

# Arkansas

## Weatherization Assistance Program

### State Plan

Program Year (PY)

July 1, 2018 – June 30, 2019

April 13, 2018

Arkansas Department of Environmental Quality  
Arkansas Energy Office  
5301 Northshore Drive  
North Little Rock, Arkansas 72118-5317  
501-682-7390  
[www.adeq.state.ar.us/weatherization](http://www.adeq.state.ar.us/weatherization)

## **Mission Statement**

The mission of the Arkansas Energy Office (AEO), is to promote energy efficiency, clean technology, and sustainable strategies that encourage economic development, energy security and the environmental well-being for all citizens of Arkansas.

### **The State Goals**

The policies contained in this plan will enable Arkansas and its subgrantee network to weatherize homes of low-income Arkansans effectively, based on:

- Following priorities from the Department of Energy to serve elderly and disabled persons, households with children, and households experiencing a burden from high energy bills as well as households using a high amount of energy;
- Ensuring that only the most cost effective measures are installed on houses;
- Including client education about energy conservation; and
- Addressing health and safety issues affected by weatherization work on the house.

Title:

## **Executive Summary**

The Arkansas Weatherization Assistance Program (WAP) State Plan for Program Year (PY) 2018 (July 1, 2018 – June 30, 2019) is derived from the state’s application to the U.S. Department of Energy (U.S. DOE) for Weatherization Assistance Program (WAP) funding. These funds will provide assistance to approximately 277 households across the State. (NOTE: the estimate of 277 households is based on DOE funding only.)

The purpose of WAP is to install energy conservation measures in the homes of income-eligible persons (up to 200% of federal poverty level). Funds are directed toward the most cost-effective energy efficiency measures, as determined by an on-site, highly technical energy audit of the eligible building. The program helps to:

- reduce energy consumption in Arkansas,
- reduce the cost of energy for low-income families, and
- address health and safety issues in the home affected by weatherization work.

Currently, subgrantees are either a Community Action Agency or a non-profit organization. These entities provide energy efficiency weatherization services by subcontracting work to qualified contractors or by using their own trained weatherization crews. Energy efficiency measures funded through the program include air sealing activities, insulation, and evaluation, repairs, or replacement of heating systems. The program assists all types of housing: single family homes, a category which includes duplexes, triplexes and quadplexes, manufactured housing (mobile homes), and multi-family housing, consisting of small, garden-style apartments, group homes and emergency shelters.

The state will spend DOE funds for PY 2018 in accordance with this plan. Possible changes in funding levels are discussed in the budget section.

## **Disclaimers**

NOTE: In planning for PY 2018, DOE instructed Grantees to use the same funding allocation given for Program Year 2016 (WPN 16a). This budget will be revised based on the PY 2018 official allocation, when received.

NOTE: The Department of Energy (DOE), after reviewing Arkansas' application to approve PY 2018 funding, may require changes be made to the information contained in this state plan.

### **18. Estimated Funding (\$):**

**BUDGET INFORMATION - Non-Construction Programs**

Federal

1. Program/Project Identification No. EE0007906		2. Program/Project Title Weatherization Assistance Program	
3. Name and Address Ark Dept of Environmental Quality – Arkansas Energy Office 5301 Northshore Drive North Little Rock, AR 72118-5317		4. Program/Project Start Date 07/01/2018	5. Completion Date 06/30/2019

**SECTION A - BUDGET SUMMARY**

Grant Program Function or Activity (a)	Federal Catalog No. (b)			Non-Federal (f)	Total (g)
		Federal (c)			
1. DOE	81.042	\$219,841.00		\$1,868,107.00	\$2,087,948.00
2. STATE			\$0.00	\$0.00	\$0.00
3.					
4.					
5. TOTAL		\$219,841.00	\$0.00	\$1,868,107.00	\$2,087,948.00

**SECTION B - BUDGET CATEGORIES**

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) GRANTEE ADMINISTRA TION	(2) SUBGRANTEE ADMINISTR	(3) GRANTEE T&TA	(4) PROGRAM OPERATIONS	
a. Personnel	\$35,227.00	\$0.00	\$55,214.00	\$0.00	\$90,441.00
b. Benefits	\$10,004.00	\$0.00	\$19,926.00	\$0.00	\$29,930.00
c. Travel	\$3,250.00	\$0.00	\$29,644.00	\$0.00	\$32,894.00
d. Equipment	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
e. Supplies	\$500.00	\$0.00	\$2,000.00	\$0.00	\$2,500.00
f. Contract	\$15,564.00	\$120,493.00	\$116,436.00	\$1,335,687.00	\$1,901,536.00
g. Construction	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
h. Other	\$3,250.00	\$0.00	\$500.00	\$0.00	\$3,750.00
i. Total Direct Charges	\$67,795.00	\$120,493.00	\$223,720.00	\$1,335,687.00	\$2,061,051.00
j. Indirect	\$10,476.00	\$0.00	\$16,421.00	\$0.00	\$26,897.00
k. Totals	\$78,271.00	\$120,493.00	\$240,141.00	\$1,335,687.00	\$2,087,948.00
7. Program Income	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

**BUDGET INFORMATION - Non-Construction Programs**  
**SECTION B - BUDGET CATEGORIES**

1. Program/Project Identification No.  
 EE0007906

2. Program/Project Title  
 Weatherization Assistance Program

3. Name and Address Ark Dept of Environmental Quality- Arkansas Energy Office  
 5301 Northshore Drive  
 North Little Rock, AR 72118-5317

4. Program/Project Start Date 07/01/2017

5. Completion Date 06/30/2018

<b>SECTION A - BUDGET SUMMARY</b>						
Grant Program Function or Activity (a)	Federal Catalog No. (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1.						
2.						
3.						
4.						
5. TOTAL		\$219,841.00	\$0.00	\$868,107.00	\$0.00	\$2,087,948.00

<b>SECTION B - BUDGET CATEGORIES</b>					
6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) HEALTH AND SAFETY	(2) LIABILITY INSURANCE	(3) FINANCIAL AUDITS	(4) SUBGRANTE E T&TA	
a. Personnel	\$0.00	\$0.00	\$0.00	\$0.00	\$90,441.00
b. Benefits	\$0.00	\$0.00	\$0.00	\$0.00	\$29,930.00
c. Travel	\$0.00	\$0.00	\$0.00	\$0.00	\$32,894.00
d. Equipment	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
e. Supplies	\$0.00	\$0.00	\$0.00	\$0.00	\$2,500.00
f. Contract	\$185,545.00	\$13,509.00	\$16,097.00	\$98,205.00	\$1,901,536.00
g. Construction	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
h. Other	\$0.00	\$0.00	\$0.00	\$0.00	\$3,750.00
i. Total Direct Charges	\$185,545.00	\$13,509.00	\$16,097.00	\$98,205.00	\$2,061,051.00
j. Indirect	\$0.00	\$0.00	\$0.00	\$0.00	\$26,897.00
k. Totals	\$185,545.00	\$13,509.00	\$16,097.00	\$98,205.00	\$2,087,948.00
7. Program Income	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

## **Budget Information Continued**

Allocation of DOE Funds to Subgrantees

	Budgeted Amounts	Number of Units
Better Community Development, Inc.	\$ 86,314	9
Black River Area Development Corporation	\$ 187,892	27
Central Arkansas Development Council (CADC)	\$ 524,039	87
Community Action Program for Central Arkansas	\$ 109,216	17
Crawford-Sebastian Community Development Council (CSCDC)	\$ 414,721	72
Crowley's Ridge Development Council	\$ 255,487	38
Pine Bluff-Jefferson County Economic Opportunities Commission (PBJCEOC)	\$ 191,867	27
<b>Total</b>	<b>\$ 1,769,536</b>	<b>277</b>

## **Policy Advisory Council Members**

As required by federal regulations, a Policy Advisory Council (PAC) assists in the development and implementation of the WAP and advises the state on a broad range of issues relating to WAP. The PAC is broadly representative of organizations that provide services to low-income persons in Arkansas.

Member Representing:

- At Large – Katie Niebaum
- Electric Cooperatives - Brett Curry
- Federal Housing – HUD – David Blick
- Health Department - Quinyatta Mumford
- Housing - USDA Rural Development – Cheryl Ivy
- Local Government – Victor Turner
- Low Income Home Energy Assistance Program – Shirley Mason
- Other – Roger Smith
- Public Service Commission – Wally Nixon
- Public Utility – CenterPoint Energy – Kirk Pierce
- Public Utility – Entergy Arkansas – Denice Jeter
- Weatherization Director – Community Action Agency – Beverly Palmer
- Ex Officio – Mitchell Simpson

## **V.1 Eligibility**

AEO understands that every dwelling weatherized must meet both the client eligibility and the building eligibility requirements.

Basis for household eligibility is WPN 18-3 (February 21, 2018) containing current poverty income guidelines and definition of income. Arkansas will use 200% of poverty levels and categorical eligibility as described in the preceding section. LIHEAP eligibility can also be used because the maximum income allowable for LIHEAP utility assistance is 60% of Arkansas median income which is less than 200% of poverty level.

### **V.1.1 Approach to Determining Client Eligibility**

#### ***Income Verification***

As defined in 10CFR440.3, low-income means that:

1. income in relation to household size is at or below 200 percent of the poverty level determined in accordance with criteria established by the Director of the Office of Management and Budget, and published in WPN 18-3, or
2. the household contains a member who has received cash assistance payments at any time during the preceding twelve months under Titles IV or XVI of the Social Security Act, or applicable state or local law, or
3. the household is eligible for assistance based on energy assistance payments that have been paid under the Low Income Home Energy Assistance Act of 1981 (LIHEAP).

AEO acknowledges that all subgrantees must have on file proof of income eligibility for each client served and each client waiting for services and must re-certify eligibility every twelve (12) months.

#### ***Qualified Aliens Receiving Weatherization Benefits:***

U.S. DOE directs grantees to guidance provided by Health and Human Services (HHS) at <http://aspe.hhs.gov/hps/immigration/restrictions-sum.shtml>. Subgrantees must follow this guidance and verify qualified alien status of Weatherization Program applicants. The verification documentation is required as part of the Subgrantee Client Files.

### **V.1.2 Approach to Determining Building Eligibility**

AEO acknowledges that all subgrantees must have on file proof of income eligibility for each client served and each client waiting for services and must re-certify eligibility every 12 months. Documentation will include: all sources of income, such as payroll stubs, social security administration award letter, income tax forms. Subgrantees are required to keep documentation in each client file for review during Program Compliance and Onsite Program monitoring visits by state or federal WAP staff.

#### ***Procedures to Determine that Units Weatherized Have Eligibility Documentation***

*All dwelling units certified as eligible for services shall be occupied by an income-eligible household. Income eligibility was described in the previous section.*

*Non-traditional dwelling units, such as apartments over businesses or camping trailers, require AEO approval prior to weatherization. AEO will ensure that program regulations for eligibility are met prior to granting approval.*

*Requirements to establish eligibility of non-stationary campers and trailers are:*

- *Residential electric service established.*
- *Mail service established using street address. (PO Box does not qualify).*
- *Other proof that permanent residence has been established for 12 months or more.*

### ***Reweathering Compliance***

The following is Arkansas's plan to ensure that houses are not re-weatherized if weatherization occurred after 9/30/1994:

- 1) Develop access to the database for non-CAP agencies, if possible.
- 2) Require that agencies search by address as well as client name.
- 3) Understand that data prior to circa 2004 is not available in the database:
  - Survey agencies for the existence of paper records of houses weatherized.
  - Require, if newly assigned to serve counties since 2013, to contact the agency which previously served that county for information on a house prior to approving application.
  - Prior to doing the energy audit, require visual inspection at the house for new windows and doors, new HVAC, extensive interior caulking, presence of insulation (check date on attic insulation tag).
- 4) The least reliable avenue is asking the applicant; this question is asked at the top of the weatherization application and must be discussed further with the client at the time of application.

Homes weatherized on or before September 30, 1994 are eligible to be reweatherized. No more than ten percent (10%) of a subgrantee's DOE completed units may be reweatherized without prior approval from AEO. Priority wait list criteria will be followed in addressing reweatherized units. Arkansas does not expect to have re-weatherized units in PY 2018.

### ***Building Eligibility – Housing Types***

Eligible housing types include owner and renter-occupied single-family site built and manufactured (mobile) homes. Single-family homes include duplexes, triplexes, and quadplexes. Eligible multi-family buildings are defined as garden style buildings with no more than two (2) stories.

### ***State Historic Preservation Compliance (SHPO)***

Arkansas Historic Preservation Program and AEO have not developed a Programmatic Agreement. Therefore, prior to the expenditure of federal funds to alter any structure or site, AEO Subgrantees will comply with Section 106 of the National Historic Preservation Act (NHPA). Section 106 applies to historic properties or sites that are listed on or eligible for listing on the National Register of Historic Places. In order to fulfill the requirements of Section 106, the Subgrantee must contact the Historic Preservation Office to coordinate the Section 106 review as set forth in 36 CFR Part 800 and consistent with DOE's 2009 Letter of Delegation of Authority.



Subgrantees are required to determine the year a home was built (typically records are located in the county assessor's office; records may be available online as well). Prior to weatherizing a home that is fifty (50) years old or older, the subgrantee must follow this protocol:

- Take a picture of the front and rear of the home;
- Draft a letter that:
  - states the address of the home,
  - includes an energy audit printout, work order, and the pictures as enclosures, and
  - requests approval to complete weatherization measures.
- Mail letters to: Arkansas Historic Preservation Program, Attention Section 106, 1100 North Street, Little Rock, Arkansas 72201.

The SHPO will notify the subgrantee within thirty (30) days whether or not permission is granted to proceed with weatherization.

### ***Rental and Multi-family Building Procedures***

#### ***Rental Units/Single-family***

Arkansas's rental plan, as follows, protects renters' rights as specified in 10 CFR 440.22 (b)(3) and (c)(e).

- The subgrantee obtains written permission from the owner or agent of the rental unit at the time of tenant's application. Such written permission shall be permanently maintained in the file of the client whose unit is weatherized.
- The benefits of weatherization assistance will accrue primarily to low-income tenants.
- No undue or excessive enhancement shall occur to the value of the dwelling units. Each energy audit of a rental unit will be reviewed by the Weatherization Director of the weatherizing agency to ensure that all measures authorized by the energy audit software, Energy Conservation Online System (ECOS), and all Health & Safety measures are provided in compliance with DOE requirements. Any questions in this regard should be asked of AEO prior to the start of weatherization.
- Not less than 66 percent (50 percent for duplexes and four-unit buildings) of the households in a building must be income-eligible for Weatherization services.
- The subgrantee must obtain and place in the client file a signed agreement from the landlord (or authorized agent of the landlord) that states that for a minimum of twelve (12) months after weatherization work has been completed on a dwelling, the tenants in that dwelling will not be subjected to rent increases because of the increased value of dwelling units due solely to weatherization assistance provided.
- Subgrantees will provide copies of the signed Landlord Agreements to the tenants to ensure their understanding and provide an avenue for tenant complaints.
- Other Considerations:
  - In the event of a dispute between the tenant and property owner regarding the issues listed above, the subgrantee will attempt to resolve the dispute; if that fails, the tenant will be referred to legal aid by the subgrantee.
  - Units being weatherized must be occupied by a qualified household; the only exception to this requirement is that an applicant household may temporarily move out while work is being performed on the house, if the temporary nature of the move is documented and re-occupation of the house is expected once work is completed.
  - The Arkansas Weatherization Assistance Program does not seek property owner agreements for placement of liens nor does it use other contractual restrictions.
  - Subgrantees do not accept financial participation of the owner in Weatherization costs.

## ***Rental Units/Multi-family***

### ***Energy Audit***

During the selection process for a multi-family project, the energy auditor will complete a walk-through of the property and note the potential for energy savings.

Arkansas uses NEAT energy audit software on its garden-style, single- or two-story buildings which make up a multi-family complex; MulTEA energy audit software developed by NREL will be reviewed in PY 2018 for potential replacement of NEAT as the Arkansas multi-family audit tool.

In the event that measures do not receive an SIR of 1.0 or greater, multi-family complex owners are encouraged to utilize its maintenance dollars to address those measures.

Multi-family weatherization has always represented less than twenty percent (20%) of total weatherization production in Arkansas. AEO has an agreement with DOE that all multi-family energy audits will be approved by DOE prior to beginning weatherization work.

### **Multi-family Units Receiving Cost-effective Measures**

The AEO budgets funds specifically for weatherizing multi-family complexes. Better Community Development, Inc. is the provider of multi-family weatherization services throughout the state. The multi-family stated goal is to weatherize at least one (1) complex within each territory over a period of time.

Ten percent (10%) of the total number of units that make up each multi-family complex will undergo a site specific audit. This sampling will create a priority list including health and safety measures for the entire complex.

In the event that additional ECMs or health and safety measures are needed on non-sampled units, those measures will be itemized and adjustments to the work order for that unit will be noted. The same holds true if measures are listed for a unit and that specific unit does not need the measure; adjustments will be noted and deducted from the total cost of the job.

### **Project Officer Review Prior to Commencing Work**

AEO will submit to our DOE Project Officer all pertinent materials to approve the multi-family project prior to commencing the work of weatherizing the buildings. AEO will submit Auditor's Input Sheets, Recommended Measures Output Report, and any other requested documentation for a case-by-case approval.

AEO is confident that the number of multi-family complexes weatherized during PY 2018 will be less than twenty percent (20%) of Arkansas' total building stock weatherized. Currently, about eight percent (8%) of units weatherized are multi-family.

### **Describing the Approach for Multi-family Service Delivery**

The AEO has signed a MOU with the USDA Rural Development Office to develop a partnership with a goal of weatherizing multi-family complexes throughout Arkansas. The AEO will utilize USDA Rural Development funds for a blended service approach.

### **AEO's Verifying Statement for Project Approval**

The AEO understands the approval process for multi-family complexes. All pertinent material (including Auditor's Input Sheet and Recommended Measures Output Report.) will be submitted to the DOE Project Officer for approval prior to the start of weatherization work. The Project Officer will review material and determine approval or denial on a case-by-case basis.

### ***Deferral Process***

There are conditions and situations under which a subgrantee must not or may choose not to weatherize an otherwise eligible dwelling unit. Information for making this determination may become evident during the application process, during the initial inspection process, during the energy audit, or after weatherization work has begun

The Arkansas WAP Deferral policy is part of the Health & Safety plan found in the Arkansas Sub-Grantee Operations Manual, Chapter 7 - Technical Standards and Best Practices, VI. Health & Safety. This document is uploaded as an attachment to this application.

In addition, the Deferral form (WAP 35) ensures that all information is discussed with the client and provided in writing with both parties' signatures. WAP 35 is uploaded as an attachment to this application.

### **V.1.3 Definition of Children**

Children are defined as those individuals under the age of 19.

### **V.1.4 Approach to Tribal Organizations**

Arkansas has no identified Native American tribes. Low-income Native Americans will receive the same weatherization services provided to other low-income persons in Arkansas.

### **V.2 Selection of Areas to be Served**

In 2013, Arkansas issued Requests for Qualifications (RFQ) and changed the traditional service areas from those served by fifteen (15) Community Action Agencies to larger areas served by seven (7) agencies. Serving larger areas of the state has provided challenges for the Arkansas network.

AEO reserves the right to:

- Change any service delivery area should weatherization of homes or service to eligible clients not meet standards of quality work.
- Reassign, on a temporary basis, responsibility for the Weatherization Program in a service area or part of a service area in order to ensure quality of service.
- Issue a Request for Qualifications (RFQ) at any time for part or all of the Weatherization Program and its service areas.

Arkansas uses a funding allocation formula based on methodology similar to that used by DOE to allocate state-level funding. This formula is driven primarily by the number of persons living below poverty level, and by climatic conditions – with additional input based on the age of the housing stock.

The factors used in the formula are:

- Population below poverty level, given a weight of 80 percent,
- Annual average heating and cooling degree days, given a weight of 10 percent,
- Percentage of houses built prior to 1990, given a weight of 10 percent.

Each of these factors was multiplied by the weights given and summed to yield a total weight for each county. Each county's weight is then divided by the state's total weight and adjusted so the percentages for the counties sum to 100. The county percentages can be summed as required to generate the allocation appropriate to each administrative entity.

### **V.3 Priorities for Service Delivery**

Subgrantees are allowed to maintain a priority list for each county in their service area. The Subgrantee's waiting list must be maintained by assigning points for DOE categories of priority for service. Priority points are awarded to eligible households based on:

1. At least one member of the household is elderly (age 60 or older). (1 point)
2. At least one member of the household is disabled. A disabled person must be a recipient of Rehabilitation Services, receive Social Security disability, Veterans disability or services under the Developmental Disabilities Act. Disability from a private employer must be in addition to or as a settlement with Federal or state disability. (1 point)
3. At least one member of the household is a child (under the age of 19). (1 point)
4. The household experiences a high energy burden. (1 point)

A household spending more than six percent (6%) of their total income on heating and cooling is defined as having a high energy burden (from DOE Better Buildings/Clean Energy for Low-Income Communities Accelerator fact sheet). To calculate the household's energy burden:

- Add the client's heating and cooling utility bills (gas, electric, fuel oil) for the past 12 months;
  - Use client's annualized income documentation (obtained during the client intake process);
  - Divide the sum of utility bills by the annualized income and multiply by 100 to determine the percent burden.
5. The household is a high energy user. (1 point)

A household whose electricity bill is 10¢ or more per square foot is defined as a high energy user. To calculate, take the highest electric bill, usually from the summer months, divide by conditioned square footage of the house. If result is 10¢ or more, household is a high energy user. (from Entergy Solutions brochure "You have the power to lower your Entergy bill.")

AEO has approved the use of separate priority lists by county to give subgrantees flexibility when scheduling work crews and assigning contractors. This policy minimizes travel distances and maximizes available work hours and worker efficiency. However, a subgrantee serving two (2) or more counties may not work exclusively in one (1) county for more than one (1) month. The Subgrantee's goal should be to serve each county in proportion to the number of units planned for that county and to prioritize counties based on the number of priority points assigned to top applicants on each county list. The selection of a county in which to provide weatherization work exclusively for a coming month should be based on where the client with the highest number of points among all counties resides.

A copy of each county priority list must be printed monthly and kept on file. Each county list should contain notes, e.g., attempts to contact clients and other information pertinent to selection of clients.

## V.4 Climatic Conditions

Total heating degree-days in Arkansas range from a high of 5,477 in the northcentral part of the state to a low of 4,999 in central Arkansas. The average heating degree-days are 30 year averages that have been supplied by the National Oceanic and Atmospheric Administration. In counties without reporting stations and in counties without complete data for 30 years, data from nearby stations was utilized.

	<u>Degree Days</u>
Black River Area Development Council	5,477
Central Arkansas Development Council	4,999
Community Action Program for Central Arkansas	5,276
Crowley's Ridge Development Council	5,294
Crawford-Sebastian Community Development Council	5,298
Pine Bluff Jefferson County Economic Opportunity Commission	5,198

Better Community Development (BCD) is the multi-family provider for the entire state of Arkansas.

Following is a description of how weather data is used in Arkansas's energy audit software, Energy Conservation Online System (ECOS):

Methodology for calculating heat loss -- ECOS uses a balance point temperature when calculating energy usage/loss for building segments. DOE requires that when using this methodology, you utilize 68 degrees for heating and 78 degrees for cooling-NOAA weather data is imported into ECOS for each weather station in Arkansas. The weather data is a 20 year average which is standard practice for DOE protocol and includes all 8 compass points and horizontal surfaces (future solar panel modeling potential).

Calculating demand -- When the model is run, for every hour of the day ECOS knows what the exterior temperature is based on the weather data. The demand is calculated on how much energy is needed to maintain a 68 degree heating and 78 degree cooling internal temperature. So, the hotter it is outside, the more demand is needed to meet the cooling balance point temperature. For example, if it is 98 degrees outside, this equates to a 20 degree delta T that must be met to reduce the cooling temperature to 78 degrees resulting in more loss or usage of BTUs and more energy (fuel) needed to meet the demand.

Calculating energy loss -- Segments or condition codes are assigned an R-value which was reviewed by DOE. When a user selects to "model" a building segment they enter the orientation (N/E/S/W etc.) and select a condition code. ECOS will calculate the energy usage in BTUs based on the condition code and orientation to determine how much energy is needed to meet the demand for that segment over a period of time (one year). If the user selects to insulate that building segment (increase the R-value), ECOS will run the same calculation over the same wall segment and orientation. The result is how much energy will be needed to meet the demand for that wall segment.

This results in the following formula:  $\text{Pre Energy Usage (in BTUs)} - \text{Post Energy Usage (in BTUs)} = \text{Estimated Savings (in BTUs) annually}$ . Then the savings in BTUs is converted to units based on the primary fuel type. So, if it is natural gas, it is converted to therms, electricity, to KWH, etc. This results in annual savings of units. Then it is a simple calculation to get the SIR. Depending on the life expectancy of the task, the annual savings are multiplied by the life expectancy then divided by the cost to get the SIR.  $(\text{Annual Savings} \times \text{Life expectancy} / \text{Task Cost}) = \text{Task SIR}$ .

## **V.5 Types of Weatherization Work to be Implemented**

### **V.5.1. Technical Guides and Materials**

Arkansas uses the following: (1) "Retrofitting the States - SF Complete, Standard Work Specifications Field Guide for Single-Family Homes" - aka Deck of Cards (approved by DOE for use in Arkansas July 2015), (2) "Retrofitting the States - Manufactured Housing, Standard Work Specifications Field Guide for Manufactured Housing" - aka Deck of Cards (approved by DOE for use in Arkansas May 27, 2016) and (3) Subgrantee Operations Manual (working draft). The Subgrantee Operations Manual is a living document and as DOE's WPNs are released, updates are made to the manual with the appropriate effective dates.

Arkansas has contacted Rebecca Eckman, developer of the Deck of Cards, for the purposes of re-approval of the "Retrofitting the States - SF Complete, standard Work Specifications Field Guide for Single-Family Homes". Arkansas will not be requesting any variances from the Standard Work Specifications, therefore Arkansas' Field Guide will only undergo minor changes (repagination due to NREL's formatting changes and any SWS numbering changes). Arkansas will be submitting its Field Guide for DOE review in late April.

All three (3) guidance documents are maintained on the AEO website.

**Electronic Link** <http://adeq.state.ar.us/weatherization-assistance-program-wap>

**Scroll to bottom of page and click on "WAP Forms & Documents"**

- Standard Work Specifications Field Guide for Single-Family Homes: mailed with certified return receipt to all subgrantees on or before June 1, 2015.
- Standard Work Specifications Field Guide for Manufactured Housing: mailed with certified return receipt to all subgrantees.
- Arkansas Subgrantee Operations Manual 2014 (currently under revision).

All three (3) guidance documents are maintained on the website.

### **Documenting the Process for Distribution**

AEO sent each subgrantee one copy of the Standard Work Specifications Field Guide for Single-Family Homes via certified mail. Each subgrantee signed for delivery. The US Postal Service returned the signature cards to AEO, providing written verification that each subgrantee received a copy.

Subgrantees require Weatherization contractors to sign an acknowledgement form verifying that they have received a copy of the Standard Work Specifications Field Guide for Single-Family Homes and for Manufactured housing at the time of their procurement to do weatherization work. During monitoring visits, AEO program monitors confirm the existence of contractor agreements to use the SWS.

## **AEO's Statements of Assurances**

AEO ensures that all subgrantee agreements and subgrantee contracts contain language which clearly specifies that all work performed will be of a quality outlined in WPN 15-4, Section 2.

The language clearly requires and documents the following:

- (1) that subgrantees understand that work quality standards must align with the SWS,
- (2) that each subgrantee's direct hire is aware of these standards, and
- (3) that they all must sign off that they have received a copy of the Standard Work Specifications Field Guide for Single-Family and Manufactured Homes.

AEO ensures that all work will be performed in accordance with our DOE-approved Energy Audit procedures and all materials will be approved materials specified in 10 CFR 440, Appendix A.

## **Language in Subgrantee Agreement**

The following language will be inserted into subgrantee and contractor agreements:

*It is the signatory's responsibility to perform all weatherization and health & safety work to the specifications outlined in WPN 15-4 using DOE Standard Work Specifications (SWS) as found in "Retrofitting the States, Standard Work Specifications Field Guide for Single-Family Homes" and in "Retrofitting the States, Standard Work Specifications Field Guide for Manufactured Housing." Work quality standards that align with the SWS must be followed for all work performed on client homes. The signatory acknowledges receipt of the above referenced documents. All contractors of subgrantees must be assigned the same contractual responsibility and acknowledge receipt of the referenced documents. Subgrantees must ensure that every completed home is inspected for compliance with these standards and require reworks when the work is judged not satisfactory by these standards*

## **Describe Mechanism Used**

The mechanism AEO uses to verify that subgrantees understand and agree to expectations of weatherization work is the subgrantee's signature on the grant agreement. In addition, third party and state office QCI inspections review weatherization work vis-a-vis the SWS.

## **V.5.2 Energy Audit Procedures**

Single-Family--Energy Conservation Online Software (ECOS) is used to audit single family homes. Site specific audits are run on all single family homes weatherized with Arkansas WAP funds. DOE approval of ECOS was given on 12/22/14.

Manufactured Housing--Energy Conservation Online Software (ECOS) is utilized to audit manufactured housing. Site specific audits must be run on all mobile homes weatherized with Arkansas Weatherization Assistance Program funds. DOE approval of ECOS was granted 12/22/14.

Multi-family—See Below

Arkansas is committed to resubmitting energy audit procedures to DOE for approval every five (5) years, with the understanding that sufficient lead time is required for the approval process.

## **Multi-family Energy Audits**

Approval of the DOE project officer will be requested for each multi-family audit prior to weatherization. Arkansas will submit necessary materials from the audit to DOE on a case-by-case basis. Arkansas limits

multi-family weatherization to gardens style complexes with no more than two (2) stories. There are very few qualifying high rise complexes in the state.

AEO has signed a MOU with the USDA Rural Development Office in Arkansas to develop a partnership with a goal of weatherizing multi-family complexes throughout the state of Arkansas. The AEO will utilize USDA Rural Development funds for a blended service approach. Arkansas will screen any potential multi-family project for energy savings potential prior to conducting a full audit.

During PY 2018, Arkansas will review the requirements of MulTEA, now available, and obtain training with the goal of seeking approval from DOE for use of this software for multi-family energy audits.

About eight percent (8%) of Arkansas total weatherization is multi-family.

### **V.5.3 Final Inspection**

#### **Inspection and Monitoring of Work Using Guidelines and Standards**

For PY 2018 Arkansas will continue to ensure that Quality Control Inspector (QCI) competency is demonstrated by mandating certification as a BPI Home Energy Professional (HEP) QCI. AEO requires that each subgrantee employ or contract with a HEP QCI. Subgrantees must submit to AEO the credentials of all staff employed as a QCI and of any third parties engaged to conduct quality control inspections. AEO contracts with SEAL, Inc. AEO employs a WAP staff member who is a certified QCI, Candy Roman.

#### **AEO's Final Inspection & Assurance Statement**

Beginning in 2015, AEO requires that every DOE WAP unit reported as a "completed unit" undergo a final inspection by a certified QCI, ensuring that all work meets the minimum specifications outlined in the Standard Work Specifications developed by DOE/NREL.

- Every client file will have a WAP 08 form that certifies that the unit had a final inspection and that all work met the required standards. The form will be signed by a certified QCI. Signatures will be accepted to demonstrate compliance. If a unit, inspected by the subgrantee QCI, is also inspected by the state, two (2) certification forms will be available in the client file - one for each inspection.
- Final inspection information is entered in ECOS and reviewed as part of desk monitoring.
- The Quality Control Inspection includes an assessment of the original audit to confirm that the measures called for on the work order are appropriate and compliant with the state audit procedures and protocols approved by DOE and that there are no "missed measures" which should have been considered.

#### **The Use of Quality Control Inspectors**

Since July 1, 2015 Arkansas Subgrantees have had at least one (1) certified QCIs on staff or contract with a HEP QCI. AEO has monitored at least ten percent (10%) of all units reported as complete in PY 2015, 2016 and 2017. This practice will continue in PY 2018 unless AEO verifies that a subgrantee has a completely independent QCI process from its energy auditing function; if so, then inspections will include a minimum of 5% of completed units.



## Policy & Procedures for Inadequate Inspection Practices

- Agency QCI accompanies state/third party QCI to learn first-hand of any deficiencies in the agency inspection and audit.
- State/third party QCI provides feedback during the inspection.
- QCI addresses incomplete and poor workmanship as well as missed opportunities on site and in reports. Needed Tier 2 training is delivered in the field by the third-party QCI at the time of the inspection or arranged later.
- State/third-party QCI identifies call backs and missed opportunities and identifies required corrective actions at agency's expense.

Improvements are expected or AEO will meet with agency administration to review expectations and discuss continued deficiencies.

## **V.6 Weatherization Analysis of Effectiveness**

The State of Arkansas is concerned that all entities that participate in the program be qualified and have sufficient ability to effectively deliver a quality product to the citizens of Arkansas. The following evaluation system has been developed to analyze current subgrantee performance and to assess viability for continued participation in the weatherization program.

- **On-site Inspections of Weatherized Units:** State/Third Party QCI will inspect a minimum of ten percent (10%) of completed units for each subgrantee, unless AEO verifies that the subgrantee has completely separated the audit and inspection functions. (See previous Final Inspection section).
- **Monitoring:** In PY 2017, AEO conducted a risk assessment of each agency. Monitoring will be scheduled, with agencies at increased risk monitored more frequently. Higher risk monitoring will be monthly or quarterly. Lower risk monitoring will be semi-annually or annually. Visits will focus on fiscal and administrative compliance with all applicable federal and state WAP rules and regulations. Findings will be tracked with corrective action responses. Any patterns will be noted and addressed.
- **CPA Audits:** Each subgrantee must submit a financial audit within three (3) months of the end of their fiscal year. Audits will be reviewed and be used in the financial risk assessment to be implemented in PY 2018.
- **Productivity:** Charting of actual production compared to each subgrantee's weatherization plan will be reviewed monthly.
- **Analyses using ECOS:** With the implementation of ECOS in PY 2015, AEO has expanded capability to track subgrantee progress. Beginning in PY 2016, dashboard reports were created to show:
  1. Findings by subgrantee, measure, and contractor reworks; training needs including Tier 1 and Tier 2 based on findings, results and priorities.
  2. ECOS allows for the development of comparison charts to show productivity levels, spending and energy savings between subgrantees.
  3. AEO implemented self-assessments based on Knowledge, Skills, and Abilities (KSAs) required by the WAP position in which they are employed. Weatherization directors use these self-assessments, and other information specific to staff, to develop their training plan.

In PY 2018, AEO will establish ECOS quarterly reports of effectiveness measures for each subgrantee which will be used to assess each subgrantee and compare among subgrantees. Improvements will be tracked by comparing state/third party QCI findings with findings from the previous QCI report.

## **V.7 Health and Safety Plans**

Arkansas Health and Safety Plan is attached to SF 424.

When ASHRAE 2019 is released, training will be provided.

## **V.8 Program Management**

### **V.8.1 Overview and Organization**

Since 2013, the weatherization program has been administered by the Arkansas Energy Office (AEO). The organizational chart shows WAP as a unit under the Senior Manager of AEO. Connection to the State Energy Program allows for the exchange of ideas beneficial to WAP. WAP is physically housed with AEO at the Arkansas Department of Environmental Quality (ADEQ).

### **V.8.2 Administrative Expenditure Limits**

Subgrantee administration funds within the 10% allowed for administration are allocated according to a formula which is similar to the one used by DOE. Up to an additional 5% of the subgrant is allowed for administrative costs if the total subgrant is less than \$350,000. Approval of additional administrative costs up to 5% is based on each subgrantee's cost allocation plan for overall agency administration.

### **V.8.3 Monitoring Activities**

#### **1) Staff who monitor in Arkansas:**

Candy Roman has been employed by Arkansas Weatherization state office since 1994 as a program monitor. She achieved her certification as a BPI HEP Quality Control Inspector (QCI) in June 2017.

Subrena McCoy has been employed by Arkansas Weatherization state office since 2010 as a program monitor. She was promoted to Weatherization Program Manager in July 2017 but continues to serve dual functions as a program monitor and the manager until such time that another program monitor is hired. The program monitor vacancy was advertised on April 11, 2018.

Dekendria Young has been employed by Arkansas Weatherization state office since 2016 as a budget specialist/fiscal monitor.

#### **2) Salaries and travel for monitoring:**

There are twenty (20) trips @ estimated \$400 per trip (\$8,000) included in the budget for monitoring purposes. At present, only three (3) subgrantees are located in outlying areas of the state, requiring overnight travel. Other subgrantees are within a 45 minute drive from North Little Rock where the state office is located. Present procedure is that state monitoring staff accompanies the third-party Quality Control Inspector (QCI) on inspections. \$8,000 is deemed generously sufficient to fund all of these monitoring trips using state-owned vehicles.

### **3) Grantee assurance that final inspections and technical monitoring are conducted by certified QCIs:**

AEO assures that all Subgrantee final inspections are performed by certified QCIs. Each subgrantee has had at least one (1) certified QCI on staff since July 1, 2015. In addition, AEO currently procures certified QCI services from a third-party for technical monitoring. Subgrantees are encouraged to certify more than one of its employees as QCI. In the event that a subgrantee has only one QCI and loses him/her they may elicit the assistance of one of the other subgrantee's QCI until such time that they have filled the QCI position. Candy Roman will perform in-progress inspections on an as-needed basis in PY2018.

### **4) PY 2018 monitoring schedule:**

**a) Administrative Monitoring:** Annually, in the first quarter of the program year, each subgrantee will be visited by an administrative and a fiscal monitor.

*The following potential schedule for visits to existing subgrantees is subject to change (specifically the listed dates and subgrantee order), but this first round of visits will be completed by the first week of October 2018:*

Week of July 9 – 13: CRDC, Jonesboro  
Week of July 23 – 27: PBJCEOC, Pine Bluff (central Arkansas area)  
Week of August 6 – 10: BRAD, Pocahontas  
Week of August 20 - 24: CADC, Benton (central Arkansas area)  
Week of September 10 – 14: CSCDC, Ft. Smith  
Week of September 24 – 28: CAPCA, Conway (central Arkansas area)  
Week of October 1 – 5: BCD, Little Rock (central Arkansas area)

### **Content of monitoring:**

Administrative review:

- Subgrantee monitoring analysis overview/risk assessment – review status based on performance during previous year;
- Client files – sample files from most recent quarter (minimum 10% with increased numbers reviewed if deficiencies are found) with review of eligibility, rental agreement, energy audit, work orders/SWS, health & safety, final inspection by QCI, separation of audit and final inspection (different staff, certified QCI); required forms present, complete, signed and dated;
- ECOS management – fuel prices updated, prices in ECOS match procured prices; complete entry of information reviewed;
- Procurement - process and documentation;
- Contractors - agreements signed and citing SWS standards and work required to these standards; plan for evaluating contractor work/dismissing contractors for poor performance;
- Training - training plan being followed for persons employed by weatherization and contractors, including training necessary to maintain staff certifications; developing plans for additional staff certifications;
- Priority lists – how clients are pulled from list; how priorities are entered in ECOS, are all five (5) priorities being calculated, is subgrantee redetermining client eligibility every 12 months;
- Inventory – equipment and materials;
- Management system relating to production;
- Policies and procedures, including records retention.

### **Fiscal review:**

- Subgrantee monitoring analysis overview/risk assessment – review status based on performance during previous year, including follow-up on any findings from last single agency audit;
- Sample month of general ledger compared to invoices, client files, and weatherization payroll;
- Personnel and other expenses charged to weatherization administration;
- Policies and procedures for financial management and separation of duties.
- Subgrantee Monthly Billing Groups/Invoices are compared to submitted support documents (per line item category); this monthly procedure will also inform the on-site fiscal review.

Exit conference will include discussion of findings with executive director, financial director, and weatherization director as available. AEO will send subgrantee a written report within thirty (30) calendar days of the monitoring visit. A combined report for the program, including Administrative and Fiscal reviews, will be provided when the Administrative monitor and Fiscal monitor visit during the same time. Each report will require a response from the subgrantee with a corrective action plan which AEO will accept or reject, in whole or in part, in a written response.

### **Resolution strategy:**

Monitors will follow-up to ensure that corrective actions are carried out by each subgrantee according to the approved plan. Based on required corrective actions and the risk assessments from the previous year, each subgrantee will be placed on a monthly, quarterly, semi-annual, or annual schedule of on-site monitoring visits. These scheduled monitoring visits will include a review of areas cited for corrective actions and any changes that have taken place with the subgrantee. Progress with production, staff training, and contractor performance will be reviewed. Any subgrantee placed on a monthly monitoring schedule will be deemed to be on probation.

**b) Technical monitoring:** AEO will use third-party QCI services during PY2018. Through the third-party QCI, AEO will monitor a minimum of 10% of units reported as complete, unless a subgrantee certifies that its program operates with complete separation with respect to auditing houses and inspecting weatherized units, **and** AEO verifies from knowledge of the process used by the subgrantee that separation does exist. For subgrantees with documented separation, a minimum of 5% of completed units will be inspected.

The frequency of technical monitoring is as follows:

At the end of each quarter, AEO will provide the number of units to be inspected for each subgrantee. For example, the required number of inspections for weatherization work reported complete during April – June, 2018 will be given to the QCI by July 10, 2018. The QCI inspections must start the next week and continue during successive weeks until completed, with a maximum of one (1) week spent inspecting each subgrantee's weatherization work. Final reports for each subgrantee must be submitted to AEO prior to beginning inspections for another subgrantee.

The third-party inspection includes a file review and in-home inspection. The third-party QCI is accompanied by an AEO administrative monitor and the subgrantee QCI or other staff. Expectations for the inspection are:

A typical inspection averages eight (8) hours based on the following requirements:

- 1 hour - review client file (energy audit, work orders, and agency QCI inspection report);
- 3 hours - on-site inspection;
- 1 hour - follow-up discussion of findings with agency and state staff (may be in the field after the inspection or back at the subgrantee office);
- 2 hours - complete required written report; and
- 1 hour - review and discuss documentation of corrective actions, if any; approve or deny.

The resolution strategy starts with AEO sending a letter to the subgrantee containing the findings and corrective actions required by the third-party QCI and conveying the original QCI reports to be filed in the client files. This letter requests that the subgrantee submit corrective actions taken and photographic documentation of such to AEO within fifteen (15) working days of the receipt of the letter. The letter also states that corrective work must be completed with non-federal funds. Corrective action documentation will be sent to QCI for approval.

In-progress inspections will be included for subgrantees who have repeated major deficiencies from one technical monitoring visit to the next. Candy Roman will conduct in-progress inspections following recommended assessments as outlined in WPN 16-4.

Every month, monitors conduct desk audits. Desk audit details will be sent to each subgrantee while the auditor/inspector is still in the audit/job. The objective is to look at audits and jobs in progress in ECOS before they are completed and placed in a billing group; in this way compliance issues or better ways to evaluate/analyze a unit can be discussed before the job is completed, thus minimizing noncompliance and disallowances. Auditors/inspectors can see the state monitor's notes on each page of the audit as well as in the job analysis; this feedback enables subgrantee staff to consider alternative procedures in what might be complex weatherization situations before conducting final calculations, the goal being to prevent compliance issues after job completion.

Significant deficiencies are defined as: health & safety violations, poor quality installation of materials, and major measures missed. If any of these same deficiencies are repeated in the next QCI monitoring of completed units, the following steps will be taken:

- Monitoring of the subgrantee will increase so that an additional visit will be made prior to the next regularly scheduled visit;
- A percentage of the units completed since the last regularly scheduled monitoring visit will be inspected; the number of additional units inspected will be two (2) or 100% if less than two (2);
- One (1) in-progress unit will be inspected during this extra visit;
- AEO, the third-party QCI, and subgrantee will discuss: 1) contractor deficiencies, 2) quality of auditor assessments, and 3) subgrantee QCI giving a pass to substandard work and missed opportunities;
- Training needs relative to findings will be discussed and provided to agency staff and its contractors.

Subgrantee noncompliance or repeated unresolved findings (based on a minimum of two [2] monitoring visits to a subgrantee without improvement) will be reported promptly to the DOE project officer.

AEO will submit a T&TA, Monitoring, and Leveraging Report 30 days after the end of the reporting period. This report will include subgrantees monitored; major findings (fraud, waste, and abuse) and resolutions; trends with respect to findings, concerns or other issues; needed T&TA (programmatic/

administrative, technical, financial); subgrantees considered high risk for other programs or program management; and outcome activities involving T&TA and monitoring training.

**c) Process for discipline and/or removal of a subgrantee from the program.**

The “AEO General Terms and Conditions” and “Scope of Services” in the “Administrative Grant Agreement” specify the criteria necessary for a Subgrantee to be considered in compliance. Failure to maintain fiscal control, comply with federal regulations, or fulfill contract obligations will lead to probation.

The terms of probation will begin with monthly on-site monitoring to review problematic areas of the program with a frequency designed to assess training and improvements or non-improvement. Probation will be initiated for six (6) months with the option to extend for another six (6) months if sufficient progress is not deemed to have occurred but some improvement has been shown. Areas of required improvement will be specified in a written probation document and be under continual review during monthly monitoring visits. At the end of the probation period, AEO will either 1) release the subgrantee from probation; 2) take steps to bring the program into compliance by reducing the workload to a more manageable level; in this regard, AEO may reallocate part of the unobligated WAP funds and part of the subgrantee’s service territory to a suitable replacement subgrantee on a temporary basis; or 3) terminate the subgrantee grant agreement.

## **V.8.4 Training and Technical Assistance**

During PY 2018, AEO will take the same approach used in PY 2017 to train network staff. In addition, AEO will allow Subgrantee contractors to be trained with T&TA funds with their signature on a retention agreement. Contractors sometimes participate in the annual training conference as well as in Tier 2 training when topics are relevant to their work.

All Tier 1 training will be provided by an IREC-accredited training center. Tier 1 training will qualify staff toward certification in one of the BPI certifications required (QCI) or encouraged (Energy Auditor, Crew Leader, Weatherization Worker) by DOE. The Building Analyst and Manufactured Housing credentials will be included in the allowable Tier 1 training.

AEO requires that each Subgrantee has at least one (1) certified QCI on staff. This requirement has been met since July 1, 2015. Currently, there are eleven (11) certified QCI employed by the weatherization network. In addition:

*AEO encourages QCI staff to become certified Energy Auditors; currently three (3) QCIs are also certified Energy Auditors. There is also another weatherization employee who has also acquired his Energy Auditor certification in addition to those stated above.*

*In preparation for the up-coming changes in QCI certification AEO recommends that staff identified by a Subgrantee as a potential QCI first pursue certification as an Energy Auditor.*

*AEO recommends that new staff hired by Subgrantees pursue the Building Analyst and Manufactured Housing credentials to establish a solid foundation for going on to certification as an Energy Auditor and QCI.*

*AEO requires that weatherization directors and field staff (auditors and inspectors) as well as contractors have active certification in lead-safe practices through the Environmental Protection Agency's Renovation, Repair, and Painting program.*

*Feedback from various sources that determines training content:* AEO considers all sources of information about subgrantees when planning the annual Weatherization Conference that is always held for two and a half (2 ½) days in conjunction with Weatherization Day. This year, the conference will be October 30 - November 1, 2018 in Eureka Spring at the End of the Ozarks. Sources of information include Subgrantee training plans (based on employee self-assessments of how well skills align with KSAs of Job Task Analysis (JTA) for position held and Weatherization Director evaluation), DOE and AEO monitoring visits, QA review visits and subgrantee single agency financial audit reports. If the needed training areas exceed the time available during the conference, additional training will be scheduled in Arkansas around specific topics.

*Maintaining workforce credentials:* AEO stays abreast of credentials and their renewal requirements by maintaining a spreadsheet tracker based on the staff certifications submitted by subgrantees. The annual conference always provides more than enough CEUs for certified staff to meet the annual continuing education requirement; in PY 2016, fifteen (15) CEUs were provided, exceeding the annual requirement of 8 (24 in three years). In PY 2017, six (6) CEUs were provided.

In PY 2018, there are no certified QCIs and Field Energy Auditors that will need renewal certification. Last year, two (2) certified QCIs renewed their credentials.

*Attendance at training:* Training provided by AEO in Arkansas is considered mandatory. Subgrantees have consistently attended available training, and, therefore, AEO has not needed to establish ramifications for non-compliance. In the case of non-attendance at training, AEO would consider requiring absent subgrantee staff to find and attend equivalent training elsewhere.

*Statement regarding training staff:* AEO requires that weatherization field staff new to the job are supervised by trained and certified staff until such time that skills are demonstrated satisfactorily and any required certifications are completed (see AEO requirements and recommendations for certifications above).

*Planning for industry-wide initiatives and future program requirements:* AEO attends NASCSP conference each year and through this and other means strives to keep abreast of industry standards and to cover these areas in Arkansas trainings and requirements. For instance, AEO now encourages certification for Energy Auditors. Currently, only one (1) subgrantee uses crew; during PY 2018 AEO will explore the possibility of initiating pursuit of certification for Weatherization Worker and Crew Leader. ASHRAE 62.2 – 2016 was covered during the Indoor Air Quality training during the conference training in PY 2017.

*Partnering with statewide home performance industry on training issues:* AEO is linked to the home performance industry. Last year, AEO secured conference trainers for the following topics: Healthy Homes, Health & Safety, Air-sealing/Sealing Duct Systems, CAZ Testing Failures and Consequences of Weatherization. During the planning for the 2018 conference, AEO will reach out to home industry trainers as needs are identified.

*Use of effectiveness and energy savings evaluations to develop training:* AEO has the capacity to create reports from data in ECOS that show the energy savings achieved from each job and aggregates the savings by different variables. This report was introduced to the subgrantees during Grants Guidance

with weatherization directors in August 2016. In PY 2017, AEO will look at this data monthly compared to the measures installed on each job. Aggregated reports will be created quarterly for share with each subgrantee. AEO will seek consultation on using this report to guide development of specific T&TA activities and priorities. In addition, AEO intends to use as measures of effectiveness the timeliness of completion rates for houses audited and an analysis of reasons for deferral. Measures of effectiveness and energy savings will be fully integrated into the planning process for PY 2018.

*Grantee effectiveness:* AEO uses the resources of NASCSP for training and information relevant to implementing and administering the grant. During PY 2017, AEO staff attended the NASCSP fall and spring conferences and the annual Home Performance Coalition conference. AEO budgets for attendance at these and other conferences should the opportunity arise. AEO is anticipating a monitoring visit from DOE during PY 2018 which will provide guidance on effective management.

*Arkansas Health & Safety Plan:* AEO utilized the Health & Safety template as its guide in developing the Arkansas 2018 H&S Plan. We pre-populated the template with DOE and Arkansas H&S guidance and provided a copy to the network's Technical Committee for review. AEO conducted a webinar (with shared-desk viewing) which allowed the Technical Committee members to discuss the acceptance, revision or deferral of each measure. The first H&S Plan webinar was conducted on February 22, 2018 and the follow-up meeting was held on March 15, 2018. Glen Salas and Katherine Foote made themselves available for guidance at the March 15, 2018 session. During PY 2018, H&S training will be provided at the annual conference covering identified training needs. In addition to the conference, technical training is also provided in the Spring during our Annual Grants Guidance. AEO will reach out to industry experts to assist in providing the identified training.

*Client Education:* Client education is built into auditing and inspecting and is considered an important part of the weatherization process. There are specific forms to document the information given to and discussed with the client in the home. AEO encourages subgrantees to budget for materials that each agency considers useful in educating clients. In addition, AEO has free materials on energy efficiency provided through another program that are distributed on an annual basis to subgrantees at the Arkansas conference, based on orders placed by the subgrantees. For the past three (3) years at the conference, AEO has provided a training session on Communications which is designed for weatherization staff in the office and in client homes to learn to communicate more effectively with clients. Subgrantees are encouraged to respond to outreach requests and most participate in the Assurance 16 program which is a LIHEAP program in which clients learn household management skills, including energy efficiency practices.

Each subgrantee will prepare a training plan for weatherization staff to be included in the DOE subgrant for PY 2018. These training plans will substantiate the allocation of T&TA funds to each subgrantee and will inform the selection of training topics for the annual conference and other training offered in Arkansas.

AEO will provide T&TA funds to subgrantees to certify QCIs and Energy Auditor in PY 2018 based on the subgrantee's approved training plans.

AEO will also make T&TA funds available through subgrantee training plans for staff to:

- Pursue Building Analyst and Manufactured Housing credentials.
- Attend the Home Performance Coalition National Conference or DOE/Energy OutWest Conference.



Grants Guidance administrative training will be held in fall and spring to gather weatherization directors for discussions on topics involving grant implementation and administration, including the PY 2018 State Plan.

AEO will encourage and provide T&TA funding for subgrantees to include Building Analyst certification for inexperienced, uncredentialed staff in their training plans.

AEO will encourage and provide T&TA funding for subgrantees to attend the national Home Performance Coalition training conference or Energy OutWest.

AEO staff will attend the fall and spring NASCSP conferences and the Home Performance Coalition national conference. AEO staff will attend one (1) additional conference if identified as specifically applicable to weatherization and job duties.

### **V.9 Energy Crisis and Disaster Plan**

Arkansas will not use any grant funds for energy crisis relief during the 2018 Program Year.