" value="2.5"/></td> <td>Winter: <input type="text" value="0.85"/></td> <td>Winter: <input type="text" value="None"/></td> </tr> <tr> <td>To Bottom Of Window (ft):</td> <td><input type="text" value="7.5"/></td> <td>Summer: <input type="text" value="0.70"/></td> <td>Summer: <input type="text" value="None"/></td> </tr> </table>	Overhang: Depth (ft):	<input type="text" value="10.0"/>	Interior Shading	Adjacent Shading	To Top Of Window (ft):	<input type="text" value="2.5"/>	Winter: <input type="text" value="0.85"/>	Winter: <input type="text" value="None"/>	To Bottom Of Window (ft):	<input type="text" value="7.5"/>	Summer: <input type="text" value="0.70"/>	Summer: <input type="text" value="None"/>																								
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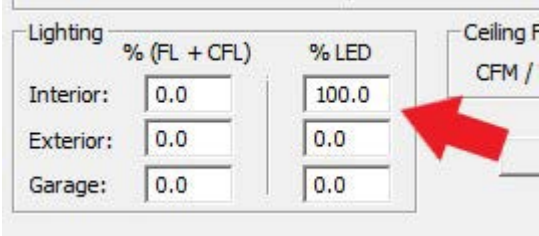
Mechanical Equipment Properties Summary

Task	Reference Picture
<p>8. Verify mechanical equipment properties are modeled correctly.</p> <ul style="list-style-type: none"> Use the justification images to verify the mechanical equipment specifications were entered in the audit correctly. Compare the equipment name and the information entered into the library (e.g., water heater is named “40 gal 0.59EF Gas” but the library has an EF of 0.48). When measure leveraging is utilized, base case equipment characteristics in the audit may not match assessment documentation. When alternative funds are used to install a measure, the base case model is updated to reflect the installed value. A note stating leveraging was used should be included in the audit and can be verified using the eCORE documentation. The efficiency of air conditioners and heat pumps (equipment with a compressed refrigerant cycle) can be derated. If a mechanical equipment was derated, there should be a note in the audit. Please refer to the TRM Appendix D, page 11 for more details. Confirm the performance adjustment is set to 100 percent for all equipment. <p>MF Specific: Confirm there is mechanical equipment entered for each unit. This can be done in two ways: 1) If each unit has the same type of equipment, then there may be one equipment entry, but the total number of units should be entered. 2) If the units have different types of equipment, then there must be a separate entry for each different type/size of equipment.</p>	 

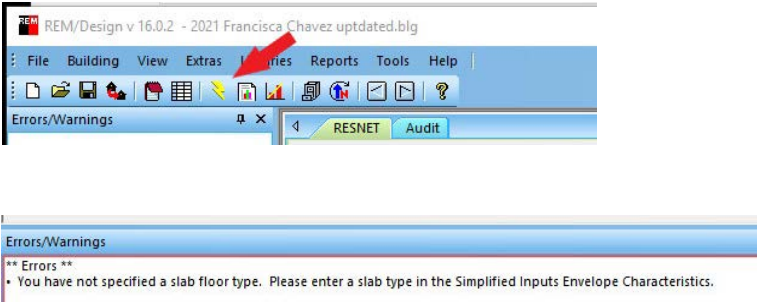
Duct System

Task	Reference Picture
<p>9. Verify that the duct system was modeled when a ducted heating/cooling system exists.</p> <ul style="list-style-type: none"> When the audit input states “None”, use the justification images to confirm existing equipment does not utilize a duct system. 	
<p>10. Verify the type of duct leakage is set to “Quantitative Duct Leakage to Outside”.</p> <ul style="list-style-type: none"> Use eCORE documentation to check the program duct sealing was billed to. <ul style="list-style-type: none"> When billed to DOE, the entry should match the initial duct test reading. Verify that an appropriate duct leakage number is used and not 15 percent of the system airflow. When billed to LIHEAP, the entry should equal 15 percent of the system airflow. Use the justification images to verify the airflow calculation. Refer to the TRM Appendix D, page 23 for more details about modeling duct leakage. <p>Detailed Mode: Under the leakage tab of the screen the input type should be entered as measured, the test type should be Total Duct Leakage, and the duct test conditions should be Postconstruction test.</p> <p>MF Specific: If the dwelling has multiple duct systems, then each duct system must be modeled in the audit. For example, if the dwelling is a four-unit multi-family and each unit has its own FAU then the audit should have four separate duct systems each with its own total duct leakage CFM25 reading.</p>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 20px;"> <p>Simplified Input Mode</p>  </div> <div> <p>Detailed Input Mode</p>  </div> </div>

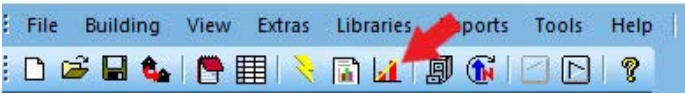
Duct System

Task	Reference Picture
RESNET Tab	
Task	Reference Picture
<p>11. Verify the interior LED input is set to 100 percent.</p>	

Quick Analysis

Task	Reference Picture
<p>12. Verify there are no errors present that prevent report generation.</p> <ul style="list-style-type: none"> Run the Quick Analysis for the audit. Any errors or warnings will appear in the Errors/Warnings window. Errors are required to be addressed; warnings are allowed. 	

Improvement Analysis

Task	Reference Picture
<p>13. Validate that all feasible ADMs are included in the improvement analysis.</p> <ul style="list-style-type: none"> Click the bar graph button on the top ribbon to open the "Energy Efficient Improvement Measures to Consider" screen. 	

Improvement Analysis


Task

- Click the “Previous Run” button on the top of the Energy Efficient Improvement Measures to Consider screen. This will load all measures that were proposed in the audit.
- Use eCORE documentation to verify that all audit driven measures are either: 1) included in the audit improvements, or 2) the audit base case was updated to account for the measure being installed using another funding source.
- Ensure that the measure grouping policy was followed. Measures such as windows of the same type, insulations of the same type (e.g., all walls or multiples of the same style of attics), and heating/cooling upgrades should stay grouped and be counted as one measure. See TRM Appendix D, page 10 for the policy on measure grouping.

Reference Picture


Load Measures From:

	Element	Existing	Proposed	Measure Cost




Load Measures From:

	Element	Existing	Proposed	Measure Cost
* 0	Ceiling 1: Attic	R-5 2x4 16oc	R-30 Blow...	Increase by R-25
* 0	AG Wall 1: Main A...	R-0 2x4 16oc*****	add R-13	Add R-13 wall0
* 0	Floor 1: Cond->O...	Uninsulated	R-19	R-19 Floor
* 0	Infiltration:	7.20-10.80 ACH50	5.00 As S...	5 ACH
* 0	Leakage 1:	Tot 192-288 CFM25	Tot 190 A...	Duct Leakage
* 0	Equip 2: HEAT:	80AFUE Gas Furn...	94AFUE G...	New furnace



	Element	Existing	Proposed	Measure Cost
* 2	Ceiling 1: Attic	R-5 2x4 16oc	R-30 Blow...	Increase by R-25
* 2	AG Wall 1: Main A...	R-0 2x4 16oc*****	add R-13	Add R-13 wall0
* 2	Floor 1: Cond->O...	Uninsulated	R-19	R-19 Floor
* 2	Infiltration:	7.20-10.80 ACH50	5.00 As S...	5 ACH
* 2	Leakage 1:	Tot 192-288 CFM25	Tot 190 A...	Duct Leakage
* 2	Equip 2: HEAT:	80AFUE Gas Furn...	94AFUE G...	New furnace



Improvement Analysis

Task

14. Verify the proposed measure characteristics reflect the actual installed measures.

- Document the improvements included in the audit on the checklist. These values must be confirmed by the agency inspector on-site to ensure that each proposed measure included in the audit is equal to what was installed.
- Ensure that the library entry name is accurate for the specifics entered into the library.
- Confirm the correct effective useful life value was used in the "Measure Cost" library. Compare to the EUL list located the TRM Appendix D, page 40.

Reference Picture

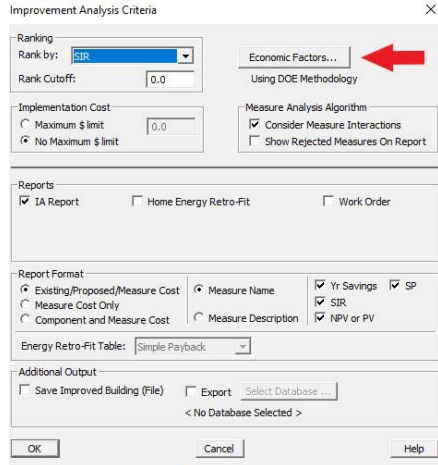
Software interface showing measure characteristics for "R-30 Blown, Attic". The interface includes a list of items with columns for name, value, and unit. Below the list are buttons for "New", "Delete", "Cut", "Copy", "Paste", "Up", and "Down". The "Input Mode" is set to "Quick Fill Site-Built". The "Ceiling Type Name" is "R-30 Blown, Attic" and the "Ceiling Type" is "Attic". The "Continuous Insulation R-Value" is 17.0, "Cavity Insulation R-Value" is 13.0, "Cavity Insulation Thickness (in)" is 3.5, and "Cavity Insulation Grade" is "I". The "Gypsum Thickness (in)" is 0.500 and the "Framing Factor" is 0.1100. The "Use Default" checkbox is checked.

Software interface showing measure cost details. The interface includes a table with columns for "Item", "Cost", and "Units". The "Life" is set to 30 years.

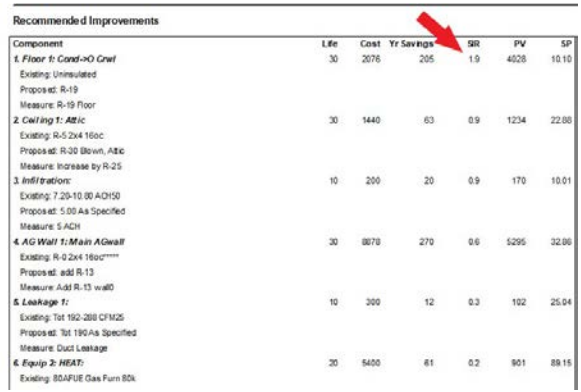
Item	Cost	Units
Labor	0.480	\$/gross sqft
Material	0.720	\$/gross sqft
	0.000	\$
	0.000	\$

Life: 30 years

Improvement Analysis Criteria

Task	Reference Picture
<p>15. Verify the improvement analysis criteria selections align with CSD program policy.</p> <ul style="list-style-type: none"> Rank by = SIR Rank Cutoff = 0.0 Implementation Cost = “No Maximum \$ limit” Ensure the Economic Factor is set to “Using DOE Methodology” Measure Analysis Algorithm = “Consider Measure Interactions” Clicking “OK” will open the Improvement Analysis Report 	

Improvement Analysis Report

Task	Reference Picture																																																																																																																																																																	
<p>16. Verify all installed measures have a Measure SIR and an ADM Package SIR ≥ 1.0.</p> <ul style="list-style-type: none"> Use eCORE documentation to verify that all measures listed on the Measure Level (Final) IAR with an SIR ≥ 1.0 were installed. Air sealing is the only measure that may be installed without a Measure SIR ≥ 1.0, but the measure must meet ADM Package SIR requirements. If an audit-driven measure included in the work scope was not installed, confirm there is a note in the client file documenting why the measure could not be installed. If an audit-driven measure listed on the Measure Level (All) Report IAR with an SIR ≤ 1.0 was installed, confirm documentation showing that alternate funds were used to 	 <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th>Component</th> <th>Life</th> <th>Cost</th> <th>Yr Savings</th> <th>SIR</th> <th>PV</th> <th>SP</th> </tr> </thead> <tbody> <tr> <td>1. Floor 1: Cond->0 Gwlf</td> <td>30</td> <td>2076</td> <td>205</td> <td>1.9</td> <td>4028</td> <td>10.10</td> </tr> <tr> <td>Existing: Uninsulated</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Proposed: R-19</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Measure: R-19 Floor</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2. Ceiling 1: Attic</td> <td>30</td> <td>1440</td> <td>63</td> <td>0.9</td> <td>1234</td> <td>22.88</td> </tr> <tr> <td>Existing: R-5 2x4 16oc</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Proposed: R-20 Down Attc</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Measure: Increase by R-20</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3. Infiltration:</td> <td>10</td> <td>200</td> <td>20</td> <td>0.9</td> <td>170</td> <td>10.01</td> </tr> <tr> <td>Existing: 7.25-10.00 AQH5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Proposed: 5.00 Aa Specified</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Measure: 5 ACH</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4. IG Wall 1: Main IGwall</td> <td>30</td> <td>8070</td> <td>270</td> <td>0.6</td> <td>5295</td> <td>32.06</td> </tr> <tr> <td>Existing: R-0 2x4 16oc****</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Proposed: add R-13</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Measure: Add R-13 wall0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5. Leakage 1:</td> <td>10</td> <td>300</td> <td>12</td> <td>0.3</td> <td>102</td> <td>25.04</td> </tr> <tr> <td>Existing: Tot 190-200 CFM25</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Proposed: Tot 190 Aa Specified</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Measure: Duct Leakage</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>6. Equip 2: HRAT:</td> <td>20</td> <td>6400</td> <td>61</td> <td>0.2</td> <td>901</td> <td>89.15</td> </tr> <tr> <td>Existing: 80AFUE Gas Furn 80k</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Component	Life	Cost	Yr Savings	SIR	PV	SP	1. Floor 1: Cond->0 Gwlf	30	2076	205	1.9	4028	10.10	Existing: Uninsulated							Proposed: R-19							Measure: R-19 Floor							2. Ceiling 1: Attic	30	1440	63	0.9	1234	22.88	Existing: R-5 2x4 16oc							Proposed: R-20 Down Attc							Measure: Increase by R-20							3. Infiltration:	10	200	20	0.9	170	10.01	Existing: 7.25-10.00 AQH5							Proposed: 5.00 Aa Specified							Measure: 5 ACH							4. IG Wall 1: Main IGwall	30	8070	270	0.6	5295	32.06	Existing: R-0 2x4 16oc****							Proposed: add R-13							Measure: Add R-13 wall0							5. Leakage 1:	10	300	12	0.3	102	25.04	Existing: Tot 190-200 CFM25							Proposed: Tot 190 Aa Specified							Measure: Duct Leakage							6. Equip 2: HRAT:	20	6400	61	0.2	901	89.15	Existing: 80AFUE Gas Furn 80k						
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Improvement Analysis Report

Task

Reference Picture

leverage the measure. Verify that the base case was updated in the REM/Design Digital Building File.

- Check the ADM Package (Final) IAR (Dwelling IAR) Report to confirm that all measures included in the final ADM work scope have a grouped SIR ≥ 1.0 .

Recommended Improvements

Component	Life	Cost	Yr Savings	SIR	PV	SP
Group:	25	22919	838	0.6	14661	27.36
1. Ceiling 1: Attic	30	1440				
Existing: R-5 2x4 16oc*						
Proposed: R-30 Blown, Attic						
Measure: Increase by R-25						
2. AG Wall 1: Main AGWall	30	8878				
Existing: R-0 2x4 16oc****						
Proposed: add R-13						
Measure: Add R-13 wall						
3. Floor 1: Cond->O Crwl	30	2076				
Existing: Uninsulated						
Proposed: R-19						
Measure: R-19 Floor						
4. Window 1: A-1	20	370				
Existing: Single - Metal						
Proposed: DBLGL/Arg - Vinyl						
Measure: WINDOW Repl \$15.0/SQFT + LABOR\$150****						
5. Window 2: C-2	20	630				
Existing: Single - Metal						
Proposed: DBLGL/Arg - Vinyl						
Measure: WINDOW Repl \$15.0/SQFT + LABOR\$150****						
6. Window 3: D-1 - SLDR	20	744				
Existing: Single - Metal						
Proposed: DBLGL/Arg - Vinyl						
Measure: WINDOW Repl \$15.0/SQFT + LABOR\$150****						

17. Verify the reimbursed ADM costs are less than or equal to the ADM costs on the IAR.

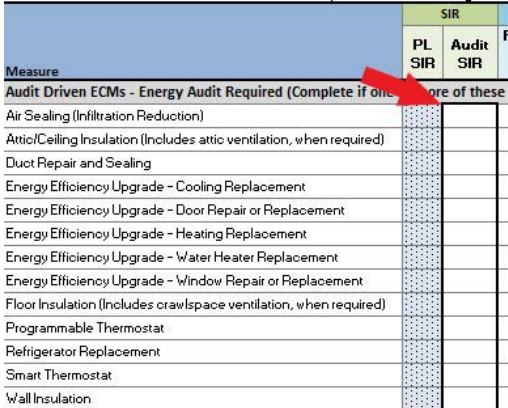
- Using the Measure Level (Final) IAR and the eCORE documentation, confirm the dollar amount billed and reimbursed for each measure on the eCORE documentation is equal to or less than what was included in the audit.

MF Specific: Depending on how a multi-family building is modeled, the cost included on the IAR may equal the total cost of the measure for all units. To compare costs, costs for all individual dwelling units will need to be added together.

Recommended Improvements

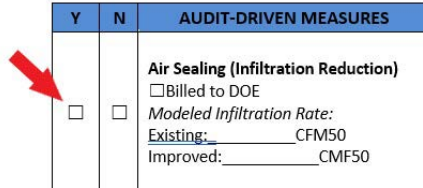
Component	Life	Cost	Yr Savings	SIR	PV	SP
1. Floor 1: Cond->O Crwl	30	2076	205	1.9	4028	10.10
Existing: Uninsulated						
Proposed: R-19						
Measure: R-19 Floor						
2. Ceiling 1: Attic	30	1440	63	0.9	1234	22.88
Existing: R-5 2x4 16oc						
Proposed: R-30 Blown, Attic						
Measure: Increase by R-25						
3. Infiltration:	10	200	20	0.9	170	10.01
Existing: 7.20-10.80 ACH50						
Proposed: 5.00 As Specified						
Measure: 5 ACH						
4. AG Wall 1: Main AGWall	30	8878	270	0.6	5295	32.86
Existing: R-0 2x4 16oc****						
Proposed: add R-13						
Measure: Add R-13 wall						
5. Leakage 1:	10	300	12	0.3	102	25.04
Existing: Tot 192-288 CFM25						
Proposed: Tot 190 As Specified						
Measure: Duct Leakage						
6. Equip 2: HEAT:	20	5400	61	0.2	901	89.15
Existing: 80AFUE Gas Furn 80k						
Proposed: 94AFUE Gas Furn 80k						

Improvement Analysis Report

Task	Reference Picture																																															
<p>18. Verify all final measure(s) and ADM Package SIR are reported on the CSD 710 form.</p> <ul style="list-style-type: none"> For audit-driven measures, the SIRs on the CSD 710 form should match the SIRs calculated in the Measure Level (Final) IAR and the ADM Package SIR IAR. 	 <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr style="background-color: #d9e1f2;"> <th rowspan="2">Measure</th> <th colspan="2">SIR</th> </tr> <tr style="background-color: #d9e1f2;"> <th>PL SIR</th> <th>Audit SIR</th> </tr> </thead> <tbody> <tr> <td colspan="3">Audit Driven ECMs - Energy Audit Required (Complete if one or more of these)</td> </tr> <tr> <td>Air Sealing (Infiltration Reduction)</td> <td style="background-color: #d9e1f2;"></td> <td></td> </tr> <tr> <td>Attic/Ceiling Insulation (Includes attic ventilation, when required)</td> <td style="background-color: #d9e1f2;"></td> <td></td> </tr> <tr> <td>Duct Repair and Sealing</td> <td style="background-color: #d9e1f2;"></td> <td></td> </tr> <tr> <td>Energy Efficiency Upgrade - Cooling Replacement</td> <td style="background-color: #d9e1f2;"></td> <td></td> </tr> <tr> <td>Energy Efficiency Upgrade - Door Repair or Replacement</td> <td style="background-color: #d9e1f2;"></td> <td></td> </tr> <tr> <td>Energy Efficiency Upgrade - Heating Replacement</td> <td style="background-color: #d9e1f2;"></td> <td></td> </tr> <tr> <td>Energy Efficiency Upgrade - Water Heater Replacement</td> <td style="background-color: #d9e1f2;"></td> <td></td> </tr> <tr> <td>Energy Efficiency Upgrade - Window Repair or Replacement</td> <td style="background-color: #d9e1f2;"></td> <td></td> </tr> <tr> <td>Floor Insulation (Includes crawlspace ventilation, when required)</td> <td style="background-color: #d9e1f2;"></td> <td></td> </tr> <tr> <td>Programmable Thermostat</td> <td style="background-color: #d9e1f2;"></td> <td></td> </tr> <tr> <td>Refrigerator Replacement</td> <td style="background-color: #d9e1f2;"></td> <td></td> </tr> <tr> <td>Smart Thermostat</td> <td style="background-color: #d9e1f2;"></td> <td></td> </tr> <tr> <td>Wall Insulation</td> <td style="background-color: #d9e1f2;"></td> <td></td> </tr> </tbody> </table>	Measure	SIR		PL SIR	Audit SIR	Audit Driven ECMs - Energy Audit Required (Complete if one or more of these)			Air Sealing (Infiltration Reduction)			Attic/Ceiling Insulation (Includes attic ventilation, when required)			Duct Repair and Sealing			Energy Efficiency Upgrade - Cooling Replacement			Energy Efficiency Upgrade - Door Repair or Replacement			Energy Efficiency Upgrade - Heating Replacement			Energy Efficiency Upgrade - Water Heater Replacement			Energy Efficiency Upgrade - Window Repair or Replacement			Floor Insulation (Includes crawlspace ventilation, when required)			Programmable Thermostat			Refrigerator Replacement			Smart Thermostat			Wall Insulation		
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REM/Design Building File Review – Table 2: Measure Information from the Audit to Confirm On-site

Measure Identification (Reviewer)

Task	Reference Picture						
<p>Using the REM/Design energy audit files, identify which ADMs were modelled as improvements. Mark each item with “Y” if measure was modelled or “N” if measure was not modelled.</p>	 <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr style="background-color: #d9e1f2;"> <th>Y</th> <th>N</th> <th>AUDIT-DRIVEN MEASURES</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td> Air Sealing (Infiltration Reduction) <input type="checkbox"/> Billed to DOE Modeled Infiltration Rate: Existing: _____ CFM50 Improved: _____ CFM50 </td> </tr> </tbody> </table>	Y	N	AUDIT-DRIVEN MEASURES	<input type="checkbox"/>	<input type="checkbox"/>	Air Sealing (Infiltration Reduction) <input type="checkbox"/> Billed to DOE Modeled Infiltration Rate: Existing: _____ CFM50 Improved: _____ CFM50
Y	N	AUDIT-DRIVEN MEASURES					
<input type="checkbox"/>	<input type="checkbox"/>	Air Sealing (Infiltration Reduction) <input type="checkbox"/> Billed to DOE Modeled Infiltration Rate: Existing: _____ CFM50 Improved: _____ CFM50					

Measure Value Identification (Reviewer)

Task	Reference Picture
<p>1. Using the REM/Design energy audit files, identify both the existing and improved measure values for on-site verification. Entered values are unique to each measure and listed on the checklist (i.e. CFM 25, efficiency, type, R-Value, etc.)</p> <ul style="list-style-type: none"> • If a measure is included in the audit as an improvement, both the existing and improved measure values are listed. • If a measure is not included in the audit as an improvement, only list the existing measure value 	
<p>2. For air sealing and duct repair and sealing, identify if the measure was billed to DOE.</p>	

On-Site Confirmation (Inspector)

Task	Reference Picture
<p>For installed measures, verify the improved values noted by the reviewer match the on-site conditions.</p> <ul style="list-style-type: none"> • Mark “Yes” when the installed condition matches the improved value noted by the reviewer. • Mark “No” when the installed condition does not match the improved value noted by the reviewer. When the installed condition based on the on-site inspection does not match the improved value as noted by the reviewer, document the discrepancy by noting the actual values. • Mark “N/A” when the ADM was not considered as an improvement. 	

Monthly Issues Report

MONTHLY ISSUE ROLL UP REPORT (month/year)					
Agency Name	Agency Contact Name	Inspection Month	Assigned Rater	Rater & Admin Notes for CSD	Inspection End Date
Agency Name	Client Name	Date	Rater Name	Major Issues: <ul style="list-style-type: none"> • List major issues found on job site Minor Issues: <ul style="list-style-type: none"> • List minor issues • List minor issues. • List minor issues Lot Details: <ul style="list-style-type: none"> • See WIRS Training Referral: <ul style="list-style-type: none"> • List Training Referrals Subcontractor: <ul style="list-style-type: none"> • List Subcontractor Referrals General rater Comments: <ul style="list-style-type: none"> • List General Rater Comments Lot Details: <ul style="list-style-type: none"> • See WIRS General rater Comments: <ul style="list-style-type: none"> • List General Rater Comments 	Date
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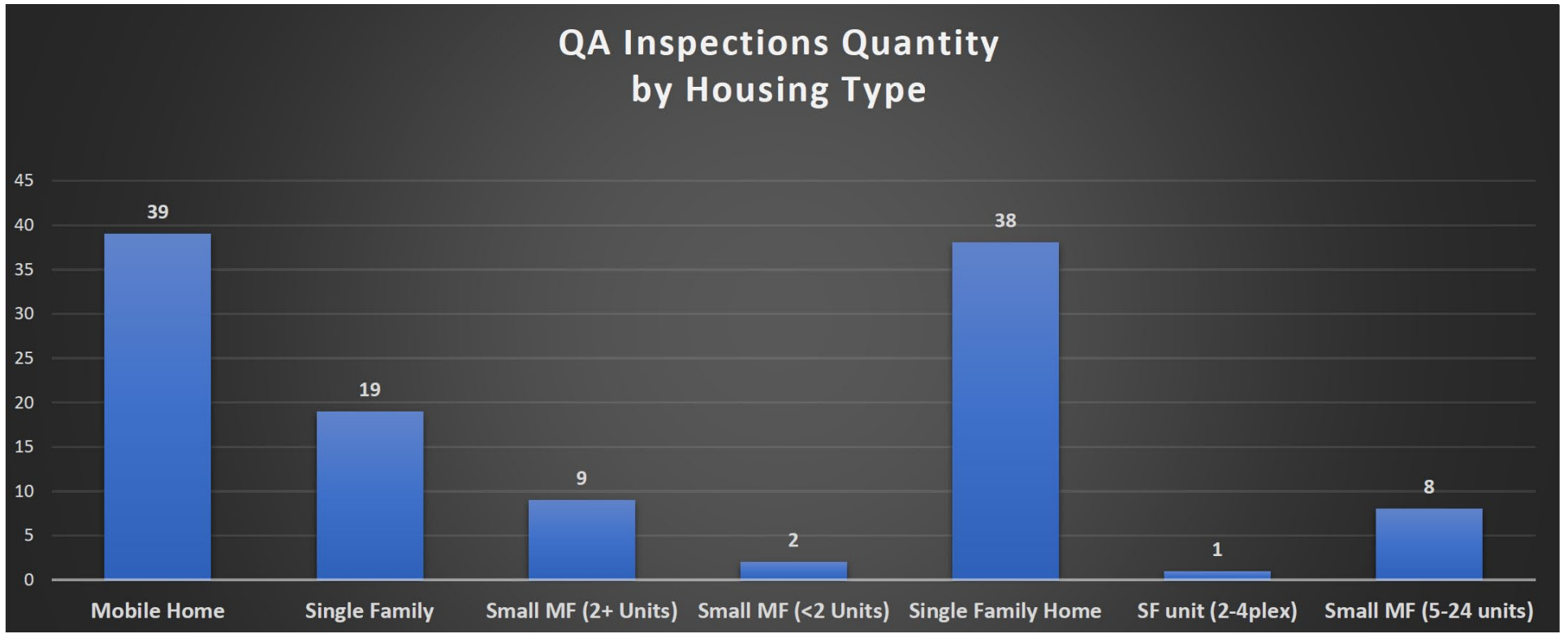
Units by Funding Source Report

Assigned Rater #1	Agency Name	Agency Contact Name	Inspection Start Date	Inspection End Date	Status	Total Lots Inspected (For Billing)	# Units Inspected - LIHEAP 2017	# Units Inspected - LIHEAP 2018	# Units Inspected - LIHEAP 2019	# of Units Inspected - ECIP 2016	# of Units Inspected - ECIP 2017	# of Units Inspected - ECIP 2018	# of Units Inspected - DOE 2019
Rater	Agency	Agency Contact					0	0	17	0	0	0	0
Rater	Agency	Agency Contact					0	0	14	0	0	4	0
Rater	Agency	Agency Contact					0	0		0	0	0	0
Rater	Agency	Agency Contact					0	0	28	0	0	0	0
Rater	Agency	Agency Contact					0	0	18	0	0	0	0
Rater	Agency	Agency Contact					0	3	19	0	0	0	0
Rater	Agency	Agency Contact					0	0	0	0	0	0	0
Rater	Agency	Agency Contact					0	0	13	0	0	0	0
Rater	Agency	Agency Contact					0	0	16	0	0	0	0
Contract Totals							0	0	0	0	0	0	0
PROGRAM TOTALS							0	0	0	0	0	0	0

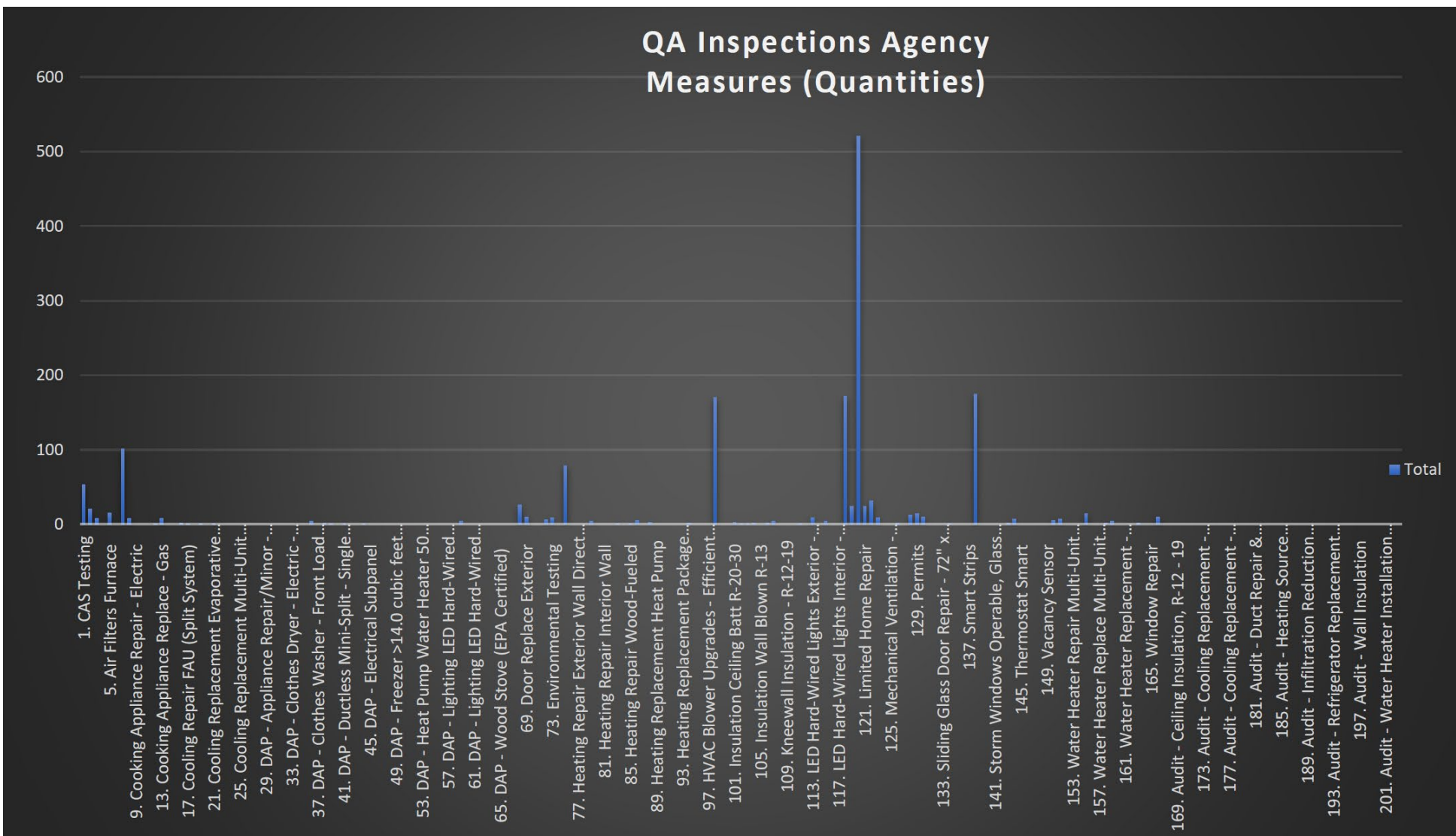
ICT Tracker Report

Status	Rater	Inspection Month	Agency Name	Client Full Name	Agency Due Date	# Haz Fail	# Non-Haz Fail	# Paper Fail	Date Notified	Date Resolved with CSD
Pending	Rater		Agency Name	Client Name		0	0	10		
Referred to CSD	Rater		Agency Name	Client Name		0	1	1		
Remedied	Rater		Agency Name	Client Name		0	1	0		
Resolved with CSD	Rater		Agency Name	Client Name		0	1	0		
Pending	Rater		Agency Name	Client Name		0	1	1		

Inspection Quantity by Housing Type



Inspection Measure Quantities



QA Inspections Agency Measures (Quantities)	Sum of Quantity
1. CAS Testing	53
2. Blower Door	21
3. Duct Blast	8
4. Air Filters AC	0
5. Air Filters Furnace	15
6. Attic Ventilation	0
7. Carbon Monoxide Alarm	101
8. Ceiling Fans	8
9. Cooking Appliance Repair - Electric	0
10. Cooking Appliance Repair - Gas	0
11. Cooking Appliance Repair - Propane	0
12. Cooking Appliance Replace - Electric	1
13. Cooking Appliance Replace - Gas	8
14. Cooking Appliance Replace - Propane	0
15. Cooling Repair AC Wall/Window	0
16. Cooling Repair Evaporative Cooler	2
17. Cooling Repair FAU (Split System)	1
18. Cooling Repair Multi-Unit Central System	0
19. Cooling Replacement - Ductless Minisplit	1
20. Cooling Replacement AC Wall/Window	0
21. Cooling Replacement Evaporative Cooler Roof	1
22. Cooling Replacement Evaporative Cooler Window/Wall	0
23. Cooling Replacement Forced Air Unit (Split System)	0
24. Cooling Replacement Multi-Unit Central System	0
25. Cooling Replacement Multi-Unit Central System	0
26. CVA Venting All Other	0
27. CVA Venting Louver Doors Only	0
28. DAP - Appliance Repair/Minor - clothes dryer	0
29. DAP - Appliance Repair/Minor - clothes washer	0
30. DAP - Appliance Repair/Minor - dishwasher	0
31. DAP - Appliance Repair/Minor - Freezer	0
32. DAP - Chimney Cleaning	0
33. DAP - Clothes Dryer - Electric - Energy Star - <7.35 cubic feet	0
34. DAP - Clothes Dryer - Electric - Energy Star - >7.35 cubic feet	0
35. DAP - Clothes Dryer - GAS - Energy Star - <7.35 cubic feet	0
36. DAP - Clothes Dryer - GAS - Energy Star - >7.35 cubic feet	4
37. DAP - Clothes Washer - Front Load - Energy Star - <6 cubic feet	0
38. DAP - Clothes Washer - Top Load - Energy Star - <6 cubic feet	2
39. DAP - Dishwasher - Energy Star < 24 inches	1
40. DAP - Ductless Mini-Split - Dual Zone (16-20 SEER, 9-11HSPF, 18-48KBTU)	0
41. DAP - Ductless Mini-Split - Single Zone (16-20 SEER, 9-11HSPF, 9-24KBTU)	1
42. DAP - Ductless Mini-Split - Tri Zone (16-20 SEER, 9-11HSPF, 24-60KBTU)	0

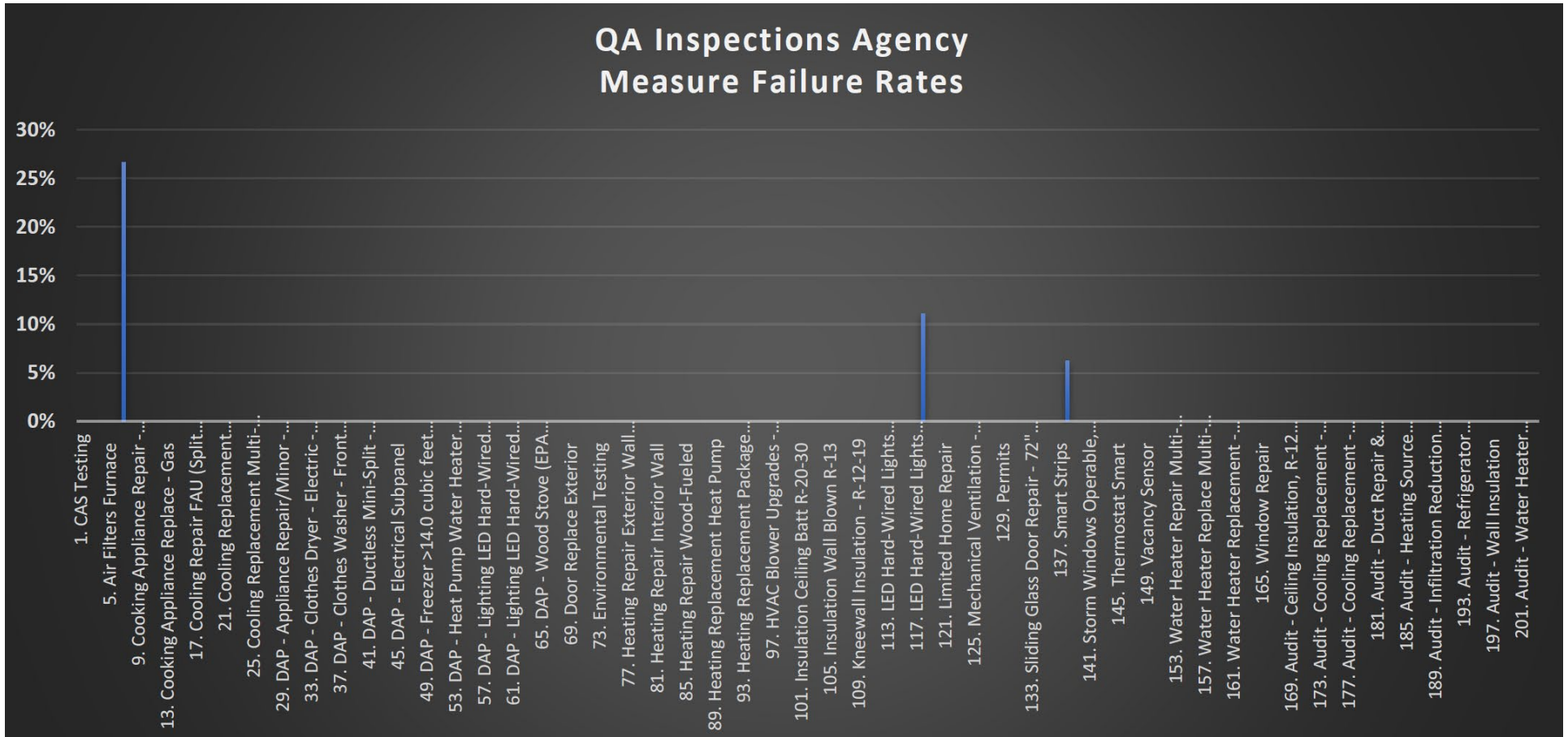
QA Inspections Agency Measures (Quantities)	Sum of Quantity
43. DAP - Ductless Mini-Split - Quad Zone (16-20 SEER, 9-10HSPF, 36-60KBTU)	0
44. DAP - Electrical Panel Upgrade	1
45. DAP - Electrical Subpanel	0
46. DAP - Freezer <14.0 cubic feet (upright electric)	0
47. DAP - Freezer <15.0 cubic feet (chest electric)	0
48. DAP - Freezer <15.0 cubic feet (upright propane)	0
49. DAP - Freezer >14.0 cubic feet (upright electric)	0
50. DAP - Freezer >15.0 cubic feet (chest electric)	0
51. DAP - Freezer >15.0 cubic feet (upright propane)	0
52. DAP - Freezer >6.0 cubic feet (chest propane)	0
53. DAP - Heat Pump Water Heater 50 Gallon	0
54. DAP - Heat Pump Water Heater 65 Gallon	0
55. DAP - Heat Pump Water Heater 80 Gallon	0
56. DAP - Lighting LED Downlight Retrofit Kits	0
57. DAP - Lighting LED Hard-Wired Lights-Exterior - Porch Light	0
58. DAP - Lighting LED Hard-Wired Lights-Exterior - Security Light	0
59. DAP - Lighting LED Hard-Wired Lights-Interior - Ceiling	4
60. DAP - Lighting LED Hard-Wired Lights-Interior - Vanity	0
61. DAP - Lighting LED Hard-Wired Lights-Interior - Wall/Sconce	0
62. DAP - Limited Repairs within Support Measure	0
63. DAP - New Electrical Circuit	0
64. DAP - Whole House Fan	0
65. DAP - Wood Stove (EPA Certified)	0
66. DAP - Wood Stove + Stove Pipe (EPA Certified)	0
67. DAP - Wood Stove + Stove Pipe + Vent Pipe (EPA Certified)	0
68. Door Repair Exterior	26
69. Door Replace Exterior	10
70. Duct Blast Test Pre/Post	0
71. Duct Insulation	0
72. Duct Repair and Replacement	6
73. Environmental Testing	9
74. Exterior Water Pipe Wrap	0
75. Faucet Aerator	79
76. Floor Foundation Venting	0
77. Heating Repair Exterior Wall Direct Vent	0
78. Heating Repair Floor Furnace	0
79. Heating Repair Forced Air Unit (Split System)	4
80. Heating Repair Heat Pump	0
81. Heating Repair Interior Wall	0
82. Heating Repair Multi-Unit Central System	0
83. Heating Repair Other	1
84. Heating Repair Package (Dual Pack)	0
85. Heating Repair Wood-Fueled	1
86. Heating Replacement Exterior Wall Direct Vent	5
87. Heating Replacement Floor Furnace	0

QA Inspections Agency Measures (Quantities)	Sum of Quantity
88. Heating Replacement Forced Air Unit (Split System)	3
89. Heating Replacement Heat Pump	0
90. Heating Replacement Interior Wall	0
91. Heating Replacement Multi-Unit Central System	0
92. Heating Replacement Other	0
93. Heating Replacement Package (Dual Pack)	0
94. Heating Replacement Wood Fueled	2
95. HERS Rater	0
96. HVAC Blower Upgrades - ECM Blower Motor	0
97. HVAC Blower Upgrades - Efficient Fan Controller	0
98. Infiltration Reduction - (Excludes Window and Door Repair and Replacement) Includes, Calking, Cover Plate Gaskets, Minor Envelope Repair, Glass Replacement, Weather Stripping and Vent Covers.	170
99. Insulation Ceiling Batt R-0-11	0
100. Insulation Ceiling Batt R-12-19	0
101. Insulation Ceiling Batt R-20-30	3
102. Insulation Ceiling Blown R-31-38	1
103. Insulation Floor Batt < 36" clearance	1
104. Insulation Floor Batt > 36" clearance	2
105. Insulation Wall Blown R-13	0
106. Kitchen Exhaust Repair	2
107. Kitchen Exhaust Replace	4
108. Kneewall Insulation - R-11	0
109. Kneewall Insulation - R-12-19	0
110. Kneewall insulation	0
111. Lead-Safe Weatherization	1
112. LED Downlight Retrofit Kits	0
113. LED Hard-Wired Lights Exterior - Porch Light	9
114. LED Hard-Wired Lights Exterior - Security Lights	0
115. LED Hard-Wired Lights Interior - Ceiling	4
116. LED Hard-Wired Lights Interior - Vanity	0
117. LED Hard-Wired Lights Interior - Wall/Sconce	0
118. LED Nightlights	172
119. LED Torchiere Lamp	24
120. LEDs (Thread Based)	521
121. Limited Home Repair	24
122. Low Flow Handheld Showerhead	32
123. Low Flow Showerhead	9
124. Low Flow Toilet - when required by local AHJ	0
125. Mechanical Ventilation - Balanced System	0
126. Mechanical Ventilation - exhaust System	2
127. Mechanical Ventilation - Supply System	0
128. Microwave	13
129. Permits	14
130. Refrigerator Replacement 19 cu. Ft. and below	10

QA Inspections Agency Measures (Quantities)	Sum of Quantity
131. Refrigerator Replacement 19 cu. Ft.	0
132. Shade Screens	0
133. Sliding Glass Door Repair - 72" x 80" and smaller	0
134. Sliding Glass Door Repair - Greater than 72" x 80"	1
135. Sliding Glass Door Replacement - 72" x 80" and smaller	0
136. Sliding Glass Door Replacement - Greater than 72"	0
137. Smart Strips	0
138. Smoke Alarm	175
139. Storm Windows Fixed, Glass Glazing	0
140. Storm Windows Fixed, Polycarbonate	0
141. Storm Windows Operable, Glass Glazing	0
142. Storm Windows Operable, Polycarbonate	0
143. Thermostat Manual	2
144. Thermostat Programmable	7
145. Thermostat Smart	0
146. Thermostatic Low Flow Showerhead TSV Combo Valve (TSV Only)	0
147. Thermostatic Shower Valve (TSV Only)	0
148. Tinted Window Film	0
149. Vacancy Sensor	0
150. Water Heater Blanket	5
151. Water Heater Pipe Insulation	7
152. Water Heater Repair - Mobile Home	0
153. Water Heater Repair Multi-Unit Central System	0
154. Water Heater Repair/ Electric	0
155. Water Heater Repair/ Gas	14
156. Water Heater Replace - Mobile Home	0
157. Water Heater Replace Multi-Unit Central System	0
158. Water Heater Replace/ Electric	2
159. Water Heater Replace/ Gas	4
160. Water Heater Replacement - Heat Pump, 50 gallon	0
161. Water Heater Replacement - Heat Pump, 60 gallon	0
162. Water Heater Replacement - Heat Pump, 80 gallon	0
163. Water Heater Timer	2
164. Whole House Fan	0
165. Window Repair	0
166. Window Replace	10
167. Audit - Attic Ventilation	0
168. Audit - Ceiling Insulation, R-11	0
169. Audit - Ceiling Insulation, R-12 - 19	0
170. Audit - Ceiling Insulation, R-20 - 30	0
171. Audit - Ceiling Insulation, R-31 - 38	0
172. Audit - Cooling Replacement - AC Wall/Window	0
173. Audit - Cooling Replacement - Evap Cooler Roof	0
174. Audit - Cooling Replacement - Evap Cooler Window/Wall	0
175. Audit - Cooling Replacement - FAU Split System	0

QA Inspections Agency Measures (Quantities)	Sum of Quantity
176. Audit - Cooling Replacement - Ductless Minisplit (Heat Pump)	0
177. Audit - Cooling Replacement - Heat Pump / Other types not listed	0
178. Audit - Cooling Replacement - Multi-Unit Central System (serving more than one MUD)	0
179. Audit - Door Replacement	0
180. Audit - Duct Insulation (LIHEAP Only)	0
181. Audit - Duct Repair & Replacement (Includes Duct Insulation) (DOE Only)	0
182. Audit - Floor Foundation Venting	0
183. Audit - Floor Insulation	0
184. Audit - Heating Source Replacement - Exterior Wall Direct Vent	0
185. Audit - Heating Source Replacement - Interior Wall Furnace	0
186. Audit - Heating Source Replacement - Floor Furnace	0
187. Audit - Heating Source Replacement - Forced Air Unit (Split System)	0
188. Audit - Heating Source Replacement - Multi-Unit Central System (serving more than one MUD)	0
189. Audit - Infiltration Reduction (Excludes both repair and replacement of Doors and Windows)	0
190. Audit - Kneewall Insulation - R-11	0
191. Audit - Kneewall Insulation - R-12-19	0
192. Audit - Limited Home Repair (ECM Support)	0
193. Audit - Refrigerator Replacement - 19 cu. Ft. and below	0
194. Audit - Refrigerator Replacement - Over 19 cu. Ft.	0
195. Audit - Thermostat - Programmable - Standard	0
196. Audit - Thermostat - Smart	0
197. Audit - Wall Insulation	0
198. Audit - Water Heater Installation - Electric	0
199. Audit - Water Heater Installation - Heat Pump Water Heater	0
200. Audit - Water Heater Installation - Gas & Propane	0
201. Audit - Water Heater Installation - Mobile Home	0
202. Audit - Water Heater Installation - Multi-Unit Central System (serving more than one MUD)	0
203. Audit - Window Replacement	0
Grand Total	1626

Agency Measure Fail Rates



QA Inspection Agency Measure Failure Rates	Max of Measure
1. CAS Testing	0%
2. Blower Door	0%
3. Duct Blast	0%
4. Air Filters AC	0%
5. Air Filters Furnace	0%
6. Attic Ventilation	0%
7. Carbon Monoxide Alarm	27%
8. Ceiling Fans	0%
9. Cooking Appliance Repair - Electric	0%
10. Cooking Appliance Repair - Gas	0%
11. Cooking Appliance Repair - Propane	0%
12. Cooking Appliance Replace - Electric	0%
13. Cooking Appliance Replace - Gas	0%
14. Cooking Appliance Replace - Propane	0%
15. Cooling Repair AC Wall/Window	0%
16. Cooling Repair Evaporative Cooler	0%
17. Cooling Repair FAU (Split System)	0%
18. Cooling Repair Multi-Unit Central System	0%
19. Cooling Replacement - Ductless Minisplit	0%
20. Cooling Replacement AC Wall/Window	0%
21. Cooling Replacement Evaporative Cooler Roof	0%
22. Cooling Replacement Evaporative Cooler Window/Wall	0%
23. Cooling Replacement Forced Air Unit (Split System)	0%
24. Cooling Replacement Multi-Unit Central System	0%
25. Cooling Replacement Multi-Unit Central System	0%
26. CVA Venting All Other	0%
27. CVA Venting Louver Doors Only	0%
28. DAP - Appliance Repair/Minor - clothes dryer	0%
29. DAP - Appliance Repair/Minor - clothes washer	0%
30. DAP - Appliance Repair/Minor - dishwasher	0%
31. DAP - Appliance Repair/Minor - Freezer	0%
32. DAP - Chimney Cleaning	0%
33. DAP - Clothes Dryer - Electric - Energy Star - <7.35 cubic feet	0%
34. DAP - Clothes Dryer - Electric - Energy Star - >7.35 cubic feet	0%
35. DAP - Clothes Dryer - GAS - Energy Star - <7.35 cubic feet	0%
36. DAP - Clothes Dryer - GAS - Energy Star - >7.35 cubic feet	0%
37. DAP - Clothes Washer - Front Load - Energy Star - <6 cubic feet	0%
38. DAP - Clothes Washer - Top Load - Energy Star - <6 cubic feet	0%
39. DAP - Dishwasher - Energy Star < 24 inches	0%
40. DAP - Ductless Mini-Split - Dual Zone (16-20 SEER, 9-11HSPF, 18-48KBTU)	0%
41. DAP - Ductless Mini-Split - Single Zone (16-20 SEER, 9-11HSPF, 9-24KBTU)	0%
42. DAP - Ductless Mini-Split - Tri Zone (16-20 SEER, 9-11HSPF, 24-60KBTU)	0%
43. DAP - Ductless Mini-Split - Quad Zone (16-20 SEER, 9-10HSPF, 36-60KBTU)	0%
44. DAP - Electrical Panel Upgrade	0%
45. DAP - Electrical Subpanel	0%
46. DAP - Freezer <14.0 cubic feet (upright electric)	0%

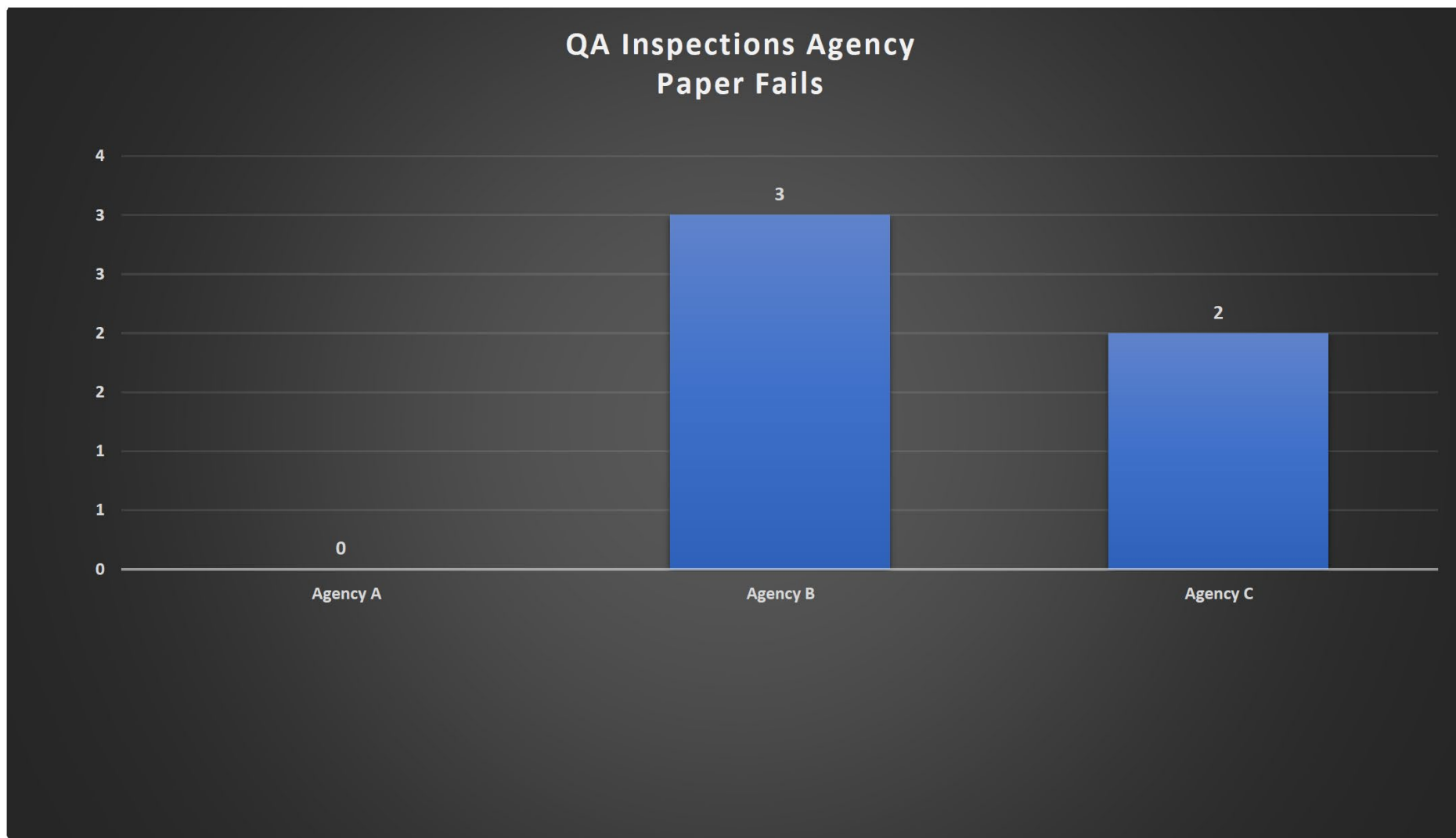
QA Inspection Agency Measure Failure Rates	Max of Measure
47. DAP - Freezer <15.0 cubic feet (chest electric)	0%
48. DAP - Freezer <15.0 cubic feet (upright propane)	0%
49. DAP - Freezer >14.0 cubic feet (upright electric)	0%
50. DAP - Freezer >15.0 cubic feet (chest electric)	0%
51. DAP - Freezer >15.0 cubic feet (upright propane)	0%
52. DAP - Freezer >6.0 cubic feet (chest propane)	0%
53. DAP - Heat Pump Water Heater 50 Gallon	0%
54. DAP - Heat Pump Water Heater 65 Gallon	0%
55. DAP - Heat Pump Water Heater 80 Gallon	0%
56. DAP - Lighting LED Downlight Retrofit Kits	0%
57. DAP - Lighting LED Hard-Wired Lights-Exterior - Porch Light	0%
58. DAP - Lighting LED Hard-Wired Lights-Exterior - Security Light	0%
59. DAP - Lighting LED Hard-Wired Lights-Interior - Ceiling	0%
60. DAP - Lighting LED Hard-Wired Lights-Interior - Vanity	0%
61. DAP - Lighting LED Hard-Wired Lights-Interior - Wall/Sconce	0%
62. DAP - Limited Repairs within Support Measure	0%
63. DAP - New Electrical Circuit	0%
64. DAP - Whole House Fan	0%
65. DAP - Wood Stove (EPA Certified)	0%
66. DAP - Wood Stove + Stove Pipe (EPA Certified)	0%
67. DAP - Wood Stove + Stove Pipe + Vent Pipe (EPA Certified)	0%
68. Door Repair Exterior	0%
69. Door Replace Exterior	0%
70. Duct Blast Test Pre/Post	0%
71. Duct Insulation	0%
72. Duct Repair and Replacement	0%
73. Environmental Testing	0%
74. Exterior Water Pipe Wrap	0%
75. Faucet Aerator	0%
76. Floor Foundation Venting	0%
77. Heating Repair Exterior Wall Direct Vent	0%
78. Heating Repair Floor Furnace	0%
79. Heating Repair Forced Air Unit (Split System)	0%
80. Heating Repair Heat Pump	0%
81. Heating Repair Interior Wall	0%
82. Heating Repair Multi-Unit Central System	0%
83. Heating Repair Other	0%
84. Heating Repair Package (Dual Pack)	0%
85. Heating Repair Wood-Fueled	0%
86. Heating Replacement Exterior Wall Direct Vent	0%
87. Heating Replacement Floor Furnace	0%
88. Heating Replacement Forced Air Unit (Split System)	0%
89. Heating Replacement Heat Pump	0%
90. Heating Replacement Interior Wall	0%
91. Heating Replacement Multi-Unit Central System	0%
92. Heating Replacement Other	0%

QA Inspection Agency Measure Failure Rates	Max of Measure
93. Heating Replacement Package (Dual Pack)	0%
94. Heating Replacement Wood Fueled	0%
95. HERS Rater	0%
96. HVAC Blower Upgrades - ECM Blower Motor	0%
97. HVAC Blower Upgrades - Efficient Fan Controller	0%
98. Infiltration Reduction - (Excludes Window and Door Repair and Replacement) Inc	0%
99. Insulation Ceiling Batt R-0-11	0%
100. Insulation Ceiling Batt R-12-19	0%
101. Insulation Ceiling Batt R-20-30	0%
102. Insulation Ceiling Blown R-31-38	0%
103. Insulation Floor Batt < 36" clearance	0%
104. Insulation Floor Batt > 36" clearance	0%
105. Insulation Wall Blown R-13	0%
106. Kitchen Exhaust Repair	0%
107. Kitchen Exhaust Replace	0%
108. Kneewall Insulation - R-11	0%
109. Kneewall Insulation - R-12-19	0%
110. Kneewall insulation	0%
111. Lead-Safe Weatherization	0%
112. LED Downlight Retrofit Kits	0%
113. LED Hard-Wired Lights Exterior - Porch Light	0%
114. LED Hard-Wired Lights Exterior - Security Lights	0%
115. LED Hard-Wired Lights Interior - Ceiling	0%
116. LED Hard-Wired Lights Interior - Vanity	0%
117. LED Hard-Wired Lights Interior - Wall/Sconce	0%
118. LED Nightlights	11%
119. LED Torchiere Lamp	0%
120. LEDs (Thread Based)	0%
121. Limited Home Repair	0%
122. Low Flow Handheld Showerhead	0%
123. Low Flow Showerhead	0%
124. Low Flow Toilet - when required by local AHJ	0%
125. Mechanical Ventilation - Balanced System	0%
126. Mechanical Ventilation - exhaust System	0%
127. Mechanical Ventilation - Supply System	0%
128. Microwave	0%
129. Permits	0%
130. Refrigerator Replacement 19 cu. Ft. and below	0%
131. Refrigerator Replacement 19 cu. Ft.	0%
132. Shade Screens	0%
133. Sliding Glass Door Repair - 72" x 80" and smaller	0%
134. Sliding Glass Door Repair - Greater than 72" x 80"	0%
135. Sliding Glass Door Replacement - 72" x 80" and smaller	0%
136. Sliding Glass Door Replacement - Greater than 72"	0%
137. Smart Strips	0%
138. Smoke Alarm	6%

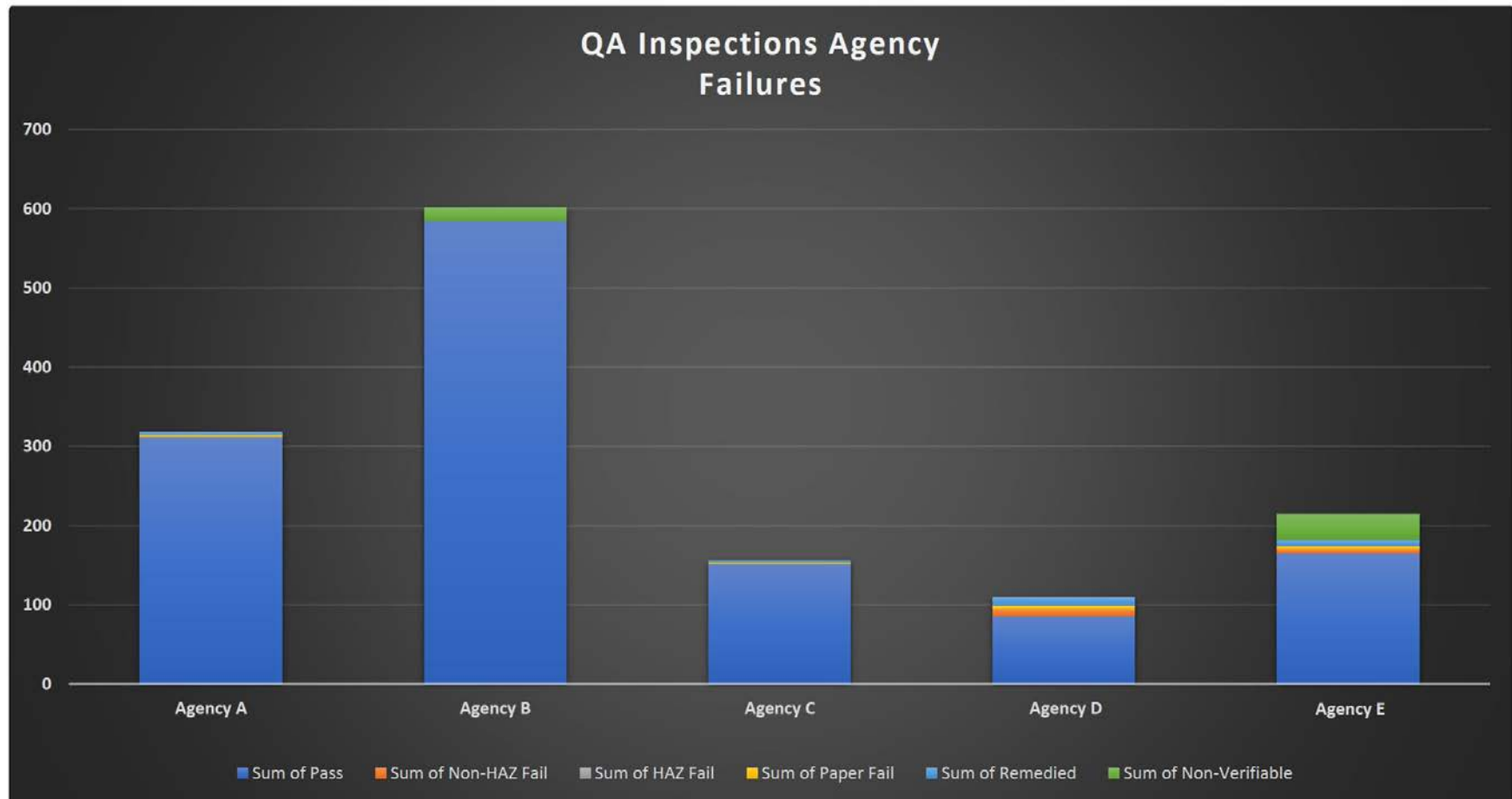
QA Inspection Agency Measure Failure Rates	Max of Measure
139. Storm Windows Fixed, Glass Glazing	0%
140. Storm Windows Fixed, Polycarbonate	0%
141. Storm Windows Operable, Glass Glazing	0%
142. Storm Windows Operable, Polycarbonate	0%
143. Thermostat Manual	0%
144. Thermostat Programmable	0%
145. Thermostat Smart	0%
146. Thermostatic Low Flow Showerhead TSV Combo Valve (TSV Only)	0%
147. Thermostatic Shower Valve (TSV Only)	0%
148. Tinted Window Film	0%
149. Vacancy Sensor	0%
150. Water Heater Blanket	0%
151. Water Heater Pipe Insulation	0%
152. Water Heater Repair - Mobile Home	0%
153. Water Heater Repair Multi-Unit Central System	0%
154. Water Heater Repair/ Electric	0%
155. Water Heater Repair/ Gas	0%
156. Water Heater Replace - Mobile Home	0%
157. Water Heater Replace Multi-Unit Central System	0%
158. Water Heater Replace/ Electric	0%
159. Water Heater Replace/ Gas	0%
160. Water Heater Replacement - Heat Pump, 50 gallon	0%
161. Water Heater Replacement - Heat Pump, 60 gallon	0%
162. Water Heater Replacement - Heat Pump, 80 gallon	0%
163. Water Heater Timer	0%
164. Whole House Fan	0%
165. Window Repair	0%
166. Window Replace	0%
167. Audit - Attic Ventilation	0%
168. Audit - Ceiling Insulation, R-11	0%
169. Audit - Ceiling Insulation, R-12 - 19	0%
170. Audit - Ceiling Insulation, R-20 - 30	0%
171. Audit - Ceiling Insulation, R-31 - 38	0%
172. Audit - Cooling Replacement - AC Wall/Window	0%
173. Audit - Cooling Replacement - Evap Cooler Roof	0%
174. Audit - Cooling Replacement - Evap Cooler Window/Wall	0%
175. Audit - Cooling Replacement - FAU Split System	0%
176. Audit - Cooling Replacement - Ductless Minisplit (Heat Pump)	0%
177. Audit - Cooling Replacement - Heat Pump / Other types not listed	0%
178. Audit - Cooling Replacement - Multi-Unit Central System (serving more than one unit)	0%
179. Audit - Door Replacement	0%
180. Audit - Duct Insulation (LIHEAP Only)	0%
181. Audit - Duct Repair & Replacement (Includes Duct Insulation) (DOE Only)	0%
182. Audit - Floor Foundation Venting	0%
183. Audit - Floor Insulation	0%
184. Audit - Heating Source Replacement - Exterior Wall Direct Vent	0%

QA Inspection Agency Measure Failure Rates	Max of Measure
185. Audit - Heating Source Replacement - Interior Wall Furnace	0%
186. Audit - Heating Source Replacement - Floor Furnace	0%
187. Audit - Heating Source Replacement - Forced Air Unit (Split System)	0%
188. Audit - Heating Source Replacement - Multi-Unit Central System (serving more than one unit)	0%
189. Audit - Infiltration Reduction (Excludes both repair and replacement of Doors and Windows)	0%
190. Audit - Kneewall Insulation - R-11	0%
191. Audit - Kneewall Insulation - R-12-19	0%
192. Audit - Limited Home Repair (ECM Support)	0%
193. Audit - Refrigerator Replacement - 19 cu. Ft. and below	0%
194. Audit - Refrigerator Replacement - Over 19 cu. Ft.	0%
195. Audit - Thermostat - Programmable - Standard	0%
196. Audit - Thermostat - Smart	0%
197. Audit - Wall Insulation	0%
198. Audit - Water Heater Installation - Electric	0%
199. Audit - Water Heater Installation - Heat Pump Water Heater	0%
200. Audit - Water Heater Installation - Gas & Propane	0%
201. Audit - Water Heater Installation - Mobile Home	0%
202. Audit - Water Heater Installation - Multi-Unit Central System (serving more than one unit)	0%
203. Audit - Window Replacement	0%
Grand Total	27%

Agency Paper Fails



Agency Inspection Failures



QA Inspections Agency Failures	Sum of Pass	Sum of Non-HAZ Fail	Sum of HAZ Fail	Sum of Paper Fail	Sum of Remedied	Sum of Non-Verifiable
Agency A	312	0	0	3	3	0
Agency B	584	0	0	0	0	17
Agency C	152	0	0	2	2	0
Agency D	86	9	0	4	11	0
Agency E	165	6	0	3	8	33
Grand Total	1299	15	0	12	24	50

EXHIBIT E

2023 LIHEAP MEASURE MATRIX

**REIMBURSEMENT RATES
 FOR WEATHERIZATION AND EHCS ACTIVITIES**

2023 LIHEAP

	A	B	C	D	E	F
1	Line #	Measure	Type	Allowable Measures by Funding Source	Maximum Reimbursement	Quantity Limits Per Job
3	SECTION: Assessments/Diagnostics					
4	1	Dwelling Assessment	With Attic	LIHEAP	No maximum at this time	1 assessment per dwelling unless expired
5			Without Attic			
6			Modified Assessment (for Reweatherized dwellings only)			
7	2	REM/Design Energy Audit		LIHEAP	No maximum at this time	1 audit per dwelling
8	3	Combustion Appliance Safety Test	Pre	LIHEAP, ECIP EHCS	No maximum at this time	No maximum at this time
9			Post			
10	4	Blower Door Test	Pre	LIHEAP	No maximum at this time	No maximum at this time
11			Post			
12	5	Duct Leakage Test	Pre	LIHEAP, ECIP EHCS	No maximum at this time	No maximum at this time
13			Post			
14	6	Environmental Testing		LIHEAP, ECIP EHCS	No maximum at this time	No maximum at this time
15	7	HERS Rater		LIHEAP, ECIP EHCS		No max. quantity
16	8	Permits		LIHEAP, ECIP EHCS		No max. quantity
17	9	Contractor Post-Weatherization Inspection	Contractor Post Inspection	LIHEAP	No maximum at this time	1 inspection per dwelling unless return visit is necessary to inspect additional work performed
18			Sub-contracted Post Inspection		\$415 per inspection	
19	SECTION: Health and Safety					
20	1	Carbon Monoxide Alarm	Lithium Battery	LIHEAP, ECIP EHCS	\$68 per alarm	1 occurrence per dwelling; no maximum quantity
21	2	Smoke Alarm	Lithium Battery or Hard-Wired	LIHEAP, ECIP EHCS	\$68 per alarm	1 occurrence per dwelling; minimum quantity as required by code
22	3	Cooking Appliance Repair, Free Standing Range or Cook Top	Electric	LIHEAP	\$700 per dwelling	1 repair or replacement per dwelling
23			Natural Gas and Propane			
24			Other Types Not Listed			
25	4	Cooking Appliance Replacement, Free Standing Range or Cook Top	Electric	LIHEAP	\$1400 per dwelling	1 repair or replacement per dwelling
26			Natural Gas and Propane			
27			Other Types Not Listed			
28	5	Cooking Appliance Repair, Built-In Single Wall Oven	Electric 24"	LIHEAP	\$852 per appliance	1 repair or replacement per dwelling
29			Electric 30"		\$1,281 per appliance	
30			Gas 24"		\$888 per appliance	
31	6	Cooking Appliance Replacement, Built-In Single Wall Oven	Electric 24"	LIHEAP	\$1,704 per appliance	1 repair or replacement per dwelling
32			Electric 30"		\$2,561 per appliance	
33			Gas 24"		\$1,776 per appliance	
34	7	Cooling Repair	AC Wall/Window	LIHEAP, ECIP EHCS	\$1,052 per dwelling	1 repair or replacement per dwelling
35			Evaporative Cooler		\$1,325 per dwelling	
36			FAU (Split System)		\$3,000 per dwelling	
37			Multi-Unit Central System (serving more than one MUD)		\$788 per MUD	1 repair or replacement per MUD unit

	A	B	C	D	E	F
1	Line #	Measure	Type	Allowable Measures by Funding Source	Maximum Reimbursement	Quantity Limits Per Job
38	8	Cooling Replacement	AC Wall/Window	LIHEAP, ECIP EHCS	\$2,105 per dwelling	1 repair or replacement per dwelling
39			Evaporative Cooler Roof		\$2,650 per dwelling	
40			Evaporative Cooler Window/Wall		\$6,000 per dwelling	
41			Forced Air Unit (Split System)			
42			Multi-Unit Central System (serving more than one MUD)		\$1575 per MUD	1 repair or replacement per MUD unit
43	9	CVA Venting	All Other	LIHEAP, ECIP EHCS	\$225 per dwelling	1 repair or replacement per dwelling
44			Louver Doors Only		\$500 per dwelling	
45	10	Environmental Hazard Work		LIHEAP, ECIP EHCS	No maximum	As required by EPA
46	11	Heating Source Repair	Exterior Wall Direct Vent, Interior Wall and Floor Furnace	LIHEAP, ECIP EHCS	\$2,500 per dwelling	1 repair or replacement per dwelling
47			Forced Air Unit (Split System)		\$3,342 per dwelling	
48			Multi-Unit Central System (serving more than one MUD)		\$1,742 per MUD	1 repair or replacement per MUD unit
49			Heat Pump / Other Types Not Listed		\$4,000 per dwelling	1 repair or replacement per dwelling
50			Package (Dual Pack)		\$4,250 per dwelling	
51			Wood-Fueled		\$2,375 per dwelling	
52	12	Heating Source Replacement	Exterior Wall Direct Vent, Interior Wall and Floor Furnace	LIHEAP, ECIP EHCS	\$5,000 per dwelling	1 repair or replacement per dwelling
53			Forced Air Unit (Split System)		\$6685 per dwelling	
54			Multi-Unit Central System (serving more than one MUD)		\$3,483 per dwelling	1 repair or replacement per MUD unit
55			Heat Pump / Other Types Not Listed		\$8,000 per dwelling	1 repair or replacement per dwelling
56			Package (Dual Pack)		\$8,500 per dwelling	
57			Wood-Fueled		\$4,749 per dwelling	
58	13	Water Heater Repair	Electric	LIHEAP, ECIP EHCS	\$1,750 per dwelling	1 repair or replacement per dwelling
59			Gas & Propane			
60			Mobile Home		\$1,125 per MUD	1 repair or replacement per MUD unit
61			Multi-Unit Central System (serving more than one MUD)			

	A	B	C	D	E	F
1	Line #	Measure	Type	Allowable Measures by Funding Source	Maximum Reimbursement	Quantity Limits Per Job
62	14	Water Heater Replacement	Electric	LIHEAP, ECIP EHCS	\$3,500 per dwelling	1 repair or replacement per dwelling
63			Heat Pump - 50 Gallon		\$4,000 per dwelling	
64			Heat Pump - 65 Gallon		\$4,500 per dwelling	
65			Heat Pump - 80 Gallon		\$4,800 per dwelling	
66			Natural Gas and Propane		\$3,500 per dwelling	
67			Mobile Home			
68			Multi-Unit Central System (serving more than one MUD)		\$2,250 per MUD	1 repair or replacement per MUD unit
69	SECTION: Mandatory					
70	1	Attic Ventilation		LIHEAP	\$600 per dwelling	1 occurrence per dwelling; no maximum quantity
71	2	Ceiling Insulation	R-value 0-11	LIHEAP	\$1.40 per sq ft	1 occurrence per dwelling; no maximum quantity
72			R-value 12-19		\$1.65 per sq ft	
73			R-value 20-30		\$2.00 per sq ft	
74			R-value 31-38		\$2.30 per sq ft	
75	3	Door, Exterior (All Other Types)	Repair	LIHEAP	\$250 per door	1 occurrence per dwelling; no maximum quantity
76			Replacement - Catastrophic leaks only		\$500 per door	
77	4	Door, Sliding Glass	Repair - 72" x 80" and smaller	LIHEAP	\$713 per door	1 repair per dwelling
78			Repair - Greater than 72" x 80"		\$856 per door	
79			Replacement - 72" x 80" and smaller - Catastrophic leaks only		\$1,425 per door	1 replacement per dwelling
80			Replacement - Greater than 72" x 80" - Catastrophic leaks only		\$1,782 per door	
81	5	Duct Insulation		LIHEAP	Up to \$2.00 per square foot	1 occurrence per dwelling; no maximum quantity
82	6	Duct Repair and Replacement		LIHEAP, ECIP EHCS	\$2727 per dwelling	1 repair or replacement per dwelling
83	7	Filter Replacement	Air Conditioning	LIHEAP	\$100 per dwelling	1 occurrence per dwelling; no maximum quantity
84			Furnace			
85	8	Hot Water Flow Restrictor	Faucet Restrictor	LIHEAP	\$8 per restrictor	1 occurrence per dwelling; no maximum quantity
86			Low Flow Handheld Showerhead		\$35 per showerhead	
87			Low Flow Showerhead		\$27 per showerhead	
88	9	HVAC Blower Upgrades	ECM Blower Motor	LIHEAP	\$350 per dwelling	1 replacement per dwelling
89			Efficient Fan Controller		\$240 per dwelling	
90	10	Infiltration Reduction (Excludes both repair and replacement of Doors and Windows)		LIHEAP	\$1,412 per dwelling	1 occurrence per dwelling; no maximum quantity
91	11	Kitchen Exhaust Installation, Repair & Replacement*	Range Hoods, Wall/Ceiling Mounts	LIHEAP	\$350 per dwelling	1 repair or replacement per dwelling
92	12	Kneewall Insulation	R-value 0-11	LIHEAP	\$1.63 per sq ft	1 occurrence per dwelling; no maximum quantity
93			R-value 12-19		\$1.86 per sq ft	

	A	B	C	D	E	F	
1	Line #	Measure	Type	Allowable Measures by Funding Source	Maximum Reimbursement	Quantity Limits Per Job	
94	13	Lighting	LED Downlight Retrofit Kits	LIHEAP	\$70 per kit	1 replacement per fixture / luminaire	
95			LED Hard-Wired Lights - Exterior - Porch Light		\$105 per luminaire		
96			LED Hard-Wired Lights - Exterior - Security Light		\$125 per luminaire		
97			LED Hard-Wired Lights - Interior - Ceiling		\$105 per luminaire		
98			LED Hard-Wired Lights - Interior - Vanity		\$100 per luminaire		
99			LED Hard-Wired Lights - Interior - Wall/Sconce		\$80 per luminaire		
100			LED Night Lights		\$6 per night light		1 occurrence per dwelling; no maximum quantity
101			LED Replacement Bulbs		\$25 per bulb		1 replacement per fixture / luminaire
102		LED Torchiere Lamp Replacement		\$150 per dwelling	2 lamps per dwelling		
103	14	Limited Home Repair		LIHEAP ECIP EHCS	\$708 per dwelling	1 occurrence per dwelling	
104	15	Low Flow Toilet	Replacement (only when required by local building department permit process)	LIHEAP, ECIP EHCS	\$325 per toilet	1 occurrence per dwelling; quantity determined by permit requirements	
105	16	Mechanical Ventilation (if required by blower door diagnostics and MV calculations)	Balanced System	LIHEAP	\$2,040 per dwelling	1 occurrence per dwelling; no maximum quantity	
106			Exhaust System		\$1,440 per dwelling		
107			Supply System		\$1,440 per dwelling		
108	17	Microwave Oven		LIHEAP	\$284 per oven	1 oven per dwelling	
109	18	Refrigerator Replacement	19 cu. ft. and below	LIHEAP	\$1,500 per appliance	1 replacement per dwelling	
110			Over 19 cu. ft.		\$1,783 per appliance		
111	19	Thermostat	Manual	LIHEAP, ECIP EHCS	\$65 per thermostat	2 thermostat per dwelling	
112			Programmable - Standard		\$157 per thermostat		
113			Smart		\$280 per thermostat		
114	20	Water Heater Insulation		LIHEAP	\$55 per blanket	1 blanket per dwelling	
115	21	Water Heater Pipe Insulation		LIHEAP	\$3.90 per lin ft	1 occurrence per dwelling; no maximum quantity	
116	22	Whole House Fan		LIHEAP	\$1,400 per dwelling	1 occurrence per dwelling	

	A	B	C	D	E	F
1	Line #	Measure	Type	Allowable Measures by Funding Source	Maximum Reimbursement	Quantity Limits Per Job
117	23	Window	Repair - Catastrophic leaks only	LIHEAP	\$2,000 per dwelling	1 occurrence per dwelling; no maximum quantity
118			Replacement - Catastrophic leaks only		\$4,000 per dwelling	
119	24	Vacancy Sensor Switch		LIHEAP	\$55 per Sensor	1 occurrence per dwelling; no maximum quantity
120	SECTION: Optional					
121	1	Ceiling Fan		LIHEAP	\$250 per fan	1 occurrence per dwelling; no maximum quantity
122	2	Clothes Washer Replacement	Front Loading ≤ 6.0 cu. Ft	LIHEAP	\$1,089 per appliance	1 replacement per dwelling
123			Top Loading ≤ 6.0 cu. ft		\$1,208 per appliance	
124	3	Clothes Dryer Replacement	Electric - < 7.3 cu. ft	LIHEAP	\$970 per appliance	1 replacement per dwelling
125			Electric ≥ 7.3 cu. ft		\$1,208 per appliance	
126			Gas < 7.3 cu. ft		\$1,089 per appliance	
127			Gas ≥ 7.3 cu. ft		\$1,327 per appliance	
128	4	Dishwasher Replacement	≤ 24.0 In	LIHEAP	\$1,043 per appliance	1 replacement per dwelling
129	5	Exterior Water Pipe Wrap		LIHEAP	\$3.90 per lin ft	1 occurrence per dwelling; no maximum quantity
130	6	Floor Foundation Venting		LIHEAP	\$425 per dwelling	1 occurrence per dwelling; no maximum quantity
131	7	Floor Insulation	> 36" clearance	LIHEAP	\$2.75 per sq ft	1 occurrence per dwelling; no maximum quantity
132			< 36" clearance		\$3.32 per sq ft	
133	8	Hot Water Flow Restrictor	Thermostatic Shower Valve (TSV only)	LIHEAP	\$50 per Valve	1 occurrence per dwelling; no maximum quantity
134			Thermostatic Low Flow Showerhead (TSV + LFSH Combo)		\$61 per showerhead TSV combo	
135	9	Mechanical Ventilation	Balanced System	LIHEAP	\$2,040 per dwelling	1 occurrence per dwelling
136			Exhaust System		\$1,440 per dwelling	
137			Supply System		\$1,440 per dwelling	
138	10	Power Strips	Tier 2 Advanced	LIHEAP	\$105 per strip	1 occurrence per dwelling; no maximum quantity
139	11	Shade screens		LIHEAP	\$500 per dwelling	1 occurrence per dwelling; no maximum quantity

	A	B	C	D	E	F
1	Line #	Measure	Type	Allowable Measures by Funding Source	Maximum Reimbursement	Quantity Limits Per Job
140	12	Storm Windows	Fixed, Glass Glazing	LIHEAP	\$12.40 per sq ft	1 occurrence per dwelling; no maximum quantity
141			Fixed, Polycarbonate		\$18.40 per sq ft	
142			Operable, Glass Glazing		\$13.90 per sq ft	
143			Operable, Polycarbonate		\$21.40 per sq ft	
144	13	Timer, Electric Water Heater		LIHEAP	\$112 per timer	1 timer per dwelling
145	14	Tinted Window Film		LIHEAP	\$3.30 per sq ft	1 occurrence per dwelling; no maximum quantity
146	15	Wall Insulation, Stucco and Wood	R-value 13	LIHEAP	\$4.50 per sq ft	1 occurrence per dwelling; no maximum quantity
147	SECTION: Optional - Energy Audit Required					
148	1	Attic Ventilation		LIHEAP	Dwelling SIR of 1.0 per Energy Audit Protocol	1 occurrence per dwelling, no maximum quantity
149	2	Ceiling Insulation	R-value 0-11	LIHEAP	SIR of 1.0 per Energy Audit Protocol	1 occurrence per dwelling, no maximum quantity
150			R-value 12-19			
151			R-value 20-30			
152			R-value 31-38			
153	3	Cooling Replacement (Energy Efficiency Upgrades)	AC Wall/Window	LIHEAP, ECIP EHCS	SIR of 1.0 per Energy Audit Protocol	1 repair or replacement per dwelling
154			Evaporative Cooler Roof			
155			Evaporative Cooler Window/Wall			
156			FAU Split System			
157			Ductless Minisplit (Heat pump)			
158			Heat Pump / Other types not listed			
159		Multi-Unit Central System (serving more than one MUD)				1 repair or replacement per MUD building
160	4	Door Replacement		LIHEAP	SIR of 1.0 per Energy Audit Protocol	1 occurrence per dwelling No maximum quantity
161	5	Duct Insulation		LIHEAP	SIR of 1.0 per Energy Audit Protocol	1 repair or replacement per dwelling
162	6	Duct Repairs & Replacement		LIHEAP	SIR of 1.0 per Energy Audit Protocol	1 repair or replacement per dwelling
163	7	Floor Foundation Venting		LIHEAP	SIR of 1.0 per Energy Audit Protocol	1 occurrence per dwelling, no maximum quantity
164	8	Floor Insulation		LIHEAP	SIR of 1.0 per Energy Audit Protocol	1 occurrence per dwelling; no maximum quantity
165	9	Heating Source Replacement (Energy Efficiency Upgrades)	Exterior Wall Direct Vent, Interior Wall & Floor Furnace	LIHEAP, ECIP EHCS	SIR of 1.0 per Energy Audit Protocol	1 repair or replacement per dwelling
166			Forced Air Unit (Split System)			1 repair or replacement per MUD building
167			Multi-Unit Central System (serving more than one MUD)			
168			Other Types Not Listed			1 repair or replacement per dwelling
169			Package (Dual Pack)			
170		Wood-Fueled				

	A	B	C	D	E	F
1	Line #	Measure	Type	Allowable Measures by Funding Source	Maximum Reimbursement	Quantity Limits Per Job
171	10	Infiltration Reduction (Excludes both repair and replacement of Doors and Windows)		LIHEAP	Dwelling SIR of 1.0 per Energy Audit Protocol	1 occurrence per dwelling; no maximum quantity
172	11	Kneewall Insulation	R-Value 0-11	LIHEAP	SIR of 1.0 per Energy Audit Protocol	1 occurrence per dwelling; no maximum quantity
173			R-Value 12-19			
174	12	Limited Home Repair	ECM Support	LIHEAP	SIR of 1.0 per Energy Audit Protocol	1 occurrence per dwelling
175	13	Refrigerator Replacement	19 cu. ft. and below	LIHEAP	SIR of 1.0 per Energy Audit Protocol	1 replacement per dwelling
176			Over 19 cu. ft.			
177	14	Thermostat	Programmable - Standard	LIHEAP	SIR of 1.0 per Energy Audit Protocol	2 thermostats per dwelling
178			Smart			
179	15	Wall Insulation		LIHEAP	SIR of 1.0 per Energy Audit Protocol	1 installation per dwelling.
180	16	Water Heater Installation	Electric	LIHEAP	SIR of 1.0 per Energy Audit Protocol	1 installation per dwelling.
181			Heat Pump Water Heater			
182			Gas & Propane			
183			Mobile Home			
184			Multi-Unit Central System (serving more than one MUD)			
185	17	Window	Replacement	LIHEAP	SIR of 1.0 per Energy Audit Protocol	1 occurrence per dwelling; no maximum quantity
186	SECTION: Other Program Costs					
187	1	Wages - Field Staff		LIHEAP, ECIP EHCS, SWEATS		No max. quantity
188	2	Wages - Program Management & Support		LIHEAP, ECIP EHCS, SWEATS		No max. quantity
189	3	Workers' Compensation		LIHEAP, ECIP EHCS, SWEATS		No max. quantity
190	4	Ancillary Supplies		LIHEAP, ECIP EHCS	Based upon inventory records	No max. quantity
191	5	Disposal Fees		LIHEAP, ECIP EHCS		No max. quantity
192	6	HPO Costs		LIHEAP, ECIP EHCS		No max. quantity
193	7	Lodging and per diem		LIHEAP, ECIP EHCS	\$750 per trip	1 trip per weatherized dwelling
194	8	Vehicle & Equipment Repair, Maintenance, Fuel		LIHEAP, ECIP EHCS, SWEATS		No max. quantity
195	9	Waste Breakage		LIHEAP, ECIP EHCS, SWEATS	Based upon inventory records and justification	No max. quantity
196	10	Solar Water Heater Maintenance		LIHEAP	No maximum at this time	No maximum at this time

	A	B	C	D	E	F
1	Line #	Measure	Type	Allowable Measures by Funding Source	Maximum Reimbursement	Quantity Limits Per Job
197	SECTION: SWEATS Program Costs					
198	1	Portable Equipment Purchased and Held on Reserve	Air Conditioner	SWEATS		No max. quantity
199			Evaporative Cooler			
200			Heater			
201			Fan			
202			Generator			
203			Battery Power Backup Device			
204		Other				
205	2	Repair and Maintenance of Reserved Appliances	Air Conditioner	SWEATS		No max. quantity
206			Evaporative Cooler			
207			Heater			
208			Fan			
209			Generator			
210			Battery Power Backup Device			
211		Other				
212	3	Additional Reimbursement--Fees, Fares, or Costs for Rental Vehicles		SWEATS		No max. quantity
213	4	Temporary Shelter/Housing		SWEATS		No max. quantity
214	5	Utility Assistance Payment		SWEATS	\$1,000 per dwelling	1 per dwelling
215	6	Other Personal Tangible Individual Benefits		SWEATS		No max. quantity
216	SECTION: SWEATS Loaned Appliances Program Costs					
217	1	Portable Equipment Delivered on Loan to a Dwelling	Air Conditioner	SWEATS		2 devices per dwelling
218			Evaporative Cooler			
219			Heater			
220			Fan			
221			Generator			
222			Battery Power Backup Device			
223		Other				
224	2	Other Emergency Services		SWEATS		No max. quantity
225	3	Fuel for Generators		SWEATS		No max. quantity
226	<i>*Dampener repairs and replacements are billed under the Infiltration Reduction measure category per the 2020 Technical Reference Manual (TRM).</i>					
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EXHIBIT F

2022 DOE WAP MEASURE MATRIX

REIMBURSEMENTS FOR WEATHERIZATION ACTIVITIES

(2022 DOE WAP)

Line #	Measure	Type	Maximum Reimbursement	Quantity Limits Per Job
SECTION: Assessments/Diagnostics				
1	Dwelling Assessment	With Attic	No maximum at this time	1 assessment per dwelling unless expired
		Without Attic		
		Modified (for reweatherized dwellings)		
2	REM/Design Energy Audit		No maximum at this time	1 audit per dwelling
3	Combustion Appliance Safety Test	Pre	No maximum at this time	No maximum at this time
		Post		
4	Blower Door Test	Pre	No maximum at this time	No maximum at this time
		Post		
5	Duct Leakage Test	Pre	No maximum at this time	No maximum at this time
		Post		
6	HERS Rater		No maximum at this time	No maximum quantity
7	Permits		No maximum at this time	No maximum quantity
8	Contractor Post-Weatherization Inspection	In-house Post Inspection	No maximum at this time	1 inspection per dwelling unless return visit is necessary to inspect additional work performed
		Sub-contracted Post Inspection	\$415 per inspection	
SECTION: Health & Safety Measures (Heating/cooling and Water Heating requires an energy audit)				
1	Carbon Monoxide Alarm	Lithium Battery	\$68 per alarm	1 occurrence per dwelling; no maximum quantity
2	Smoke Alarm	Lithium Battery	\$68 per alarm	1 occurrence per dwelling; no maximum quantity
3	Cooling Repair	AC Wall/Window	\$1,052 per dwelling	1 repair or replacement per dwelling
		Evaporative Cooler	\$1,325 per dwelling	
		FAU Split System	\$3,000 per dwelling	
		Multi-Unit Central System (serving more than one MUD)	\$788 per MUD	1 repair or replacement per MUD building (66%/50% rule applies)
4	Cooling Replacement	AC Wall/Window	\$2,105 per dwelling	1 repair or replacement per dwelling
		Evaporative Cooler Roof	\$2,650 per dwelling	
		Evaporative Cooler Window/Wall	\$6,000 per dwelling	
		FAU Split System	\$6,000 per dwelling	
		Multi-Unit Central System (serving more than one MUD) (serving more than one MUD)	\$1,575 per MUD	1 repair or replacement per MUD building (66%/50% rule applies)
5	CVA Venting	All Other	\$225 per dwelling	1 repair or replacement per dwelling
		Louver Doors Only	\$500 per dwelling	

Line #	Measure	Type	Maximum Reimbursement	Quantity Limits Per Job
6	Heating Source Repair	Exterior Wall Direct Vent, Interior Wall & Floor Furnace	\$2,500 per dwelling	1 repair or replacement per dwelling
		Forced Air Unit (Split System)	\$3,342 per dwelling	
		Multi-Unit Central System (serving more than one MUD) (serving more than one MUD)	\$1,742 per MUD	1 repair or replacement per MUD building (66%/50% rule applies)
		Other Types Not Listed	\$4,000 per dwelling	1 repair or replacement per dwelling
		Package (Dual Pack)	\$4,250 per dwelling	
	Wood-Fueled	\$2,375 per dwelling		
7	Heating Source Replacement	Exterior Wall Direct Vent, Interior Wall & Floor Furnace	\$5,000 per dwelling	1 repair or replacement per dwelling
		Forced Air Unit (Split System)	\$6,685 per dwelling	
		Multi-Unit Central System (serving more than one MUD) (serving more than one MUD)	\$3,483 per dwelling	1 repair or replacement per MUD building (66%/50% rule applies)
		Other Types Not Listed	\$8,000 per dwelling	1 repair or replacement per dwelling
		Package (Dual Pack)	\$8,500 per dwelling	
		Wood-Fueled	\$4,749 per dwelling	
8	Kitchen Exhaust Installation, Repair & Replacement*	Range Hoods, Wall/Ceiling Mounts	\$350 per dwelling	1 repair or replacement per dwelling
9	Lead Safe Weatherization		No maximum	As required by EPA
10	Limited Home Repair	Health and Safety Support	\$708 per dwelling	1 occurrence per dwelling
11	Mechanical Ventilation (if required by MV calculations)	Supply System	\$1,440 per dwelling	1 occurrence per dwelling; no maximum quantity
		Exhaust System	\$1,440 per dwelling	
		Balanced System	\$2,040 per dwelling	
12	Thermostat	Manual	\$65 per thermostat	2 thermostats per dwelling
		Programmable - Standard	\$157 per thermostat	
13	Water Heater Repair	Electric	\$1,750 per dwelling	1 repair or replacement per dwelling
		Gas & Propane		
		Mobile Home		
		Multi-Unit Central System (serving more than one MUD)	\$1,125 per MUD	1 repair or replacement per MUD building (66%/50% rule applies)
14	Water Heater Replacement	Electric	\$3,500 per dwelling	1 repair or replacement per dwelling
		Heat Pump - 50 Gallon	\$4,000 per dwelling	
		Heat Pump - 65 Gallon	\$4,500 per dwelling	
		Heat Pump - 80 Gallon	\$4,800 per dwelling	
		Gas & Propane	\$3,500 per dwelling	
		Mobile Home	\$3,500 per dwelling	
				Multi-Unit Central System (serving more than one MUD)
SECTION: General Heat Waste (GHW) - Total limited to \$250 per dwelling				
1	Filter Replacement	Air Conditioning Furnace	\$100 per dwelling	1 occurrence per dwelling
2	Hot Water Flow Restrictor	Faucet Restrictor	\$8 per restrictor	1 occurrence per dwelling; no maximum quantity
3	Water Heater Blanket		\$55 per blanket	1 blanket per dwelling
4	Water Heater Pipe Wrap		\$3.90 per lin ft	1 occurrence per dwelling; no maximum quantity

Line #	Measure	Type	Maximum Reimbursement	Quantity Limits Per Job
SECTION: Priority List (PL)				
1	Lighting	LED Bulbs	\$25 per bulb	1 occurrence per dwelling; no maximum quantity
		LED Night Lights	\$6 per light	
2	Showerhead	Low-flow	\$27 per shower head	1 occurrence per dwelling; no maximum quantity
		Handheld low-flow	\$35 per shower head	
		Thermostatic	\$61 per shower head	
SECTION: Energy Audit				
1	Attic Ventilation		Dwelling SIR of 1.0 per Energy Audit Protocol	1 occurrence per dwelling, no maximum quantity
2	Ceiling Insulation	R-value 0-11	SIR of 1.0 per Energy Audit Protocol	1 occurrence per dwelling, no maximum quantity
		R-value 12-19		
		R-value 20-30		
		R-value 31-38		
3	Cooling Replacement (Energy Efficiency Upgrades)	AC Wall/Window	SIR of 1.0 per Energy Audit Protocol	1 repair or replacement per dwelling
		Evaporative Cooler Roof		
		Evaporative Cooler Window/Wall		
		FAU Split System		
		Ductless Minisplit (Heat pump)		
		Heat Pump / Other types not listed		1 repair or replacement per MUD building (66%/50% rule applies)
4	Door Replacement		SIR of 1.0 per Energy Audit Protocol	1 occurrence per dwelling No maximum quantity
5	Duct Repair & Replacement (Includes Duct Insulation)		SIR of 1.0 per Energy Audit Protocol	1 repair or replacement per dwelling
6	Floor Foundation Venting		SIR of 1.0 per Energy Audit Protocol	1 occurrence per dwelling, no maximum quantity
7	Floor Insulation		SIR of 1.0 per Energy Audit Protocol	1 occurrence per dwelling; no maximum quantity
8	Heating Source Replacement (Energy Efficiency Upgrades)	Exterior Wall Direct Vent, Interior Wall & Floor Furnace	SIR of 1.0 per Energy Audit Protocol	1 repair or replacement per dwelling
		Forced Air Unit (Split System)		1 repair or replacement per MUD building (66%/50% rule applies)
		Multi-Unit Central System (serving more than one MUD)		
		Other Types Not Listed		
		Package (Dual Pack)		1 repair or replacement per dwelling
9	Infiltration Reduction (Excludes both repair and replacement of Doors and Windows)		Dwelling SIR of 1.0 per Energy Audit Protocol	1 occurrence per dwelling; no maximum quantity
10	Kneewall Insulation	R-Value 0-11	SIR of 1.0 per Energy Audit Protocol	1 occurrence per dwelling; no maximum quantity
		R-Value 12-19		
11	Limited Home Repair	ECM Support	Dwelling SIR of 1.0 per Energy Audit Protocol	1 occurrence per dwelling
12	Refrigerator Replacement	19 cu. ft. and below	SIR of 1.0 per Energy Audit Protocol	1 replacement per dwelling
		Over 19 cu. ft.		

Line #	Measure	Type	Maximum Reimbursement	Quantity Limits Per Job
13	Thermostat	Programmable - Standard Smart	SIR of 1.0 per Energy Audit Protocol	2 thermostats per dwelling
14	Wall Insulation		SIR of 1.0 per Energy Audit Protocol	1 installation per dwelling.
15	Water Heater Installation	Electric Heat Pump Water Heater Gas & Propane Mobile Home Multi-Unit Central System (serving more than one MUD)	SIR of 1.0 per Energy Audit Protocol	1 installation per dwelling.
16	Window	Replacement	SIR of 1.0 per Energy Audit Protocol	1 occurrence per dwelling; no maximum quantity
SECTION: Other Program Costs				
1	Wages - Field Staff			No max. quantity
2	Wages - Program Management & Support			No max. quantity
3	Lodging and Per Diem		\$750 per trip	1 trip per weatherized dwelling
4	Disposal Fees			No max. quantity
5	Ancillary Supplies		Based upon inventory records	No max. quantity
6	Waste Breakage		Based upon inventory records and justification	No max. quantity
7	Vehicle & Equipment Repair, Maintenance, Fuel			No max. quantity
8	HPO Costs			No max. quantity

*Damper repairs and replacements are billed under the Infiltration Reduction measure category per the 2020 Infiltration Reduction Technical Reference Manual (TRM).