

State of California
Department of Community Services and Development

Weatherization Assistance Program
for Low-Income Persons



2014 State Plan and Application
to the
U.S. Department of Energy

June 26, 2014

Edmund G. Brown, Jr.
Governor
State of California

Diana S. Dooley
Secretary
California Health and
Human Services Agency

Linné Stout
Director
Department of Community
Services and Development

Table of Contents

Annual File

I.	Application for Federal Assistance Standard Form 424	1
II.	Budget Information	4
III.	Budget Explanation	7
IV.1	Subgrantees	12
IV.2	Production Schedule	31
IV.3	Energy Savings	32
IV.4	DOE-Funding Leveraging Activities	33
IV.5	Policy Advisory Council Members	34
IV.6	Public Hearing	37
IV.7	Miscellaneous	38

Master File

V.1	Eligibility	
	V.1.1 Approach to Determining Client Eligibility	39
	V.1.2 Approach to Determining Building Eligibility	39
	V.1.3 Definition of Children	42
	V.1.4 Approach to Tribal Organizations	42
V.2	Selection of Areas to Be Served	43
V.3	Priorities for Service Delivery	44
V.4	Climatic Conditions	45
V.5	Type of Weatherization Work to Be Done	
	V.5.1 Technical Guides and Materials	46
	V.5.2 Energy Audit Procedures	46
	V.5.3 Final Inspections	46
V.6	Weatherization Analysis of Effectiveness	48
V.7	Health and Safety	49
V.8	Program Management	
	V.8.1 Overview and Organization	51
	V.8.2 Administrative Expenditure Limits	52
	V.8.3 Monitoring Activities	53
	V.8.4 Training and Technical Assistance Approach and Activities	64
V.9	Energy Crisis and Disaster Plan	71

Attachments

A.	DOE F 1600.5 Nondiscrimination in Federally Assisted Programs
B.	FA-CERTS
C.	Program Year 2013 Carryover
D.	CSD 2014 Eligibility and Verification Guide
E.	CSD Priority List Policy

F.	CSD Single-Family/Small Multi-Family Energy Audit Protocol
G.	CSD Multi-Family Energy Audit Protocol
H.	California Energy Commission (CEC) Climate Zones
I.	State Housing Preservation Office Memorandum of Understanding
J.	CSD Health and Safety Plan (Rev. 4/24/14)
K.	Public Hearing Transcript
L.	Policy Advisory Council Attendees
	1. September 25, 2013 Minutes
	2. December 11, 2013 Minutes
M.	CSD Weatherization Staff Organizational Chart
N.	Explanation of Indirect Costs
O.	State Administrative Manual
P.	A-133 Audit
Q.	WPN 14-4 Quality Work Plan Requirements
R.	EPA Certified Firm and Renovator List
S.	Monitoring – Areas of Responsibility

Application for Federal Assistance SF-424		
* 1. Type of Submission: <input type="checkbox"/> Preapplication <input checked="" type="checkbox"/> Application <input type="checkbox"/> Changed/Corrected Application	* 2. Type of Application: <input type="checkbox"/> New <input checked="" type="checkbox"/> Continuation <input type="checkbox"/> Revision	* If Revision, select appropriate letter(s): <input type="text"/> * Other (Specify): <input type="text"/>
* 3. Date Received: 04/15/2014	4. Applicant Identifier: <input type="text"/>	
5a. Federal Entity Identifier: <input type="text"/>	5b. Federal Award Identifier: EE0006141	
State Use Only:		
6. Date Received by State: <input type="text"/>	7. State Application Identifier: <input type="text"/>	
8. APPLICANT INFORMATION:		
* a. Legal Name: State of California		
* b. Employer/Taxpayer Identification Number (EIN/TIN): 68 0283471	* c. Organizational DUNS: 9295752680000	
d. Address:		
* Street1: 2389 Gateway Oaks Dr., Suite 100	<input type="text"/>	
Street2:	<input type="text"/>	
* City: Sacramento	<input type="text"/>	
County/Parish: Sacramento	<input type="text"/>	
* State: CA: California	<input type="text"/>	
Province:	<input type="text"/>	
* Country: USA: UNITED STATES	<input type="text"/>	
* Zip / Postal Code: 95833-4246	<input type="text"/>	
e. Organizational Unit:		
Department Name: Community services and develop	Division Name: Energy and Environmental Servi	
f. Name and contact information of person to be contacted on matters involving this application:		
Prefix: Ms.	* First Name: Kathy	
Middle Name:	<input type="text"/>	
* Last Name: Andry	<input type="text"/>	
Suffix:	<input type="text"/>	
Title: Deputy Director		
Organizational Affiliation: <input type="text"/>		
* Telephone Number: 916-576-7109	Fax Number: <input type="text"/>	
* Email: kathy.andry@csd.ca.gov		

Application for Federal Assistance SF-424

*** 9. Type of Applicant 1: Select Applicant Type:**

A: State Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

*** 10. Name of Federal Agency:**

U.S. Department of Energy

11. Catalog of Federal Domestic Assistance Number:

81 042

CFDA Title:

Weatherization Assistance for Low Income Persons

*** 12. Funding Opportunity Number:**

DE-FOA-

* Title:

Program Year 2014 Weatherization Formula Grants

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Add Attachment

Delete Attachment

View Attachment

*** 15. Descriptive Title of Applicant's Project:**

The Weatherization Assistance for Low Income Persons enables low-income families to permanently reduce their energy bills by making their homes more energy efficient.

Attach supporting documents as specified in agency instructions.

Add Attachments

Delete Attachments

View Attachments

)

Application for Federal Assistance SF-424

16. Congressional Districts Of:

* a. Applicant

* b. Program/Project

Attach an additional list of Program/Project Congressional Districts if needed.

17. Proposed Project:

* a. Start Date:

* b. End Date:

18. Estimated Funding (\$):

* a. Federal	<input type="text" value="4,907,878.00"/>
* b. Applicant	<input type="text"/>
* c. State	<input type="text"/>
* d. Local	<input type="text"/>
* e. Other	<input type="text"/>
* f. Program Income	<input type="text"/>
* g. TOTAL	<input type="text" value="4,907,878.00"/>

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

- a. This application was made available to the State under the Executive Order 12372 Process for review on
- b. Program is subject to E.O. 12372 but has not been selected by the State for review.
- c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**

- Yes No

If "Yes", provide explanation and attach

21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

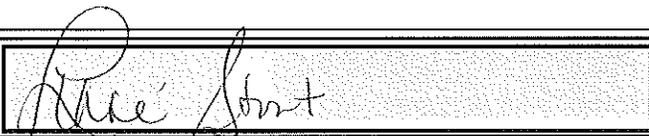
Authorized Representative:

Prefix: * First Name:
Middle Name:
* Last Name:
Suffix:

* Title:

* Telephone Number: Fax Number:

* Email:

* Signature of Authorized Representative: 

* Date Signed:

II.1 Budget Information

OMB Approval No. 0348-0044

Section A - Budget Summary						
Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. DOE WAP 2014	81.042			\$4,907,877		\$4,907,877
2. DOE WAP 2013	81.042			\$1,523,628		\$1,523,628
3.						\$0
4.						\$0
5. Totals		\$0	\$0	\$6,431,505	\$0	\$6,431,505
Section B - Budget Categories						
6. Object Class Categories	Grant Program, Function or Activity				Total (5)	
	(1) Grantee Administration	(2) Subgrantee Admin	(3) Grantee T&TA	(4) Subgrantee T&TA		
a. Personnel	\$90,765		\$178,151		\$268,916	
b. Fringe Benefits	\$35,044		\$69,999		\$105,043	
c. Travel	\$6,300		\$47,050		\$53,350	
d. Equipment					\$0	
e. Supplies					\$0	
f. Contractual		\$321,576	\$333,000	\$399,076	\$1,053,652	
g. Construction					\$0	
h. Other					\$0	
i. Total Direct Charges (sum of 6a-6h)	\$132,109	\$321,576	\$628,200	\$399,076	\$1,480,961	
j. Indirect Charges	\$189,466		\$8,504		\$197,970	
k. Totals (sum of 6i-6j)	\$321,575	\$321,576	\$636,704	\$399,076	\$1,678,931	
7. Program Income					\$0	

II.1 Budget Information

OMB Approval No. 0348-0044

Section A - Budget Summary						
Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1.						\$0
2.						\$0
3.						\$0
4.						\$0
5. Totals		\$0	\$0	\$0	\$0	\$0
Section B - Budget Categories						
6. Object Class Categories	Grant Program, Function or Activity				Total (5)	
	(1) Program Operations	(2) Health & Safety	(3) Vehicles & Equipment	(4) Liability Insurance		
a. Personnel					\$0	
b. Fringe Benefits					\$0	
c. Travel					\$0	
d. Equipment					\$0	
e. Supplies					\$0	
f. Contractual	\$3,962,683	\$752,910		\$36,981	\$4,752,574	
g. Construction					\$0	
h. Other					\$0	
i. Total Direct Charges (sum of 6a-6h)	\$3,962,683	\$752,910	\$0	\$36,981	\$4,752,574	
j. Indirect Charges					\$0	
k. Totals (sum of 6i-6j)	\$3,962,683	\$752,910	\$0	\$36,981	\$4,752,574	
7. Program Income					\$0	

Previous Edition Usable

SF-424A (Rev. 4-92)
Prescribed by OMB Circular A-102

Authorized for Local Reproduction

II.1 Budget Information

OMB Approval No. 0348-0044

Section A - Budget Summary						
Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1.						\$0
2.						\$0
3.						\$0
4.						\$0
5. Totals		\$0	\$0	\$0	\$0	\$0
Section B - Budget Categories						
6. Object Class Categories	Grant Program, Function or Activity				Total (5)	
	(1) Leveraging	(2) Financial Audits	(3)	(4)		
a. Personnel					\$0	
b. Fringe Benefits					\$0	
c. Travel					\$0	
d. Equipment					\$0	
e. Supplies					\$0	
f. Contractual	\$0	\$0			\$0	
g. Construction					\$0	
h. Other					\$0	
i. Total Direct Charges (sum of 6a-6h)	\$0	\$0	\$0	\$0	\$0	
j. Indirect Charges					\$0	
k. Totals (sum of 6i-6j)	\$0	\$0	\$0	\$0	\$0	
7. Program Income						
						\$0

Previous Edition Usable

SF-424A (Rev. 4-92)
Prescribed by OMB Circular A-102

Authorized for Local Reproduction

III. Budget Explanation

Personnel

Positions to be supported under the proposed award and brief descriptions of the duties of professionals:

Position	Description of Duties
Staff Services Manager I / Technical Support Unit	Manager provides staff supervision and administers departmental policies and programs. Participates in Policy Advisory Council meetings. Oversees development of policies, standards, contracts and trainings. Primary liaison to DOE.
Assoc. Govt. Program Analyst (3) / Technical Support Unit	Analysts provide technical and analytical support and training to Subgrantees and departmental staff. Help in the development of policies, standards, contracts, program guidance and energy audit reviews.
Staff Services Analyst / Technical Support Unit	Analyst provides technical and analytical support and training to Subgrantees and departmental staff. Help in the development of policies, standards, contracts and program guidance.
Student Assistant – Technical Support Unit	Assistant provides clerical and analytical support to Technical Support Unit
Staff Services Manager II – QA and Field Operations	Manager provides staff supervision and administers departmental policies and programs. Participates in Policy Advisory Council meetings.
Staff Services Manager I / Field Operations Unit	Manager provides staff supervision and oversight of the monitoring of Subgrantees.
Assoc. Govt. Program Analysts (8) / Field Operations Unit	Analysts perform day-to-day program administration, review of fiscal and programmatic data reports, annual monitoring activities and program analysis for monitoring purposes.
Staff Services Manager I / Policy Development Unit	Manager provides staff supervision and oversight of contract and policy development.
Assoc. Govt. Program Analysts (2) / Policy Development Unit	Analysts develop Subgrantee and subcontractor contracts and contract amendments and aids in the development of program policy.
Staff Services Manager I / Quality	Manager performs oversight of the QA

Assurance Unit	monitoring provided by third-party inspection contractor and oversees separate QA inspections performed by Grantee staff.
Assoc. Govt. Program Analyst (2) / Quality Assurance Unit	Analysts perform field monitoring of the third-party inspection contractor and separate QA inspections of the Subgrantees.
Retired Annuitant – Quality Assurance Unit	Provides program support and clerical services to QA unit

Direct Personnel Compensation:

Position	# of Positions	Salary/Wage	Time	Direct Pay
Staff Services Manager I / Technical Support Unit	1	\$73,524	25.0% FT	\$18,381
Assoc. Govt. Program Analyst / Technical Support Unit	3	\$64,176	25.0% FT	\$48,132
Staff Services Analyst / Technical Support Unit	1	\$53,352	25.0% FT	\$13,338
Student Assistant / Technical Support Unit	1	\$15,600	50.0% PT	\$7,800
Staff Services Manager I (Acting SSM II) – QA and Field Operations	1	\$80,724	10.0% FT	\$8,072
Staff Services Manager I / Field Operations Unit	1	\$73,524	13.0% FT	\$9,558
Assoc. Govt. Program Analysts (8) / Field Operations Unit	8	\$64,176	13.0% FT	\$66,743
Staff Services Manager I / Policy Development Unit	1	\$73,524	25.0% FT	\$18,381
Assoc. Govt. Program Analysts (2) / Policy Development Unit	2	\$64,176	25.0% FT	\$32,088
Staff Services Manager I / Quality Assurance Unit	1	\$73,524	20.0% FT	\$14,705
Assoc. Govt. Program Analyst / Quality Assurance Unit	2	\$64,176	20.0% FT	\$25,670
Retired Annuitant – Quality Assurance Unit	1	\$30,242	20.0% PT	\$6,068
Total Direct Personnel Compensation				\$268,916

Fringe Benefits

The fringe benefit rate is based upon actual percentages used to pay for benefits of all State employees. The total amount of fringe benefits is calculated based upon a prorated amount of the annual salary of each classification that is attributable to DOE activities.

Benefit	Rate
Retirement	20.50%
Payroll Taxes – OASDI	6.20%
Payroll Taxes - Medicare	1.45%
Medical Insurances	11.85%
Total Fringe Benefit Rate	40.00%

Position	# of Positions	Direct Pay	Rate	Benefit
Staff Services Manager I / Technical Support Unit	1	\$73,524	25.0% FT	\$7,352
Assoc. Govt. Program Analyst / Technical Support Unit	3	\$64,176	25.0% FT	\$19,253
Staff Services Analyst / Technical Support Unit	1	\$53,352	25.0% FT	\$5,335
Student Assistant / Technical Support Unit	1	\$15,600	50.0% PT	\$597
Staff Services Manager I (Acting SSM II) – QA and Field Operations	1	\$80,724	10.0% FT	\$3,229
Staff Services Manager I / Field Operations Unit	1	\$73,524	13.0% FT	\$3,823
Assoc. Govt. Program Analysts (8) / Field Operations Unit	8	\$64,176	13.0% FT	\$26,698
Staff Services Manager I / Policy Development Unit	1	\$73,524	25.0% FT	\$7,352
Assoc. Govt. Program Analysts (2) / Policy Development Unit	2	\$32,088	25.0% FT	\$12,835
Staff Services Manager I / Quality Assurance Unit	1	\$73,524	20.0% FT	\$5,882
Assoc. Govt. Program Analyst / Quality Assurance Unit	2	\$64,176	20.0% FT	\$10,268
Retired Annuitant – Quality Assurance Unit	1	\$30,242	20.0% PT	\$2,419
Total Fringe Benefits				\$105,043

Travel

Proposed travel:

Purpose of Trip	Number of Trips	Average Cost per Trip	Total
Energy OutWest Regional T&TA (Out-of-State)	1	\$1,850	\$1,850
NASCSP Training Conferences (Out-of-State)	1	\$2,950	\$2,950
On-Site Meetings and Special Investigations	6	\$500	\$3,000
Program Management Training	6	\$600	\$3,600
PG&E Energy Training Center – Basic Wx	3	\$150	\$450
PG&E Energy Training Center - Diagnostics	6	\$100	\$600
DOE Inspection Training – Staff & 3 rd Party Inspectors	8	\$1,550	\$12,400
DOE Inspection Certifications – Staff & 3 rd Party Inspectors	8	\$1,200	\$9,600
Comprehensive Monitoring	40	\$410	\$16,400
Quality Assurance Inspections	10	\$250	\$2,500
Total Travel			\$53,350

- 1) All budget estimations are based upon historical data and actual costs incurred under previous grants. Costs for all travel are leveraged with the LIHEAP weatherization program.
- 2) Budgets for meetings and conferences include any related training fees.

Contracts and Subgrants

Name of Proposed Sub	Basis of Cost	Total Cost
Wx Service Providers	Net allocation after Grantee admin and T&TA. Allocated by 3-factor formula; see Subgrantees for allocation breakdown. Cost basis – Allocated by 3-factor formula (Subgrantee)	\$5,436,776
Historical Preservation Reviews – Department of General Services	The services under this contract are for the direct services for delivery of services and would normally be paid directly by each Subgrantee. For efficiencies, the Grantee procured the services of a state agency, but is being funded through Subgrantee Program Operations.	36,450
Certified Inspector Training – TBD	Training to be provided to Subgrantees in preparation of the required certification and related costs.	75,000

	Cost basis – Estimate, not yet procured.	
Training Center Accreditation - PG&E Stockton Training Center	Provide funding to become a IREC-approved training center. Cost basis – Estimate	12,000
Technical Assistance – RHA Inc.	Provide technical assistance and training as assigned to CSD and Subgrantees. Cost basis – competitive bid contract	200,000
Third Party Inspections – ConSol	Conduct weatherized unit inspections; Cost basis. Cost basis - competitive bid contract	46,000
Total Contracts and Subgrants		\$5,806,226

Indirect Costs

Refer to Attachment N – Explanation of Indirect Costs.

Carryover

Refer to Attachment C – Program Year 2013 Carryover.

IV.1 Subgrantees

Subgrantee	Amador-Tuolumne Community Action Agency (ATCAA)		
Address	935 South State Highway 49		
City	Jackson CA 95642		
Executive Director	Shelly Hance		
Phone	(209) 223-1485	Ext.	Fax (209) 223-4178
Email	shance@atcaa.org		
Program Manager	Craig Case		
Phone	(209) 984-1034	Ext.	Fax (209) 533-1034
Email	ccase@atcaa.org		
Funds (tentative)	\$46,204	Units (tentative)	18
Service Area	Amador, Calaveras, and Tuolumne Counties		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	03 19		
Comments			
Subgrantee	Campesinos Unidos, Inc.		
Address	P.O. Box 39		
City	Brawley CA 92227		
Executive Director	Jose Lopez		
Phone	(760) 344-4500	Ext.	Fax (760) 344-0322
Email	cuimlopez@yahoo.com.com		
Energy Program Director	Toni Carrillo		
Phone	(760) 344-4500	Ext.	Fax (760) 344-0322
Email	cuitonicarriool@sbcglobal.net		
Funds (tentative)	\$191,379	Units (tentative)	73
Service Area	Imperial and San Diego Counties, Energy Area A		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	49 50 51 52 53		
Comments			

IV.1 Subgrantees

Subgrantee	Central Coast Energy Services, Inc.		
Address	PO Box 2707		
City	Watsonville CA 95077-2707		
Executive Director	Dennis Osmer		
Phone	(831) 761-7080	Ext. 125	Fax (831) 761-1747
Email	dennis@energyservices.org		
Environmental Services	Jake Lewandowski		
Phone	(831) 761-7080	Ext. 130	Fax (831) 761-1747
Email	jake@energyservices.org		
Funds (tentative)	\$200,176	Units (tentative)	76
Service Area	Monterey, San Benito, San Mateo and Santa Cruz Counties		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	14 17		
Comments			
Subgrantee	Central Valley Opportunity Center, Inc. (CVOC)		
Address	P.O. Box 1389		
City	Winton CA 95388		
Executive Director	Ernie Flores		
Phone	(209) 357-0062	Ext.	Fax (209) 357-0071
Email	eflores@cvoc.org		
Program Manager	Jean Warren		
Phone	(209) 357-0062	Ext. 133	Fax (209) 357-0071
Email	jwarren@cvoc.org		
Funds (tentative)	\$123,569	Units (tentative)	47
Service Area	Stanislaus County		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	18 19		
Comments			

IV.1 Subgrantees

Subgrantee	Colusa-Glenn-Trinity Community Action Partnership		
Address	420 East Laurel Street		
City	Willows CA 95988		
Executive Director	Scott Gurendi		
Phone	(530) 934-6510	Ext.	Fax (530) 934-6521
Email	sgruendi@hra.co.glenn.ca.us		
Energy Programs Mgr.	Bill Wathen		
Phone	(530) 934-1468	Ext.	Fax (530) 934-6650
Email	bwathen@hra.co.glenn.ca.us		
Funds (tentative)	\$18,351	Units (tentative)	7
Service Area	Colusa, Glenn and Trinity Counties		
Organization Type	County government	Sources of Labor	Direct hire and subcontractors
Congressional Districts	02		
Comments			
Subgrantee	Community Action Agency of Butte Co., Inc.		
Address	2255 Del Oro Avenue		
City	Oroville CA 95965		
Executive Director	Thomas Tenorio		
Phone	(530) 538-7559	Ext.	Fax (530) 533-7470
Email	ttenorio@buttecaa.com		
Program Manager	Rae Rush		
Phone	(530) 538-7534	Ext. 203	Fax (530) 538-7214
Email	rrush@buttecaa.com		
Funds (tentative)	\$83,443	Units (tentative)	32
Service Area	Butte County		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	02 04		
Comments			

IV.1 Subgrantees

Subgrantee	Community Action Commission of Santa Barbara County		
Address	5638 Hollister Avenue, Suite 230		
City	Goleta CA 93117		
Executive Director	Fran Forman		
Phone	(805) 964-8857	Ext.	Fax (805) 683-5872
Email	fforman@cacsb.com		
Director of Env. Serv.	Mike Culbertson		
Phone	(805) 964-8857	Ext. 145	Fax (805) 964-6798
Email	mculbertson@cacsb.com		
Funds (tentative)	\$62,917	Units (tentative)	24
Service Area	Santa Barbara County		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	23 24		
Comments			
Subgrantee	Community Action Marin		
Address	29 Mary Street		
City	San Rafael CA 94901		
Executive Director	Theller Gail		
Phone	(415) 485-1489	Ext.	Fax (415) 457-9677
Email	gtheller@camarin.org		
Program Manager	Richard McKee		
Phone	(415) 526-7519	Ext.	Fax (415) 457-9677
Email	dmckee@camarin.org		
Funds (tentative)	\$26,210	Units (tentative)	10
Service Area	Marin County		
Organization Type	Local action agency	Sources of Labor	Subcontractors
Congressional Districts	13		
Comments			

IV.1 Subgrantees

Subgrantee	Community Action of Ventura County Inc		
Address	621 Richmond Avenue		
City	Oxnard CA 93030		
Executive Dir.	Timothy Hockett		
Phone	(805) 436-4028	Ext.	Fax (805) 487-2512
Email	thockett@ca-vc.org		
Housing Serv. Mgr.	Dave Olsen		
Phone	(805) 436-4032	Ext.	Fax (805) 487-2512
Email	dolsen@ca-vc.org		
Funds (tentative)	\$103,362	Units (tentative)	39
Service Area	Ventura County and Los Angeles County - Area A		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	23 24 26 27 28 29 30 33		
Comments			
Subgrantee	Community Action Partnership of Kern Co.		
Address	300 19th Street		
City	Bakersfield CA 93301-4502		
Executive Director	Jeremy Tobias		
Phone	(661) 336-5236	Ext.	Fax (661) 326-5236
Email	jtobias@capk.opg		
Wx Manager	Loretta Andrews		
Phone	(661) 336-5283	Ext.	Fax (661) 336-5263
Email	landrew@capk.org		
Funds (tentative)	\$270,851	Units (tentative)	103
Service Area	Kern County		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	20 22		
Comments			

IV.1 Subgrantees

Subgrantee	Community Action Partnership of Orange County		
Address	7180 Lampson Avenue		
City	Garden Grove CA 92841		
Executive Director	Buddy Ray		
Phone	(714) 897-6670	Ext.	Fax (714) 894-5404
Email	bray@capoc.org		
Wx Director	Kathy Kifaya		
Phone	(714) 839-1595	Ext. 5302	Fax (714) 839-2817
Email	kkifaya@capoc.org		
Funds (tentative)	\$198,202	Units (tentative)	76
Service Area	Orange County		
Organization Type	Local Action Agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	40 42 44 46 47 48		
Comments			
Subgrantee	Community Action Partnership of Riverside County		
Address	2038 Iowa Avenue, Suite B-102		
City	Riverside CA 92507		
Executive Director	Maria Juarez		
Phone	(951) 955-3563	Ext.	Fax (951) 955-6494
Email	mjuarez@capriverside.org		
Sr Community Programs	Godwin Aimua		
Phone	(951) 955-6404	Ext.	Fax (951) 955-6506
Email	gaimua@capriversided.org		
Funds (tentative)	\$310,806	Units (tentative)	119
Service Area	Riverside County		
Organization Type	County government	Sources of Labor	Subcontractors
Congressional Districts	41 44 45 49		
Comments			

IV.1 Subgrantees

Subgrantee	Community Action Partnership of San Bernardino County		
Address	696 S Tippecanoe Ave		
City	San Bernardino CA 92415		
Chief Executive Officer	Patricia Nickols		
Phone	(909) 723-1516	Ext.	Fax (909) 723-1509
Email	pnickols@capsbc.sbcounty.gov		
EEES Program Manager	Nicole Strarks-Murray		
Phone	(909) 723-1621	Ext.	Fax (909) 723-1629
Email	nstarsks-murray@capsbc.sbcounty.gov		
Funds (tentative)	\$309,661	Units (tentative)	118
Service Area	San Bernardino County		
Organization Type	Local action agency	Sources of Labor	Direct hire
Congressional Districts	25 26 41 42 43		
Comments			
Subgrantee	Community Action Partnership of San Luis Obispo County Inc		
Address	3970 Short Street, Suite 110		
City	San Luis Obispo CA 93401		
Director	Elizabeth Steinberg		
Phone	(805) 544-4355	Ext.	Fax (805) 541-4188
Email	esteinberg@eocslo.org		
Energy Programs Dir.	Jim McNamara		
Phone	(805) 541-4122	Ext. 11	Fax (805) 541-4188
Email	jmcnamara@eocslo.org		
Funds (tentative)	\$38,664	Units (tentative)	15
Service Area	San Luis Obispo County		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	22 23		
Comments			

IV.1 Subgrantees

Subgrantee	Community Resource Project, Inc. (CRP)		
Address	250 Harris Avenue, Suite 6		
City	Sacramento CA 95838		
Acting Executive Directo	Patricia Johnson		
Phone	(916) 567-5220	Ext.	Fax (916) 567-5208
Email	patriciaj@cresource.org		
Program Manager	Elizabeth Bianchi-Rossi		
Phone	(916) 567-5220	Ext.	Fax (916) 567-5208
Email	elizabethb@cresource.org		
Funds (tentative)	\$279,289	Units (tentative)	107
Service Area	Sacramento, Sutter, and Yuba Counties		
Organization Type	Nonprofit	Sources of Labor	Direct hire
Congressional Districts	02 03 04 05 10		
Comments			
Subgrantee	Community Services & Employment Training, Inc. (CSET)		
Address	PO Box 1350		
City	Visalia CA 93279-1350		
Executive Director	Carolyn Rose		
Phone	(559) 732-4191	Ext. 630	Fax (559) 733-3971
Email	crose@cset.org		
Housing Director	Lily Rivera-Graves		
Phone	(559) 732-4194	Ext. 615	Fax (559) 627-1674
Email	lrivera@cset.org		
Funds (tentative)	\$171,101	Units (tentative)	65
Service Area	Tulare County		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	21		
Comments			

IV.1 Subgrantees

Subgrantee	Contra Costa Emp. & Human Serv. Dept.		
Address	651 Pine Street, 4th Floor		
City	Concord CA 94553		
Executive Director	Joe Valentine		
Phone	(925) 313-1579	Ext.	Fax (925) 313-1575
Email	jvalentine@ehsd.cccounty.us		
Program Director	Ed Lerman		
Phone	(925) 313-1675	Ext.	Fax (925) 313-1576
Email	elerman@ehsd.cccounty.us		
Funds (tentative)	\$128,758	Units (tentative)	49
Service Area	Contra Costa County		
Organization Type	Public agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	07 10 11		
Comments			
Subgrantee	Economic Opportunity Council of San Francisco		
Address	1426 Fillmore Street, Suite 301		
City	San Francisco CA 94115		
Executive Director	Dennis Yee		
Phone	(415) 749-5600	Ext.	Fax
Email	dky@pacbell.net		
Interim CFO	Tuan Trinh		
Phone	(415) 749-3798	Ext.	Fax
Email	gotoma2@pacbell.net		
Funds (tentative)	\$72,002	Units (tentative)	27
Service Area	San Francisco County		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	08 12		
Comments			

IV.1 Subgrantees

Subgrantee	El Dorado County Department of Human Services		
Address	937 Spring Street		
City	Placerville CA 95667		
Executive Director	Jan Walker-Conroy		
Phone	(530) 642-7275	Ext.	Fax
Email	jan.wconroy@edcgov.us		
Energy Coordinator	Michelle Hunter		
Phone	(530) 621-6255	Ext.	Fax (530) 295-2581
Email	michelle.hunter@edcgov.us		
Funds (tentative)	\$72,644	Units (tentative)	28
Service Area	Alpine and El Dorado Counties		
Organization Type	County government	Sources of Labor	Direct hire and subcontractors
Congressional Districts	03 04		
Comments			
Subgrantee	Fresno County Economic Opportunities Commission		
Address	1920 Mariposa Mall, Suite 300		
City	Fresno CA 93721		
Executive Director	Brian Angus		
Phone	(559) 263-1010	Ext.	Fax
Email	brian.angus@fesnoeoc.org		
Energy Program Director	Nathan Magsig		
Phone	(559) 263-1587	Ext.	Fax
Email	nathan.magsig@fresnoeoc.org		
Funds (tentative)	\$297,070	Units (tentative)	113
Service Area	Fresno County		
Organization Type	Local action agency	Sources of Labor	Subcontractors
Congressional Districts	18 19 20 21		
Comments			

IV.1 Subgrantees

Subgrantee	Great Northern Corporation		
Address	P.O. Box 20		
City	Weed CA 96094		
Executive Director	Bonnie Kubowitz		
Phone	(530) 938-4115	Ext. 23	Fax (530) 938-4117
Email	bkubowitz@gnccorp.org		
Program Manager	Brandy Caporaso		
Phone	(530) 938-4115	Ext. 15	Fax (530) 938-4117
Email	bcaporaso@gnccorp.org		
Funds (tentative)	\$46,149	Units (tentative)	18
Service Area	Siskiyou County		
Organization Type	Nonprofit	Sources of Labor	Direct hire and subcontractors
Congressional Districts	02		
Comments			
Subgrantee	Inyo Mono Advocates of Community Action, Inc. (IMACA)		
Address	P.O. Box 845		
City	Bishop CA 93515		
Interim Executive Directo	Jill Paydon		
Phone	(760) 873-8557	Ext. 23	Fax (760) 873-8182
Email	jpaydon@imaca.net		
Community Service Direc	Annie Blakey		
Phone	(760) 873-8557	Ext. 28	Fax (760) 873-8182
Email	ablakey@imaca.net		
Funds (tentative)	\$15,152	Units (tentative)	6
Service Area	Inyo and Mono Counties		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	25		
Comments			

IV.1 Subgrantees

Subgrantee	Kings Community Action Organization, Inc.		
Address	1130 N. 11th Ave		
City	Hanford CA 93230		
Executive Director	Jeff Garner		
Phone	(559) 415-7202	Ext.	Fax (559) 582-2146
Email	jgarner@kcao.org		
Operations Director	Saul Leal		
Phone	(559) 583-8071	Ext. 103	Fax (559) 415-7488
Email	sleal@kcao.org		
Funds (tentative)	\$36,715	Units (tentative)	14
Service Area	Kings County		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	20		
Comments			
Subgrantee	Lassen County Economic Development Corp.		
Address	P.O. Box 850		
City	Westwood CA 96137		
Executive Director	Debbie Jennings		
Phone	(530) 256-3261	Ext.	Fax (530) 256-3531
Email	ledc@citilink.net		
Energy Programs Mgr.	Debbie Jennings		
Phone	(530) 256-3261	Ext.	Fax (530) 256-3531
Email	ledc.citilink.net		
Funds (tentative)	\$19,609	Units (tentative)	7
Service Area	Lassen		
Organization Type	County	Sources of Labor	Direct hire and subcontractors
Congressional Districts	04		
Comments			

IV.1 Subgrantees

Subgrantee	Long Beach Community Action Partnership - Area D		
Address	3012 Long Beach Blvd		
City	Long Beach CA 90807		
Executive Director	Darick Simpson		
Phone	(562) 216-4606	Ext.	Fax
Email	dsimpson@lbcap.org		
Program Manager	Megan Nunley		
Phone	(562) 264-3900	Ext. 117	Fax
Email	mnunley@lbcap.org		
Funds (tentative)	\$297,998	Units (tentative)	114
Service Area	Los Angeles County - Area D		
Organization Type	Local Action Agency	Sources of Labor	Subcontractors
Congressional Districts	26 29 32 34 36 37 38 39 42 46		
Comments			
Subgrantee	Maravilla Foundation		
Address	5729 East Union Pacific		
City	City of Commerce CA 90022		
Executive Director	Alex Sotomayor		
Phone	(323) 869-4501	Ext.	Fax (323) 278-7788
Email	alexsot@aol.com		
Program Manager	Manuel Gonzalez		
Phone	(213) 804-4062	Ext.	Fax (323) 278-7788
Email	manny@maravilla.org		
Funds (tentative)	\$458,649	Units (tentative)	176
Service Area	Los Angeles County, Energy Area B		
Organization Type	Nonprofit	Sources of Labor	Direct hire
Congressional Districts	22 25 26 27 28 29 31 32 33 34 36 38		
Comments			

IV.1 Subgrantees

Subgrantee	Mariposa County Department of Human Services		
Address	P.O. Box 39		
City	Mariposa CA 95338		
Director	Mary Sawicki		
Phone	(209) 754-6445	Ext.	Fax (209) 966-8251
Email	msawicki@mariposacounty.org		
Contract Advisor	Janet Gass		
Phone	(209) 966-3609	Ext.	Fax (209) 966-3519
Email	jgass@mariposacounty.org		
Funds (tentative)	\$15,340	Units (tentative)	6
Service Area	Mariposa County		
Organization Type	County government	Sources of Labor	Direct hire and subcontractors
Congressional Districts	19		
Comments			
Subgrantee	Merced County Community Action Agency		
Address	P.O. Box 2085		
City	Merced CA 95344-0085		
Executive Director	Brenda Callahan-Johnson		
Phone	(209) 723-4565	Ext.	Fax (209) 723-4411
Email	brenda@mercedcaa.org		
Program Director	Mike Polinko		
Phone	(209) 723-1225	Ext.	Fax (209) 384-7150
Email	mpolinko@mercedcaa.org		
Funds (tentative)	\$114,245	Units (tentative)	44
Service Area	Madera and Merced Counties		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	18 19		
Comments			

IV.1 Subgrantees

Subgrantee	Metropolitan Area Advisory Committee (MAAC)		
Address	1335 Third Ave		
City	Chula Vista CA 91911		
President / CEO	Austin Foye		
Phone	(619) 426-3595	Ext.	Fax (619) 426-2173
Email	afoye@maacproject.org		
CFO / PM	Patty Bailey		
Phone	(619) 409-7588	Ext.	Fax
Email	pbailey@maacproject.org		
Funds (tentative)	\$76,200	Units (tentative)	29
Service Area	San Diego County, Energy Area B		
Organization Type	Nonprofit	Sources of Labor	Direct hire and subcontractors
Congressional Districts	49 50 51 52 53		
Comments			
Subgrantee	North Coast Energy Services		
Address	P.O. Box 413		
City	Ukiah CA 95482-0413		
Executive Director	Linda McQueen		
Phone	(707) 463-0303	Ext.	Fax (707) 463-0637
Email	linda@pacific.net		
Director	Linda McQueen		
Phone	(707) 463-0303	Ext.	Fax (707) 463-0637
Email	linda@pacific.net		
Funds (tentative)	\$259,116	Units (tentative)	99
Service Area	Lake, Mendocino, Napa, Solano, Sonoma and Yolo Counties		
Organization Type	Nonprofit	Sources of Labor	Direct hire and subcontractors
Congressional Districts	01 02 03 07 10		
Comments			

IV.1 Subgrantees

Subgrantee	Pacific Asian Consortium in Employment (PACE)		
Address	1055 Wilshire Boulevard, Suite 1475		
City	Los Angeles CA 90017		
Executive Director	Kerry Doi		
Phone	(213) 989-3213	Ext.	Fax (213) 353-1227
Email	kerrydoi@pacela.org		
Program Manager	Kim Train		
Phone	(213) 989-3254	Ext.	Fax (213) 353-1227
Email	ktrain@pacela.org		
Funds (tentative)	\$341,575	Units (tentative)	130
Service Area	Los Angeles County, Energy Area C		
Organization Type	Nonprofit	Sources of Labor	Direct hire and subcontractors
Congressional Districts	31 33 34 35 36 37 39 46		
Comments			
Subgrantee	Plumas County Community Development Commission		
Address	P.O. Box 319		
City	Quincy CA 95971		
Executive Director	David Keller		
Phone	(530) 283-2466	Ext. 115	Fax (530) 283-2478
Email	dwk@plumascdc.org		
Wx Program Manager	David Mitchell		
Phone	(530) 283-2466	Ext. 117	Fax (530) 283-2478
Email	dmitchell@plumascdc.org		
Funds (tentative)	\$16,884	Units (tentative)	6
Service Area	Plumas and Sierra Counties		
Organization Type	County government	Sources of Labor	Direct hire and subcontractors
Congressional Districts	04		
Comments			

IV.1 Subgrantees

Subgrantee	Project Go, Inc.		
Address	801 Vernon Street		
City	Roseville CA 95678-3149		
Executive Director	Lynda Timbers		
Phone	(916) 782-3443	Ext.	Fax (916) 782-1517
Email	lynda@projectgoinc.org		
Program Director	Jennifer Durbin		
Phone	(916) 782-3443	Ext. 14	Fax (916) 782-1517
Email	jennifer@projectgoinc.org		
Funds (tentative)	\$104,345	Units (tentative)	40
Service Area	Placer & Nevada County		
Organization Type	Nonprofit	Sources of Labor	Direct hire and subcontractors
Congressional Districts	04		
Comments			
Subgrantee	Redwood Community Action Agency		
Address	904 G Street		
City	Eureka CA 95501		
Executive Director	Val Martinez		
Phone	(707) 269-2009	Ext.	Fax (707) 445-0884
Email	valmartinez@rcaa.org		
Energy & Env Svcs Coor	Verlenea Freson		
Phone	(707) 444-3831	Ext.	Fax (707) 444-3662
Email	rcaa-lead@pacbell.net		
Funds (tentative)	\$94,643	Units (tentative)	36
Service Area	Humboldt and Modoc County (Intermin Del Norte County)		
Organization Type	Local action agency	Sources of Labor	Direct hire and subcontractors
Congressional Districts	01		
Comments			

IV.1 Subgrantees

Subgrantee	Sacred Heart Community Services		
Address	1381 South First Street		
City	San Jose CA 95110		
Executive Director	Poncho Guevara		
Phone	(408) 476-2653	Ext.	Fax (408) 885-9071
Email	poncho@sacredheartcommunityservice.org		
Director of Public Affairs	Darren Seaton		
Phone	(408) 278-2177	Ext.	Fax (408) 715-0247
Email	darrens@sacredheartcs.org		
Funds (tentative)	\$151,394	Units (tentative)	58
Service Area	Santa Clara County		
Organization Type	Nonprofit	Sources of Labor	Direct hire and subcontractors
Congressional Districts	11 14 15 16		
Comments			
Subgrantee	San Joaquin Co. Dept. of Aging, Children's & Comm. Serv.		
Address	P.O. Box 201056		
City	Stockton CA 95201		
Acting Director	Dean Fujimoto		
Phone	(209) 468-1594	Ext.	Fax (209) 932-2659
Email	dfujimoto@sjgov.org		
Program Manager	Melissa Hill		
Phone	(209) 468-1549	Ext.	Fax (209) 932-2659
Email	mehill@sjgov.org		
Funds (tentative)	\$142,109	Units (tentative)	54
Service Area	San Joaquin County		
Organization Type	County government	Sources of Labor	Direct hire and subcontractors
Congressional Districts	11 18		
Comments			

IV.1 Subgrantees

Subgrantee	Self-Help Home Improvement Project, Inc. (SHHIP)		
Address	3777 Meadow View Drive, Unit 100		
City	Redding CA 96002		
Executive Director	Keith Griffith		
Phone	(530) 378-6900	Ext.	Fax (530) 378-6910
Email	kgrif@shhip.org		
Program Manager	Scott Berg		
Phone	(530) 378-6910	Ext.	Fax (530) 378-6910
Email	sberg@shhip.org		
Funds (tentative)	\$91,647	Units (tentative)	35
Service Area	Shasta and Tehama Counties		
Organization Type	Nonprofit	Sources of Labor	Direct hire and subcontractors
Congressional Districts	02		
Comments			
Subgrantee	Spectrum Community Services, Inc.		
Address	1435 Grove Way		
City	Hayward CA 94546		
Executive Director	Michael Sweeney		
Phone	(510) 881-0300	Ext.	Fax (510) 538-1395
Email	msweeney@spectrumcs.org		
Program Manager	Mark Smtih		
Phone	(510) 881-0300	Ext. 235	Fax (510) 538-1395
Email	msmith@spectrumcs.org		
Funds (tentative)	\$150,347	Units (tentative)	57
Service Area	Alameda County except Albany, Berkeley and Emeryville		
Organization Type	Nonprofit	Sources of Labor	Direct hire and subcontractors
Congressional Districts	09 10 11 13		
Comments			

IV.2 Production Schedule

	Annual Total
Weatherized Units (Total)	2,075
Reweatherized Units	-

Vehicles and Equipment \$5,000 or more Average Cost per Dwelling Unit (DOE Rules)

A.	Total of Vehicles and Equipment Budget	\$0
B.	Total Units to be Weatherized, from Production Schedule above	2,075
C.	Units to be Reweatherized, from Production Schedule above	-
D.	Total Units to be Weatherized, plus Planned Reweatherized Units from Production Schedule above (B plus C)	2,075
E.	Average Vehicles and Equipment cost per Dwelling Unit (A divided by D)	\$0

Average Cost per Dwelling Unit (DOE Rules)

F.	Total of Funds for Program Operations	\$3,962,683
G.	Total Units to be Weatherized, plus Planned Reweatherized Units from Production Schedule above (total from D above)	2,075
H.	Average Cost per Dwelling Unit, less Vehicles and Equipment (F divided by G)	\$1,911
I.	Average Cost per Dwelling Unit for Vehicles and Equipment (total from E)	\$0
J.	Total Average Cost per Dwelling Unit (H plus I)	\$1,911

IV.3 Energy Savings

DOE Program	Amount	Line
Total DOE State Weatherization Allocation	\$ 6,431,506	(a)
Total Cost associated with Administration, T&TA, Financial and Energy Audits or 15% of allocation	\$ 964,726	(b)
Subtract the amount entered in line (b) from line (a), for total funds available to weatherize homes	\$ 5,466,780	(c)
State Average Cost per Home or Nat'l WAP Program Year Average Cost per Home	\$ 2,635	(d)
Divide the amount entered on line (c) by the amount entered on line (d), for Total Estimated Homes to be Weatherized	2,075	(e)
Multiply (e) by 30.5 MBTU for Total Annual Estimated Energy Savings resulting from DOE funds	63,288	(f)
All Funding Sources		
Total funds used by the State to weatherize homes (DOE WAP, LIHEAP)	\$ 44,498,769	(g)
Total cost associated with the administration of Wx funds or 15% of total funds available to wx homes	\$ 6,674,815	(h)
Subtract the amount entered in line (h) from line (g), for total funds available to weatherize homes	\$ 37,823,954	(i)
State Average Cost per Home or Nat'l WAP Program Year Average Cost per Home	\$ 2,635	(j)
Divide the amount entered on line (i) by the amount entered on line (j), for Total Estimated Homes to be Weatherized	14,357	(k)
Multiply (k) by 30.5 MBTU for Total Annual Estimated Energy Savings resulting from all funding sources	437,878	(l)

IV.4 DOE-Funded Leveraging Activities

CSD has no planned DOE-funded leveraging activities this year.

IV.5 State Policy Advisory Council Roster

<i>Service Provider Name</i>	<i>Name</i>	<i>Title</i>
Amador-Tuolumne Community Action Agency (ATCAA)	Shelly Hance	Executive Director
Campesinos Unidos, Inc.	Jose Lopez	Executive Director
Central Coast Energy Services, Inc.	Dennis Osmer	Executive Director
Central Valley Opportunity Center, Inc. (CVOC)	Ernie Flores	Executive Director
Colusa-Glenn-Trinity Community Action Partnership	Scott Gurendi	Executive Director
Community Action Agency of Butte Co., Inc.	Thomas Tenorio	Executive Director
Community Action Commission of Santa Barbara County	Fran Forman	Executive Director
Community Action Marin	Theller Gail	Executive Director
Community Action of Ventura County Inc	Timothy Hockett	Executive Dir.
Community Action Partnership of Kern Co.	Jeremy Tobias	Executive Director
Community Action Partnership of Orange County	Buddy Ray	Executive Director
Community Action Partnership of Riverside County	Maria Juarez	Executive Director
Community Action Partnership of San Bernardino County	Patricia Nickols	Chief Executive Officer
Community Action Partnership of San Luis Obispo County Inc	Elizabeth Steinberg	Director
Community Resource Project, Inc. (CRP)	Patricia Johnson	Acting Executive Direct
Community Services & Employment Training, Inc. (CSET)	Carolyn Rose	Executive Director
Contra Costa Emp. & Human Serv. Dept.	Joe Valentine	Executive Director
Economic Opportunity Council of San Francisco	Dennis Yee	Executive Director
El Dorado County Department of Human Services	Jan Walker-Conroy	Executive Director
Fresno County Economic Opportunities Commission	Brian Angus	Executive Director
Great Northern Corporation	Bonnie Kubowitz	Executive Director
Inyo Mono Advocates of Community Action, Inc. (IMACA)	Jill Paydon	Interim Executive Direct
Kings Community Action Organization, Inc.	Jeff Garner	Executive Director
Lassen County Economic Development Corp.	Debbie Jennings	Executive Director
Long Beach Community Action Partnership - Area D	Darick Simpson	Executive Director
Maravilla Foundation	Alex Sotomayor	Executive Director
Mariposa County Department of Human Services	Mary Sawicki	Director
Merced County Community Action Agency	Brenda Callahan-Johnson	Executive Director
Metropolitan Area Advisory Committee (MAAC)	Austin Foye	President / CEO
North Coast Energy Services	Linda McQueen	Executive Director

IV.5 State Policy Advisory Council Roster

<i>Service Provider Name</i>	<i>Name</i>	<i>Title</i>
Pacific Asian Consortium in Employment (PACE)	Kerry Doi	Executive Director
Plumas County Community Development Commission	David Keller	Executive Director
Project Go, Inc.	Lynda Timbers	Executive Director
Redwood Community Action Agency	Val Martinez	Executive Director
Sacred Heart Community Services	Poncho Guevara	Executive Director
San Joaquin Co. Dept. of Aging, Children's & Comm. Serv.	Dean Fujimoto	Acting Director
Self-Help Home Improvement Project, Inc. (SHHIP)	Keith Griffith	Executive Director
Spectrum Community Services, Inc.	Michael Sweeney	Executive Director

IV.5 State Policy Advisory Council Roster

Organization Name	Name
California Public Utilities Commission	Hazlyn Fortune
Pacific Gas & Electric	Mary O'Drain
Sempra	Joy Yamagata
So Cal Edison	Jack Parkhill

IV.6 Public Hearings

Public hearing was held on April 25, 2014, at 10:00am in Sacramento, CA. For transcript, refer to Attachment L Public Hearing Transcript.

Legal ad notice for the hearing ran in the following newspapers on April 15, 2014:

Sacramento Bee, Sacramento CA

Redding Record Searchlight, Redding CA

La Opinion, Los Angeles CA

IV.7 Miscellaneous

Recipient Business Officer

Kathy Andry
Deputy Director of Energy and Environmental Services Division
Kathy.Andry@csd.ca.gov
916-576-7132

Recipient Principal Investigator

Leslie Campanella
Program Manager, Technical Support Unit
Leslie.Campanella@csd.ca.gov
916-576-7131

Del Norte County

- Services for Del Norte are currently being provided by interim Subgrantee, Redwood CAA.
- Redwood will continue to act as interim Subgrantee until further notice.

State Historic Preservation

CSD entered into a programmatic agreement with the California Energy Commission, Department of Energy, California State Historic Preservation Office regarding Section 106 compliance (see Appendix D). By agreement, categories of individual measures were established that are exempt from SHPO review. These measures were determined not to have the potential to adversely affect any historic properties of the dwelling. For those measures that are non-exempt, a review is conducted on the dwelling to determine if the dwelling is of historical significance. A web-based approval system was developed by CSD to expedite the process.

Redistribution of Funds

If it is determined in the future that a Subgrantee cannot meet their production goals, funding may be redistributed to another Subgrantee who has the capacity to spend out. Funding may also be redistributed if a Subgrantee is not in compliance with program requirements, needs funds to meet additional DOE reporting or survey requests or other extenuating circumstances. If a redistribution of funds occurs, production numbers will be adjusted accordingly.

V.1 Eligibility

V.1.1 Approach to Determining Client Eligibility

To define low-income, CSD has elected to adopt the most current Low-Income Home Energy Assistance Program (LIHEAP) income eligibility guidelines at 60% of state median income. In addition to income-based qualifications, a household may qualify for services if a household member is a recipient of certain categorical assistance programs.

Eligibility is based on the household's total monthly gross income, which cannot exceed the income guidelines (Attachment D CSD 2014 Eligibility and Verification Guide). Subgrantees are required to target households with lowest incomes and high energy costs, while taking into consideration households with elderly, disabled persons and children under nineteen.

Weatherization services are only provided to those eligible households that meet the criteria included in the CSD 2014 Eligibility and Verification Guide (Attachment D).

V.1.2 Approach to Determining Building Eligibility

Household income eligibility is established and documented prior to weatherization of the dwelling. Subgrantees are required by contract to maintain individual applicant files which contain at a minimum the Energy Intake Form, copies of source documents supporting eligibility, the CSD Weatherization Dwelling Assessment, job costs documentation, and for pre-1978 units, lead-safe education confirmation and clearance inspections, if applicable.

Reweatherization

Weatherization services for a dwelling unit previously weatherized using DOE Funds are not allowable except if (1) a dwelling unit has been damaged by fire, flood, or act of nature and repair of the damage to weatherization materials is not paid for by insurance or (2) a dwelling unit weatherized using DOE WAP or other Federal program funds prior to September 30, 1994, needs further weatherization assistance.

Per WPN 11-3, CSD notifies DOE of any call-back/add-on work for units previously reported as completed when DOE funds will be used to complete the additional work on the units. The units are taken out of the DOE reporting system and re-submitted once the work is complete. Subgrantees are strongly encouraged to use other non-DOE funds to do additional weatherization work on units previously weatherized after September 30, 1994.

Eligible Structures

Single-family dwellings, mobile homes and small and large multi-family buildings are all eligible structures under the program. Subgrantees are also encouraged to weatherize group homes, rooming houses, and shelters, particularly those for the homeless, battered, or troubled. Specific criteria must be met to ensure eligibility of the group home, rooming house, or shelter. The eligibility of facilities occupied by transient persons may be certified by the owner/manager based on the facility policy of limiting occupancy to those meeting contract eligibility requirements. If a group home or rooming house does not qualify as a multi-family structure, income eligibility is based on all occupants as a group, and the building must be weatherized as a single dwelling unit.

Non-stationary campers and trailers are not allowed to receive weatherization services. Manufactured homes regulated by HUD that are built on a trailer chassis and designed for highway delivery to a permanent location are eligible and can be a single-, double-, or triple-wide home. To receive weatherization services, a manufactured home must be a permanent, full-time residential dwelling with a floor area of at least 330 square feet.

Rental Units

To ensure that the benefits of weatherization to occupants of rental units are protected, CSD's contracts with Subgrantees include this language: "Contractor shall assure that owners and renters receive equitable treatment under this program."

The following language is included on all energy service for rental unit agreement forms and is signed by the landlord, or his agent, prior to the dwelling receiving weatherization services:

By signing this form, the owner or owner's agent and the tenant grant the contractor permission to enter the dwelling unit to perform an assessment and install feasible weatherization measures in accordance with CSD weatherization program policies and standards to the above-described unit and agree to the following:

1. The owner or owner's agent shall not raise the rent of the unit for a period of two years or evict the unit's resident because of the increased value of the unit due solely to weatherization measures provided by the Contractor (allowable factors include an actual increase in property taxes, actual cost of amortizing other improvements to the property accomplished after the date of work completed by the Contractor, or actual increases in expenses of maintaining and operating this property).
2. The owner or owner's agent and the tenant shall retain all applied measures in the residence where installed.
3. The owner or owner's agent shall ensure that gas or electric service, or both, that is provided by a master-meter to tenants shall charge utilities costs in accordance with California Public Utilities Commission Code Section 739.5.
4. The tenant authorizes the contractor access to utility company records to obtain only energy usage data for a period of one year before and one year after rehabilitation, minor home repair, and/or weatherization measures are installed.

Failure of the Contractor to enforce this Agreement upon breach by the Owner shall not be construed as a waiver of the Contractor's right to enforce this Agreement.

No particular type of dwelling was identified as being more prone to higher energy consumption, and single-family, multi-family, owner-occupied, and rental units are accorded equal consideration for service provision.

Where occupancy by otherwise eligible occupants is not maintained as a permanent residence, occupancy must be limited to no more than ninety (90) days, and whether or not rent is paid has no effect on eligibility. Payment will be based on the unit's qualifying as a multi-family structure or a group home.

When complaints are received at the State directly from clients, clients are generally referred back to the Subgrantee for resolution with instructions to submit appeals in writing to the Subgrantee. The Subgrantee has 15 days to respond to an appeal and, if denied, the client is given instructions on how to appeal the decision to the State where a fair hearing may take place. Complaints specifically regarding increases in rents as a result of weatherization services provided would follow the same general guideline except that the Subgrantee would work directly with the property owner to resolve the issue.

Multi-Family Dwellings

CSD has established a program to increase weatherization in qualifying multi-family units. The program, based on DOE Program Notice 10-15, streamlines the qualification of certain HUD and USDA multi-family properties for weatherization work, including streamlining income eligibility determination and ensuring that benefits accrue primarily to the low-income residents. CSD has trained its providers in applying this streamlined process and continues to work with individual providers to encourage weatherization in multi-family units.

All dwellings in multi-family buildings can only be weatherized when 66% of the dwellings are determined to be eligible. The 50% rule is only applicable to duplexes and fourplexes.

Deferral

Deferral takes place upon discovery, or as soon as practicable, of circumstances giving rise to feasibility of a given measure or other issue causing the installation of weatherization measures to be deferred. The CSD Weatherization Deferral Form, signed by the client, provides an area for Subgrantee to refer client to other programs, agencies or outside assistance if the Subgrantee can identify an appropriate contractor or entity to assist client. If a condition is present that presents a hazard or unsafe condition affecting the health and safety of workers or clients/occupants, the hazard is resolved if feasible and within scope of WAP. Further detail of deferral conditions is provided in the each section of the CSD Health and Safety Plan (Attachment J). The plan has been updated to incorporate ASHRAE 62.2 (2013).

V.1.3. Definition of Children

"Children" are defined as members of a household who have not attained their nineteenth (19th) birthday.

V.1.4 Approach to Tribal Organizations

The State ensures that low-income members of the American Indian population receive services equivalent to the assistance provided other low-income persons within the State. CSD recommends that a tribal organization not be treated as a local applicant due to the very low amount of funding that would be available to their organization. The funding would not be enough to start-up and sustain a localized program.

V.2 Selection of Areas to Be Served

CSD's goal is to serve low-income residents in all 58 California counties. A service area may be a portion of a county, an individual county, or a group of counties. The projected funding, goals, and other information for each service area are set forth in Subgrantee Information in the Annual File.

V.3 Priorities for Service Delivery

The CSD contract with Subgrantees requires that service priority shall be given to elderly persons, persons with disabilities, families with children, high residential energy users and households with a high energy burden. Subgrantees may give first priority for services to those households whose members have life-threatening emergencies. "Children" are defined as members of a household who have not attained their nineteenth (19th) birthday. Note: Attachment D CSD 2014 Eligibility and Verification Guide that is used for the LIHEAP weatherization and utility assistance programs will be updated during the current program year to accurately reflect the definition of children used under the DOE program. The new 2015 guide will be released December 1, 2014

Weatherization services for a dwelling unit previously weatherized using DOE Funds are not allowable except if (1) a dwelling unit has been damaged by fire, flood, or act of nature and repair of the damage to weatherization materials is not paid for by insurance or (2) a dwelling unit weatherized using DOE WAP or other Federal program funds prior to September 30, 1994, needs further weatherization assistance.

V.4 Climatic Conditions

CSD currently uses the U.S. Climate Zone Map provided by the California Energy Commission (CEC) which consists of sixteen climate zones. To be more consistent with the applicability of California Title 24 requirements and to remove the subjectivity related to using weather stations, the CEC climate zones replaced the DOE climate zone map. New priority lists were developed for those site-built dwellings, mobile home and multi-family buildings existing in all climate zones. The Subgrantees use the data included in the Priority List Policy (Attachment E) or Single-Family/Small Multi-Family Energy Audit Protocol (Attachment F) to customize the energy audit for dwellings to be weatherized.

V.5 Type of Weatherization Work to Be Done

V.5.1 Technical Guides and Materials

All weatherization work is performed in accordance with DOE-approved audit procedures and 10 CFR 440 Appendix A. CSD has developed several documents to guide Subgrantees in the proper delivery of weatherization services. The primary field guidance is the CSD Weatherization Installation Standards (WIS Rev. August 2010) which serves as a benchmark for doing quality workmanship and a tool for measuring quality performance. CSD has also released the Energy Single-Family/Small Multi-Family Energy Audit Protocol (Attachment F), Priority List Policy (Attachment E) (and Multi-Family Energy Audit Protocol (Attachment G) offering further detail about specific measures and their installation hierarchy. CSD issues Energy CSD Program Notices to introduce new policies related to such subjects as asbestos removal, callbacks and audit protocols. In addition, CSD has developed a web-based weatherization FAQ and technical assistance hotline manned by a third-party technical consultant.

The WIS has been updated to incorporate the new Standard Work Specifications for Home Energy Upgrades (SWS) and be limited to material and installation specifications. The CSD Field Guide has recently been developed to provide guidance on key work procedures, outline of all field policies for the Subgrantees and works in conjunction with the WIS.

CSD contracts currently contain language that requires Subgrantees to adhere to the latest version of WIS, Energy Program Notices, OMB and other federal and state guidelines and regulations. When subcontracting, Subgrantees are required to include all program requirements in their subcontractor contracts. Refer to Attachment Q WPN 14-4 Quality Work Plan Requirements.

V.5.2 Energy Audit Procedures

DOE approved CSD's Energy Audit Tool and Priority List on September 9, 2010. This approval covers: (1) the use of REM/Design for single-family dwellings, mobile homes and multifamily buildings with 25 or fewer dwelling units, where each unit is independently heated and cooled, and has its own domestic hot water heater; (2) the use of TREAT for all multifamily buildings, except REM/Design may be used for those multifamily buildings of 25 or fewer units, as specified above; and (3) the use of the CSD DOE ARRA Priority List as designated for single-family dwellings, mobile homes and multi-family buildings 25 or fewer units as specified above. Large multifamily buildings where the TREAT energy audit is applicable will be 100% energy audit-driven.

V.5.3 Final Inspection

Currently, Subgrantees are required to review and inspect all dwellings weatherized. A statement certifying that all required measures were installed in accordance with contract requirements and the CSD Weatherization Installation Standards shall be noted on CSD Weatherization Dwelling Assessment and shall be signed and dated by the reviewer.

Subgrantees are required to have 100% of their completed units inspected by a qualified staff inspector who has not performed any of the weatherization work on the inspected unit, has not assessed or audited the same unit and has met CSD training requirements. For very small Subgrantees, staffing is so limited that it is not feasible to have a separation of duties between an assessor/auditor and inspector. Exemptions will be granted on a case-by-case basis. In those cases, the number of CSD inspections will be increased to a minimum of 10%. Due to the low number of completed dwellings in these cases, it is possible that close to 100% of the units will be inspected.

CSD will also have inspections of the installed weatherization measures performed by a third party and CSD QC inspectors. These inspections will be comprised of a statewide random sampling of the homes weatherized and in-progress. Diagnostic tests will be re-performed on a sampling of dwellings to ensure that the tests are being properly applied. Statewide standards for the installation of weatherization measures and inspections of homes weatherized by energy providers will help assure that weatherization measures are being installed properly.

During 2014, CSD will be implementing a training and certification plan to ensure that there are a sufficient number of certified inspectors to meet DOE requirements. All completed dwellings will be inspected by certified inspectors beginning July 1, 2015. Refer to Attachment Q WPN 14-4 Quality Work Plan Requirements.

V.6 Weatherization Analysis of Effectiveness

In evaluating the effectiveness of Subgrantees and determining their need for training and/or technical assistance, criteria such as the lack of units completed, the number and complexity of the measures applied to completed units, the number and types of inspection findings, the percentage of contracted funds expended, and a high level of Subgrantee staff turnover will be assessed. CSD's Field Representatives, who also review the percentage of funds expended and percentage of goals attained, will base the evaluation of each Subgrantee's effectiveness on the findings during desk and on-site programmatic evaluations. On an on-going basis, findings by Field Representatives and the CSD QCI team are followed to ensure that action plans are completed and inspection findings are rectified and closed. Significant findings can lead to a high-risk designation where special conditions can be applied and additional on-site visits and financial reviews can occur.

The department currently collects individual dwelling data electronically from each Subgrantee into a centralized depository. On an as needed basis, extensive data is exported and reviewed for various inconsistencies, cost allowances, reasonableness of costs and program compliance. Development of automatic comprehensive analysis and reporting of the data and enhanced reporting is continuing.

Findings and observations will sometimes lead to changes in monitoring and inspection protocols, field and programmatic policies and weatherization contracts. All changes are discussed and reviewed with a representative group of Subgrantees before enactment. Training may be required depending upon the nature of the change. This helps ensure that changes are effectively communicated and implemented.

V.7 Health and Safety

Subgrantees will be authorized to mitigate health and safety hazards within the scope of the weatherization program pursuant to the CSD Health & Safety Plan, CSD LI-WAP Policies and Procedures, and CSD Weatherization Standards. Subgrantees shall correct all safety hazards resulting from weatherization measure installation and relating to heating/cooling sources such as combustion appliances (carbon monoxide, back-drafting, etc.) and indoor air quality (adding mechanical ventilation, addressing excessive moisture, and installing carbon monoxide alarms). A combustion appliance safety check shall be performed on all dwelling units that contain gas appliances. Clients are informed in writing of any health and safety issues that are found in the dwelling that cannot be remediated within the parameters of the weatherization program.

Subgrantees will work in a lead-safe manner and will comply with the Environmental Protection Agency rules in 40 CFR Part 745, Lead; Requirements for Hazard Education Before Renovation of Target Housing; Final Rule, on applicable dwellings and the CSD Lead-Safe Weatherization Policy. The CSD Weatherization Installation Standards (WIS), LSW Policies and LSW training have been updated to meet the latest DOE and EPA LSW requirements.

Health and Safety Plan was submitted and approved by DOE on August 2, 2012, and was implemented. CSD has updated its standards to incorporate the new ASHRAE 62.2-2013 requirements. The CSD Health and Safety Plan and forms have been revised to reflect the new requirements and calculations. Training will be provided to Subgrantees on new ASHRAE requirements and calculations by July 15, 2014.

Each Subgrantee is limited to an average expenditure for health and safety hazard mitigation of nineteen percent (19%) of total program expenditures (less administrative, training and technical assistance, liability insurance and purchases of vehicles and equipment over \$5,000). California's older housing stock require a larger investment of health and safety measures to resolve carbon monoxide hazards and other health and safety concerns as required by California's state and local building codes. Over the last several years, CSD has deferred more of the health and safety services to its LIHEAP heating and cooling program. Considering potential funding reductions under the LIHEAP program, and that health and safety services remain constant, CSD expects that the DOE grant will assume its share of health and safety costs consistent with expenditures levels. Additionally, although several Subgrantees leverage their DOE WAP program with utility weatherization programs, the narrowly defined standards of these programs limit the replacement of combustion appliances to owner-occupied units only. Another contributing factor is the temperate climate zones in some parts of the state where the investment in standard weatherization measures is proportionately lower; however, health and safety services remain constant.

Due to leveraging, records from DOE ARRA, DOE WAP and LIHEAP Weatherization for the periods July 1, 2009, through the present were used in determining the average Health and Safety costs per dwelling. The actual rate was increased by 0.73% to offer a minimal accommodation to those Subgrantees that do not have as many leveraging opportunities or regularly encounter older housing stock.

Measure	Average Cost	Frequency	Total Per Completed Dwelling
Alarm, CO	\$73.95	73.26%	\$54.17
Alarm, Smoke	\$96.68	28.59%	\$27.64
Cooling Appliance Repair	\$284.71	1.73%	\$4.93
Cooling Appliance Replacement	\$1,434.22	2.69%	\$38.57
Heating Appliance Repair	\$201.80	9.44%	\$19.04
Heating Appliance Replacement	\$2,562.38	5.93%	\$151.88
Water Heating Appliance Repair	\$189.53	6.90%	\$13.07
Water Heating Appliance Replacement	\$1,222.68	3.50%	\$42.74
Kitchen Exhaust System	\$127.75	4.70%	\$6.00
Lead Safe Weatherization	\$36.17	9.42%	\$3.41
Average Health & Safety Per Dwelling			\$361.43
Average Program Operations Per Dwelling			\$1,977.91
Health & Safety Rate Calculated			18.27%
Health & Safety Rate Budgeted			19.00%

Note: Smoke and CO alarms are not installed or replaced if pre-existing alarms meet all requirements for location, age and operability in accordance with CSD WIS and ASHRAE 62.2-2013.

Health and safety costs will be tracked on a separate line item in the budget and the expenditure reports and will not be included in the average cost per dwelling.

V.8 Program Management

V.8.1 Overview and Organization

CSD is one of several departments under the auspices of the California Health and Human Services Agency (CHHSA). The weatherization program within CSD consists of a team approach using Program Analysts, Field Representatives, internal QCI staff, the Fiscal and Contracts Units, and the services of third-party consultants for dwelling inspections and training and technical assistance.

CSD has over 40 weatherization Subgrantees statewide. These Subgrantees also provide LIHEAP-funded services. Because of the coordination of services between these weatherization programs, a number of dwelling units will have measures installed using funds from DOE WAP and Department of Health and Human Services (DHHS) LIHEAP funds. The Subgrantee Information section of the Annual File lists CSD's Subgrantees, addresses, service areas, types of organizations, tentative allocations, congressional districts, and dwelling unit goals.

Weatherization activities to eligible low-income dwellings will focus on providing the most cost-effective measures, checking for health and safety hazards, and providing blower door-driven infiltration reduction. Subgrantees shall follow the DOE-Approved Priority List of cost-effective energy conservation measures. A prescribed list of general heat waste measures shall be allowable for all dwelling types as feasible.

The replacement of heating and cooling systems and windows for energy efficiency reasons only are only feasible when a savings-to-investment ratio (SIR) of one or greater as determined by the approved energy audit. When an energy audit is conducted, feasible measures included on the priority list are subject to the audit and the priority list is abandoned.

Commonly installed measures and diagnostic testing include combustion appliance safety test, carbon monoxide alarms, infiltration reduction, and ceiling insulation. The replacement of refrigerators does not include stand-alone freezers or through-the-door ice or water units.

Allocation Formula

CSD, working in conjunction with a representative group of service providers, updated and developed a new allocation formula effective Program Year 2014. The formula consisted of three factors: 2010 census and heating and cooling degree day data and updated utility and fuel cost information. CSD is currently in the process of evaluating new census data, weather station information and utility costs to update the formula for program year 2015.

Subgrantee Selection

To promote leveraging and increase effectiveness of the DOE WAP program, CSD elects to administer the DOE WAP program through its existing LIHEAP Subgrantees who currently perform the full complement of LIHEAP services including weatherization, emergency heating and cooling, and utility assistance services. LIHEAP Subgrantees along with their designated service territory were grandfathered in accordance with California Government Code section 16367.5. This Subgrantee network is comprised of Community Action Agencies or public or nonprofit entities that have over 40 years of experience in providing public assistance programs to the low-income clientele in their respective communities.

Performance Analysis

Subgrantees are evaluated through on-site monitoring, inspections and reporting to ensure satisfactory performance by a consideration of factors, including but not limited to, the following:

- The quality of work, as demonstrated by the Subgrantee's experience in administering and conducting weatherization activities;
- The ability to use diagnostic equipment (i.e. blower door and indoor air quality testing equipment) and any DOE-approved automated residential energy audit used to identify measures to be installed;
- The extent to which a Subgrantee has achieved, or is achieving, weatherization expenditure and unit production goals (in past or current programs) in a timely fashion;
- The ability to coordinate and leverage funds with other low-income energy conservation programs and/or social service programs;
- The ability to secure volunteers, train participants and public service employment workers, and establish partnerships with the local business community to expand the existing workforce; and
- The ability to meet contractual obligations, adhere to applicable federal and state laws, and maintain adequate internal accounting and fiscal controls.

V.8.2 Administrative Expenditure Limits

CSD will retain five percent (5%) of the allowable ten percent (10%) administrative funds; Subgrantees will also receive five percent (5%) for administration. Due to limited funding, Subgrantees allocated \$350,000 or less will not be provided the opportunity to apply to CSD for approval to use up to an additional five percent (5%) of their funding for administration.

V.8.3 Monitoring Activities

Overview

Training and technical assistance funds will be used to perform assessments of each Subgrantee, consisting of monthly and quarterly desk reviews and on-site monitoring visits for the purpose of developing a systematic approach to reviewing fiscal, programmatic and reporting compliance. Areas to be focused on through on-site monitoring visits include: review of client file folders for supporting documentation of program eligibility and job costs; appropriate signatures and dates on all required forms to certify that all measures were installed per contract requirements and CSD Installation Standards; weatherization material inventory systems and controls; internal controls to discourage waste, fraud, and abuse of Subgrantee assets; procurement policies; cost-effective weatherization measures; weatherization crew safety procedures; and providing client education and materials relating to the care and cost-effectiveness of the measures installed. The same approach to monitoring will be applied to the LIHEAP program.

Fifty percent (51%) of T&TA and thirty percent (30%) of admin budgets are allocated for monitoring purposes. Field Representative and CSD inspector salaries are charged to T&TA at a rate of 80% and 85% respectively. Travel has been budgeted at \$18,900 for monitoring purposes. An additional \$3,000 is budgeted for meetings and special investigations by the Technical Support Unit should the need arise. Monitoring activities will be leveraged with the LIHEAP and California Cap and Trade programs.

Monitoring Approach

CSD conducts annual on-site and desk monitoring of Subgrantees to ensure that Subgrantees meet the performance goals, administrative standards, financial management requirement, and other requirements of the DOE WAP program and CSD contracts and weatherization standards. Program and fiscal monitoring will be used to determine the program and operational effectiveness of Subgrantees. Findings based on unauthorized measure installation, billing discrepancies, client and dwelling ineligibility may result in disallowed costs.

CSD has four units who perform monitoring functions in various capacities. Some of the monitoring is performed on identical subject matter but with different perspectives and

criteria. Due to the overlap, a table has been prepared to illustrate the responsible units. Refer to Attachment S Monitoring – Areas of Responsibility.

CSD's monitoring program consists of the following strategies:

- Programmatic and Management Monitoring
 - Subgrantee Review
 - Monitoring tools are reviewed and updated annually. The tool addresses but is not limited to: administrative review (separation of duties, conflict of interest, inventory management, record retention, complaint management and procurement); fiscal review (cost allocation, billing process, line-item reconciliation, expenditure status and benchmarks, working capital advance, accounts payable aging); and programmatic review (prior monitoring issues, eligibility, client file review, diagnostic testing, reweatherization, SHPO).
 - Field representatives conduct monthly and quarterly desk assessments which include but are not limited to, an evaluation of the Subgrantee's expenditure performance; adherence to budget restrictions; timeliness of reports; and operational deficiencies. Noted concerns will be brought to the attention of the Executive Director and/or Board Chair for resolution that may result in an on-site visit or increased reporting, such as comprehensive monthly evaluations.
 - CSD quality assurance inspectors conduct inspections of completed and in-progress work on a minimum of 5% of completed dwellings. The percentage of inspections will be increased when warranted.
 - All contracts, program notices, policies, audit protocols and installation standards are available electronically through the CSD provider website. Installation standards can be downloaded for easy access in the field.
 - There is a separate web-based system that tracks and facilitates approval of work to be performed on homes who meet the SHPO criteria.
 - Financial/Administrative
 - Accounting systems and weatherization reporting software are noted in the Subgrantee working files. A consolidated list is maintained of what software (out of four) is used for reporting weatherization and utility assistance activities and expenditures.
 - Program notices have been issued for procurement, capped budgetary line items, program income and contract Implementation options (in-house crews vs. subcontractors) as guidelines for Subgrantees to meet OMB and contract requirements.
 - Monthly and quarterly reviews are conducted to track expending of capped line items and other program requirements including inspections. Subgrantees are contacted if spending in a line item is

- very disproportionate to other activities or the proper number of inspections has not been completed.
- Subgrantees are required to submit proof of liability insurance before contract execution.
- Equipment/Inventory/Materials
 - Subgrantees are required to have inventory policy and procedures that include processes to ensure adequate safeguards to prevent loss, damage and theft and proper accounting. Records are to be maintained of all equipment purchased with Federal grant funds and utilization and continued need for the equipment.
 - CSD issued a program notice outlining policy for the procurement of goods and services. Subgrantees are required to have a written procurement policy in place that demonstrates that a competitive bid process is conducted and that purchases over \$5,000 receive CSD pre-approval.
 - Subgrantees are required to have a written conflict of interest policy in place and cannot permit any organizational conflicts of interest or noncompetitive practices that may restrict or eliminate unfair competitive advantage or otherwise restrain trade.
 - Subgrantees are required to have a written vehicle and equipment disposition policy.
 - Eligibility
 - CSD issues an annual eligibility guide (Attachment D CSD Eligibility and Verification Guide) that outlines eligibility criteria, income verification, energy cost verification and appeal processes. An intake form (automated and/or hard copy) is completed by Subgrantees that includes all of the necessary requirements to quality clients.
 - Client data maintained in CSD's repository includes client demographics, household income and energy costs for federal reporting and monitoring purposes.
 - CSD issued new policy guidance clarifying required compliance with the re-weatherization rule and requiring certification by each Subgrantee of their processes for verifying eligibility of homes. State guidance CPN-E 12-07 went into effect November 1, 2012. CSD has also updated its field monitoring tools to support enforcement of the Re-weatherization rule.
 - Costs are disallowed for any work performed for ineligible clients.
 - Eligibility is a key component when a special investigation has been designated.
 - Rental
 - By contract, rental service agreements signed by occupants and property owners include language protecting occupants from rent increases as a result of the weatherization services provided.

- For large multi-unit projects, CSD staff evaluates whether any undue enhancement might occur in the value of the dwelling units, and confirms that the benefits of weatherization accrue primarily to the residents.
- CSD inspectors give special attention to inappropriate or unnecessary enhancements for any rental files and/or dwellings inspected. In the event there are reports of improprieties, the inspectors would do the follow-up investigation and take any needed remedial action with the Agency as deemed appropriate.
- Feedback and Reporting
 - CSD holds quarterly meeting with the Subgrantee network. A subcommittee comprised of a representative group of Subgrantees meets at least once a month to discuss policy development for all CSD-administered energy programs.
 - Subgrantees are required to submit monthly activities and expenditure reports. Reports are reviewed on a quarterly and monthly basis. Field representatives contact Subgrantees about any anomalies found.
 - All findings through on-site monitoring and technical investigations culminate in reports provided to the Subgrantees and their respective Board of Directors. Inspection reports are provided immediately to Subgrantees at the exit interview.
- Energy Audits
 - CSD has established audit protocols for single family (Attachment F CSD Single-Family/Small Multi-Family Energy Audit Protocol) and multi-family dwellings (Attachment G CSD Multi-Family Energy Audit Protocol).
 - All electronic audit files and supporting pictures are required to be submitted to CSD for review and approval before work commences. Audits are rejected when anomalies are found and Subgrantees are asked to correct and resubmit. Any serious misuse of audits can lead to disallowances and high risk designation.
- Field Work
 - CSD contracts contain an extensive list of required documentation to be maintained in each client file.
 - CSD contracts require that completed units cannot be billed until after they have been inspected. Monthly activity reports are reviewed by staff to confirm that inspections have been performed.
 - All Subgrantees are required to use a standardized form that includes the inspector's name and signature, inspection date and time, and client's signature.
 - Subgrantees are required to correct any deficient work identified by their internal inspectors before the work is submitted for reimbursement. As a result of CSD inspections, Subgrantees with

incomplete work and workmanship issues are asked to rectify the problem before disallowances are levied. Subgrantees will be asked to reverse or repay costs that are determined to be unallowable. If questioned costs are significant, an investigation may be performed.

- Communication between the Subgrantee and client are overseen by CSD staff to help resolve the complaint. If not resolved, the client is made aware of the appeal and fair hearing processes.
 - The identification of guidelines is derived from input from the Subgrantee network, CSD staff, CSD's technical consultant and Federal partners.
 - Currently, CSD is in the process of updating the CSD Weatherization Installation Standards and creating a new CSD Weatherization Field Guide. This process is overseen by the technical support unit. Changes are distributed to all Subgrantees for review and comment. Afterwards, the WIS Review Committee comprised of a representative group of Subgrantees meet with CSD to discuss suggested changes and provide final input before finalization of the manuals.
- Health & Safety
 - CSD's Health & Safety Plan is incorporated into the contract and is readily available to Subgrantees through CSD's provider website. Training was provided as part of its original implementation.
 - Subgrantees are required to maintain and have available for review all training records and certifications. CSD technical staff maintains a list of certified firms, renovators, OSHA and contractors licensing and completion of required training. Copies of certificates are required to be submitted to CSD.
 - Field monitoring guidelines include the verification of the Injury and Illness Prevention Plans (IIPP), Respirator Programs and Material Safety Data Sheets (MSDS) binders. Service providers will also be required to maintain logs for their Respirator Program and safety and MSDS training.
 - Quality Assurance
 - During annual monitoring visits, field representatives conduct client file reviews for inclusion of all required documentation, completeness of forms, and adherence to other contract requirements.
 - Quality assurance of field work is conducted by CSD and third-party inspectors. Consolidated pass/fail inspection rates are maintained by CSD staff. A matrix of significant programmatic findings and resolution are maintained for tracking purposes and identification of trends.
 - CSD is currently designing a quality assurance plan to be used by Subgrantees for their internal inspection processes and quality assurance. This will also include a subcontractor oversight policy.
 - Training & Technical Assistance

- Through monitoring and inspection processes and analysis, the need for training may be identified. When the need arises, a referral is made to the technical support unit to make arrangements for the training through the CSD-approved training centers, CSD's technical consultant or CSD internal technical staff. Additionally, Subgrantees can initiate training themselves by submitting a request to the technical support unit.
- CSD contract has specific training requirements that must be met within certain time frames in order for Subgrantee staff to continue working within the program. Training records for the required online, classroom and field training are maintained at the Subgrantee and through the web-based CSD Training Records Database which is currently being updated.
- How monitoring results are handled and required follow-up procedures
 - Both field representatives and quality assurance inspection team issue reports following their visits. All findings are tracked and followed up on through resolution. Depending upon the severity of the finding, a return visit to verify resolution may be necessary.
- Subgrantee Monitoring
 - Program Overview (Client File Review, Work Orders, etc.)
 - Field representatives confirm that Subgrantees have the necessary information and forms to administer the weatherization program effectively and meet program requirements.
 - Through client file reviews, field representatives determine if all required documentation is present, required SHPO reviews have occurred, priority list/energy audit protocols were followed, prioritization of services was given, work is adequately documented and justified, and reweatherized dwellings were handled appropriately.
 - CSD inspectors review the more technical aspects of the client file including combustion appliance safety testing and blower door and duct leakage diagnostics. They also review the assessments, work orders, work justification, permits, HERS ratings, file notes, and Subgrantee inspections.
 - Financial/Administration
 - The fiscal and performance review conducted by field representatives ensures that the agency is on track with their expenditures, and performance and benchmarks; this includes validating claims submitted for reimbursement, line-item reconciliation, verification of the agency's billing process, verification of internal controls, a review of working capital advances, verification of procurement procedures, and an evaluation of the agency's accounts / age payables.

- Inventory
 - During onsite monitoring visits, field representatives review any inventory purchased with CSD grant funds. They ensure that Subgrantees have written inventory policy and procedures in place, visually inspect the inventory, review Subgrantees' tracking procedures, and review vehicle, equipment and calibration tracking logs.
- Energy Audits
 - Technical Support Unit and CSD's third-party technical consultant are responsible for evaluating the integrity of the energy audits for all dwelling types.
 - Field representatives and CSD inspectors review files for inclusion of the Priority List Checklist and energy audit reports. CSD inspectors verify the application of the priority list and energy audit.
- Qualifications & Training
 - Field representatives and technical support staff follow up with Subgrantees when required training has not been taken, training discrepancies are found or Subgrantee staff is found to be working in areas they are not qualified to perform.
 - The technical support unit will verify any training referred by field representatives and CSD inspectors was completed.
- Weatherization of Units
 - When CSD inspectors find work that needs to be addressed, an evaluation will take place to determine and document why it was not identified through the Subgrantee's own inspection process and if any trends are present. Subgrantee inspectors, crews and field supervisors may be referred for additional training or have disallowances levied.
- Health & Safety
 - The implementation and continual application of health & safety guidelines are monitored through the inspection and field monitoring processes which includes client file reviews and client and Subgrantee staff interviews. Deficiencies are reported and must be addressed.
 - Field monitors and CSD inspectors review client files for the resolution of identified health and safety issues and required client education and RRP documentation. A finding is issued and Subgrantees are required to resolve any issue left unresolved.
 - CSD inspections currently include questions related to the application of lead-safe practices, the applied use of LSW in the course of delivering weatherization services and renovator records.
- Final Inspections

- Third-party and CSD inspectors will conduct inspections to monitor feasibility of weatherization measures, quality of workmanship, material standards, review of client files and proper application of the DOE Priority List, energy audit protocols and installation standards. Inspections are conducted at a rate of 5% of all completed units for each Subgrantee including a sampling of units in-progress. CSD inspectors use a standardized form to record measures installed and billed, feasibility, and workmanship.
- Any identified trends are discussed with the Subgrantee and training may be recommended.
- How monitoring results are handled and required follow-up procedures
 - Both field representatives and quality assurance inspection team issue reports following their visits. All findings are tracked and followed up on through resolution. Depending upon the severity of the finding, a return visit to verify resolution may be necessary.
- Financial Monitoring
 - Financial Management/Accounting Systems and Operations
 - Field representatives review accounting operations by tracing a sampling of expenditures from source documentation through to payment and bank statements.
 - Enhanced monitoring and investigative audit visits will be conducted, as needed, to evaluate Subgrantees' accounting systems and fiscal integrity.
 - Special investigations may be conducted by the CSD technical support unit if deemed necessary.
 - Field representatives determine if internal controls and separation of duties are present and written policies are in place. Audit staff will also review internal controls as part of their fiscal audit.
 - Audits
 - Auditors perform annual reviews of Subgrantees latest single-wide audits for compliance with A-133 OMB, follow up on findings identified in the Single Audit, and issue transmittal letters to Subgrantees that include findings.
 - Investigative audits will be conducted, as needed, to evaluate Subgrantees' accounting systems and fiscal integrity.
 - Payroll/Personnel
 - Field representatives review payroll records, timesheets, and organizational charts during annual monitoring visits. Subgrantee staff is interviewed to determine job responsibilities, work performed under CSD programs and improper charges for any "ghost" employees.

- Vehicles and Equipment
 - Field representatives determine if vehicles and equipment are properly tracked and maintained, are currently being utilized, how costs are shared between programs, and disposition.
- Procurement
 - Field representatives review Subgrantees' written procurement policies and procedures and verify that the policies have been followed and a competitive bid process is in place, how items are cost allocated between different programs, and that OMB requirements are being met.
- Invoicing
 - Field representatives verify the Subgrantee's billing process from intake through inspection for accuracy, review submittal of budget line items (on-site and desk reviews), test reasonableness and conformity of billed measures, and trace costs through to the general ledger.
 - The technical support unit may conduct special investigations in this area when deemed necessary.
 - Testing of invoices may be reviewed by auditors dependent upon their audit work scope.
- Records Retention
 - Subgrantees are required to retain records for a minimum of three years after the close of the audit review and resolution of any findings or disallowances. Data related to the weatherization of dwellings is uploaded and maintain in CSD's central repository.
- How monitoring results are handled and required follow-up procedures
 - Both field representatives and quality assurance inspection team issue reports following their visits. All findings are tracked and followed up on through resolution. Depending upon the severity of the finding, a return visit to verify resolution may be necessary.
 - The CSD's audit unit issues an Audit Transmittal Report after a desk review of audit reports submitted by Subgrantees. Reports are issued as a result of any standard or investigative audit. Disallowances identified through these processes that are not repaid to the department could delay execution of subsequent contracts
- Expanded Monitoring Scope – Automation
 - CSD required all Subgrantees to convert to fully automated data systems at the local level since the current reporting software originally provided by CSD has been abandoned. Subgrantees have the discretion of choosing the electronic solution that best fits their needs and meets the state's reporting requirements.

- Subgrantees are currently required to transfer electronic client file data to CSD in a central depository on a monthly basis. It is currently limited to client information, demographics and measure installation and related costs. Efforts are underway to create a system where the data can be more easily accessed and evaluated for programmatic inconsistencies. For the current program year, Subgrantees will also continue to enter summary level data for reimbursement purposes into CSD's web-based reporting system based upon reports generated from their databases.
- Automated assessment and diagnostic forms are currently being piloted and may become a required component this program year. The forms would include required calculations, work flow processes and other logic. The data collected from these forms would be maintained at the local level and would eventually be transferred to CSD. This will help provide greater consistency across the state and aid in CSD's monitoring efforts. In the future, CSD will also be piloting the automation all other required forms such client education confirmation and tenant notifications.

Monitoring Reports

Monitoring reports are provided to the Subgrantee in the following manner:

- Dwelling inspection reports are provided during exit conferences. If it determined that training and technical assistance is necessary to resolve any workmanship and/or paper work issues, the Subgrantee shall be referred to the third-party Technical Consultant or CSD technical assistance staff.
- Subgrantees are briefed on observations and potential findings generated by the monitoring visit, usually through an exit conference. Within 30 days after each visit, the State will prepare a written report on its findings and/or recommendations, and send it to the Subgrantee for corrective action, if applicable.

Reporting

Reporting software was developed by one of the Subgrantees and distributed to the network in the first quarter of 2009. This software has allowed the Subgrantees to collect and report data to the department on a summary level basis more accurately. This method of collecting data is currently being phased out and being replaced by fully automated systems on the local level. Subgrantees will still be reporting summary level data to the department along with the transfer of client file data on a monthly basis.

Monitoring Schedule

The monitoring season typically runs from February through the end of October. All Subgrantees will be visited at least once during this time period.

Since the 2013 allocation is being combined with 2014, CSD does not expect there to be sufficient activity to monitor until January 2015. Field monitors will conduct visits according to the following schedule:

Month	# of Monitoring Visits
July 2014	0
August 2014	0
September 2014	0
October 2014	0
November 2014	0
December 2014	0
January 2015	6
February 2015	6
March 2015	6
April 2015	6
May 2015	7
June 2015	7
Total	38

Frequency of inspection visits by CSD and third-party inspectors are dependent upon each Subgrantee's level of production. CSD has projected that a minimum of 104 units or a minimum of 5% for each Subgrantee will be inspected for the upcoming program year and all Subgrantees will be visited at least once by CSD inspectors. The same inspection criteria are applicable to the LIHEAP weatherization and ECIP heating and cooling programs.

Recordkeeping

- All records maintained by Subgrantees must meet the OMB requirements contained in 45 CFR Part 92 and 45 CFR Part 74 (OMB Circulars A-102, Subpart C, ("Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments") or A-110, Subpart C, Nonprofit Organizations), whichever is applicable.
- Subgrantees are required to maintain all records pertaining to this program for a minimum period of three years after submission of the close-out report. Subgrantees must maintain all applicable records until resolution of all related audit and monitoring findings are completed. Addresses and installed measures of all completed units in the LIHEAP and DOE program are required to be submitted to CSD.

- Employee and applicant records are required to be maintained in a confidential manner to assure compliance with the Information Practices Act of 1977, as amended, and the Federal Privacy Act of 1974, as amended.

Noncompliance

If it has been determined that a Subgrantee cannot fulfill their contractual obligations, steps may be implemented to redistribute any remaining allocated funds to other Subgrantees. These funds will be redistributed to the nearest Subgrantee, if feasible, to provide services in the same general geographical area. For designated high-risk Subgrantees, an independent financial audit may be performed.

Termination Procedures

CSD may commence suspension or terminations proceedings based on non-performance or material breach of Subgrantee contract. Should it become necessary to terminate any Subgrantee, or select new ones, the regulations governing such actions, i.e. sections Code of Federal Regulations sections 440.15 (c) and (d), will be followed. Should termination of a Subgrantee during the current grant cycle become necessary, CSD will redistribute the allocations and/or unexpended balances to Subgrantees operating efficient programs in order to ensure that the services continue in the areas served by the Subgrantee being terminated.

V.8.4 Training and Technical Assistance Activities

Overview

Field Representatives make annual monitoring visits through the 2014 program year and conduct report evaluation on an ongoing basis. One of the goals of on-site and report evaluation is to assess the need for training. Problems identified through desk reviews and field visits that can be resolved through training and technical assistance will be addressed by the Field Representatives and/or other CSD staff, outside consultants, and occasionally by staff brought in from other Subgrantees.

When Subgrantee staff turnover is identified, CSD Field Representatives will ensure that new employees receive the required training through online and CSD-approved training center courses. CSD requires such training as a means of increasing the quality of weatherization services provided to low-income clients. Subgrantees are required to maintain for review a log of weatherization employees and the dates and locations for all required training..

As part of the field inspection process, the inspection contractor provides monthly reports summarizing the results of their inspection visits and identifying any training needs. The Technical Support Unit will also evaluate energy audit reports and if

deficiencies are found, either provide on-site training or refer the training to the third-party technical consultant for follow-up.

All new CSD weatherization field staff shall attend basic weatherization, combustion appliance, blower door/duct leakage training courses including both theory and hands-on curricula, at CSD-approved weatherization training facilities. Appropriate CSD staff will receive updated training as needed (i.e., lead-safe practices). All CSD field representatives are required to take the appropriate training to become EPA Certified Renovators.

Training and Technical Assistance - Grantee

Training and Technical Assistance for Subgrantees

- Field Representatives provide both training and programmatic assistance during on-site visits and through ongoing telephone contact with the Subgrantees.
- Program Analysts comprising the department's Technical Support Unit provide technical assistance to staff and Subgrantees, develop training curriculum, and assess past and future training needs.
- In accordance with the Department of Energy requirements, CSD will meet the quality control inspector certification requirements by Program Year 2015. Using the NREL job-task analyses for single and multi-family jobs, the department will modify its existing, approved training curriculum for quality control inspectors to incorporate required additional components. The revised curriculum will be submitted for review and accreditation. Additionally, the department's third-party technical contractor will become accredited affiliate instructors. Accredited instructors shall shepherd qualified Subgrantee inspectors through the application process, completion of testing, and final certification to be in compliance by the start date of Program Year 2015. Refer to Attachment Q WPN 14-4 Quality Work Plan Requirements.
- A third-party contractor provides follow-up field training and technical assistance pertaining to the installation of weatherization measures, the quality and appropriateness of installed weatherization measures, infiltration reduction, and health and safety measures and develops training curriculum. The contractor maintains a "Hotline" available to Subgrantees seeking immediate technical assistance. Mentoring for underperforming or new Subgrantees is also provided by the consultant at CSD direction.

Training and Technical Assistance for Department Staff

- CSD staff will attend the Energy OutWest Peer Exchange and NASCAP meetings and conferences as approved by the Governor's office.

- CSD staff is trained on an on-going basis to keep them abreast of contractual and policy changes. For monitoring purposes, all new CSD field and technical staff receive the standard weatherization training including combustion appliance safety, blower door and duct leakage diagnostics. All CSD field staff members are EPA Certified Renovators.
- Due to the new monitoring tool and processes being redeveloped, ongoing training will be required for CSD staff to become proficient with the updated monitoring protocols.

Subgrantee Training Evaluation

- Field Representatives make annual monitoring visits (until January 2014) and conduct report evaluation and desk and client file reviews on an ongoing basis. One of the goals of the reviews is to assess the need for training. The Technical Support Unit will evaluate energy audit reports and if deficiencies are found, either provide on-site training or refer the training to the third-party technical consultant for follow-up.
- The third-party technical consultant will be evaluating TREAT audit reports and provide technical assistance as needed.
- As part of the field inspection process, the inspection contractor provides monthly reports summarizing the results of their inspection visits and identifying any training needs. A web-based training records database will maintain all records for required and supplemental training, contractor licensing and EPA certifications. Compliance reports will be a key component of the system after further development.

Training Development

- Field operations unit develops and provides semi-annual webinars to key administrative and fiscal Subgrantee staff on various subject matters, including, but not limited to, contractual changes and monitoring protocol.
- Technical support unit conducts a webinar series entitled “Technically Speaking...” to disseminate information related to changes in field protocols and policies and any identified field or technical issues. These webinars are conducted once a month or as needed.
- The department had restructured the training requirements for Subgrantee and subcontractor field staff to help ensure quality workmanship. Requirements have been stepped up to produce a sustainable work force. However, training curriculum will be updated to meet DOE new training requirements during this program year. Refer to Attachment Q WPN 14-4 Quality Work Plan Requirements.

Training and Technical Assistance - Subgrantee

The training and technical assistance funds will be allocated to Subgrantees to provide the required training. The department allocates up to 5% of LIHEAP weatherization funds and up to 2% of ECIP funds for training purposes to supplement DOE's contribution. The training encompasses site-built and mobile homes. The training requirements apply to field employees of Subgrantees and subcontractors who provide basic weatherization services. The curriculum associated with the series below will be updated to meet new DOE training requirements. Refer to Attachment Q WPN 14-4 Quality Work Plan Requirements.

Training Series

Training Coursework	Delivery
Pre-Weatherization	Online for candidate screening (optional)
Health & Safety	Online training/testing
Health & Safety Plan Comprehensive Training	Online training/testing
Environmental Hazards (Lead-Safe Weatherization, Mold & Moisture, Asbestos modules)	Online training/testing; video
Pre-Weatherization	Online training/testing
Basic Weatherization	CSD-Approved Training Centers
Pre-Duct Blaster/Blower Door Diagnostics	Online training/testing
Duct Blaster/Blower Door Diagnostics	CSD-approved training centers; followed by field training through the mobile training unit when deemed necessary by CSD and/or Subgrantee
Pre-Combustion Appliance Safety	Online training/testing
Combustion Appliance Safety	CSD-approved training centers; followed by field training through the mobile training unit when deemed necessary by CSD and/or Subgrantee
Field Assessment	CSD-Approved Training Centers (in future);-on-site by training contractor (current delivery)
Weatherization Energy Audit	Regional training; webinars; field training provided by training contractor upon request
Quality Assurance/Inspection	CSD-Approved Training Centers (in future); on-site by training contractor (current delivery)
EPA Renovator	EPA Certified Trainer
HUD Lead-Safe Weatherization Practices	HUD downloadable training course

Training Coursework	Delivery
Mechanical Ventilation	Online training/testing; followed by on-demand field training by training contractor

Note: With the exception of HUD LSW training, in-house training is not an acceptable form of training in meeting the department's training requirements. It will only be viewed as supplemental on-the-job training.

Note 2: Additional certifications will be required for all Subgrantee quality control inspectors in compliance with the Program Year 2015 requirement.

Training Requirements for New Hires of Subgrantees and Subcontractors Who Provide Basic Weatherization Services

Training Series	Crew	Assessor	Inspector	Field Supervisor
Health & Safety	X	X	X	X
Health & Safety Plan Comprehensive Training	X	X	X	X
Environmental Hazards (Lead-Safe Weatherization, Mold, Asbestos, Regulatory Requirements modules)	X	X	X	X
Introduction to Weatherization	X	X	X	X
Basic Weatherization	X	X	X	X
Pre-Duct Blaster/Blower Door Diagnostics	X ⁽¹⁾	X	X	X
Duct Blaster/Blower Door Diagnostics	X ⁽¹⁾	X	X	X
Pre-Combustion Appliance Safety	X ⁽¹⁾	X	X	X
Combustion Appliance Safety	X ⁽¹⁾	X	X	X
Field Assessment		X		X
Weatherization Energy Audit	X (2)	X(2)	X(2)	X(2)
Quality Assurance/Inspection			X	X
EPA Certified Renovator	X ⁽³⁾	X ⁽³⁾	X ⁽³⁾	X ⁽³⁾
HUD Lead-Safe Weatherization Practices	X ⁽⁴⁾	X ⁽⁴⁾	X ⁽⁴⁾	X ⁽⁴⁾
Mechanical Ventilation	X	X	X	X

- 1) Required if performing the diagnostic tests.
- 2) Determined by the Subgrantee who shall be conducting audits and could also include clerical staff for data entry purposes.

- 3) Required if performing Renovator tasks.
- 4) Training is provided in-house using HUD-approved training materials.

Training Requirements for Specialty Subcontractors

All Subcontractors who perform specialty work for Subgrantees and whose work involves combustion appliances shall be required to take the full course series for Combustion Appliance Safety if the Subgrantee will not be performing the combustion appliance safety testing.

Additional Requirements and Assessments

- New employees are required to be trained in health and safety and environmental hazards practices within 30 days of employment and will not be allowed to enter a pre-1978 dwelling in any capacity until such training has been completed.
- No weatherization employee or subcontractor is allowed to conduct combustion appliance, blower door and duct leakage diagnostics without proper training.
- Training records are required to be maintained through the web-based CSD Training Records Database.
- Personnel providing services to clients residing in pre-1978 HUD units must be trained in HUD-approved lead-safe weatherization practices before work can commence.
- Subgrantees and subcontractors who perform basic weatherization services are encouraged to schedule additional refresher trainings as needed with the Grantee's training contractor.
- Subgrantees may be required to repeat coursework or take specialized training if deemed necessary when issues are identified through field monitoring or quality assurance inspections.
- Summary data entered into the state's web-based reporting system by the Subgrantees is used to determine if they have met the performance benchmarks included as part of their contract. The level of productivity varies among Subgrantees based upon several factors including overall age and type of housing stock they typically encounter and different climatic conditions found within each service area. CSD is currently analyzing and comparing past program productivity under DOE and LIHEAP, average costs per dwelling, measure installation frequency and projected energy savings and greenhouse gas reductions. With this information, appropriate changes will be made to all CSD-administered energy programs and will lead to the development of

additional training sessions and on-going technical assistance and monitoring through the Technical Support, Field Operations and Quality Assurance Units.

Client Education

Subgrantees are required to provide client education and budget counseling that encourage households to reduce their home energy needs and the need for energy assistance. Each Subgrantee has the latitude to develop their own client education program but they must provide at least the following.

- Written information that describes energy saving behavioral adjustments that will decrease the energy consumption of the household;
- Resource information, referral, family, and budget counseling in order to assist clients in achieving self-sufficiency;
- The pamphlet entitled “Renovate Right: Important Lead Hazard Information for Families, Child Care Providers and School”;
- The pamphlet entitled “A Brief Guide to Mold, Moisture, and your Home”; and
- Description of benefits that can be expected of the weatherization measures to be installed and how to maximize the effect of each measure.

V.9 Energy Crisis and Disaster Response Plan

The purpose of California's Department of Energy (DOE) disaster planning and relief is to provide emergency services to low-income individuals and families affected by a disaster as determined by a Presidential or Gubernatorial order declaring either a Federal or State Emergency. DOE WAP has a very limited role in any disaster response. Funds are limited to eligible weatherization activities and the purchase and delivery of weatherization materials.

To the extent that services are in support of eligible weatherization (or permissible re-weatherization) work for eligible households, such expenditure is allowable. Allowable expenditures include:

- The cost of incidental repairs to an eligible dwelling unit if such repairs are necessary to make the installation of weatherization materials effective.
- The cost of eliminating health and safety hazards, elimination of which is necessary before the installation of weatherization materials.
- The cost to perform functions related to protecting the DOE investment such as: weatherization materials, tools, equipment, weatherization vehicles, or protection of local Subgrantee weatherization files, records and the like during the initial phase of the disaster response.
- The cost to use weatherization vehicles and/or equipment to help assist in the disaster relief provided DOE is reimbursed according to the DOE Financial Assistance Regulations 10 CFR Part 600.

The use of DOE funds for relief efforts is limited by the following:

- The total allowance for relief efforts is limited to a maximum allowance of \$6,500 per dwelling unit.
- The total allowance for incidental repairs in support of the installation of weatherization materials is limited to the current maximum reimbursement for minor envelope repairs per Subgrantee contract.
- The total allowance for the installation of each weatherization measure is limited to the current maximum reimbursement per Subgrantee contract.
- The cost to pay for weatherization personnel to perform relief work in the community as a result of a disaster is not allowable.

Prioritization of weatherization requests within disaster

- Disaster relief services are only available to qualified low-income households directly affected by the declared disaster. DOE requires that priority be given to identifying and providing weatherization services to the elderly, disabled, families with children, high residential energy users and households with high energy burdens.

- It is permissible, however, to consider households located in the disaster area as a priority as long as the households are eligible and meet one of the priorities above and are free and clear of any insurance claim or other form of compensation resulting from damage incurred from the disaster.
- In the event of a declared Federal or State disaster, weatherization crews may return to a unit reported as a completion to CSD that has been “damaged by fire, flood or act of God to be re-weatherized, without regard to date of weatherization”. Local authorities must deem the dwelling unit(s) salvageable as well as habitable and if the damage to materials is not covered by insurance or other form of compensation.

Prior to initiating disaster relief services, Subgrantees are required to submit a written plan to the CSD for approval outlining the specific services to be provided and the estimated costs necessary to support each type of activity. Activities are required to be reported on a monthly basis describing all relief efforts, expenditures and demographics. Approved plans will be in effect for a maximum of six months but could be extended dependent upon the anticipated recovery period and the type of disaster involved.

**U.S. Department of Energy
Assurance of Compliance
Nondiscrimination in Federally Assisted Programs**

OMB Burden Disclosure Statement

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of Information Resources Management Policy, Plans, and Oversight, Records Management Division, HR-422 - GTN, Paperwork Reduction Project (1910-0400), U.S. Department of Energy, 1000 Independence Avenue, S.W., Washington, DC 20585; and to the Office of Management and Budget (OMB), Paperwork Reduction Project (1910-0400), Washington, DC 20503.

State of California, Department of Community Services and Development (Hereinafter called the "Applicant")

HEREBY AGREES to comply with Title VI of the Civil Rights Act of 1964 (Pub. L. 88-352), Section 16 of the Federal Energy Administration Act of 1974 (Pub. L. 93-275), Section 401 of the Energy Reorganization Act of 1974 (Pub. L. 93-438), Title IX of the Education Amendments of 1972, as amended, (Pub. L. 92-318, Pub. L. 93-568, and Pub. L. 94-482), Section 504 of the Rehabilitation Act of 1973 (Pub. L. 93-112), the Age Discrimination Act of 1977 (Pub. L. 94-135), Title VIII of the Civil Rights Act of 1968 (Pub. L. 90-284), the Department of Energy Organization Act of 1977 (Pub. L. 95-91), the Energy Conservation and Production Act of 1976, as amended, (Pub. L. 94-385) and Title 10, Code of Federal Regulations, Part 1040. In accordance with the above laws and regulations issued pursuant thereto, the Applicant agrees to assure that no person in the United States shall, on the ground of race, color, national origin, sex, age, or disability, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity in which the Applicant receives Federal assistance from the Department of Energy.

Applicability and Period of Obligation

In the case of any service, financial aid, covered employment, equipment, property, or structure provided, leased, or improved with Federal assistance extended to the Applicant by the Department of Energy, this assurance obligates the Applicant for the period during which Federal assistance is extended. In the case of any transfer of such service, financial aid, equipment, property, or structure, this assurance obligates the transferee for the period during which Federal assistance is extended. If any personal property is so provided, this assurance obligates the Applicant for the period during which it retains ownership or possession of the property. In all other cases, this assurance obligates the Applicant for the period during which the Federal assistance is extended to the Applicant by the Department of Energy.

Employment Practices

Where a primary objective of the Federal assistance is to provide employment or where the Applicant's employment practices affect the delivery of services in programs or activities resulting from Federal assistance extended by the Department, the Applicant agrees not to discriminate on the ground of race, color, national origin, sex, age, or disability, in its employment practices. Such employment practices may include, but are not limited to, recruitment, advertising, hiring, layoff or termination, promotion, demotion, transfer, rates of pay, training and participation in upward mobility programs; or other forms of compensation and use of facilities.

Subrecipient Assurance

The Applicant shall require any individual, organization, or other entity with whom it subcontracts, subgrants, or subleases for the purpose of providing any service, financial aid, equipment, property, or structure to comply with laws and regulations cited above. To this end, the subrecipient shall be required to sign a written assurance form; however, the obligation of both recipient and subrecipient to ensure compliance is not relieved by the collection or submission of written assurance forms.

Data Collection and Access to Records

The Applicant agrees to compile and maintain information pertaining to programs or activities developed as a result of the Applicant's receipt of Federal assistance from the Department of Energy. Such information shall include, but is not limited to the following: (1) the manner in which services are or will be provided and related data necessary for determining whether any persons are or will be denied such services on the basis of prohibited discrimination; (2) the population eligible to be served by race, color, national origin, sex, and disability; (3) data regarding covered employment including use or planned use of bilingual public contact employees serving beneficiaries of the program where necessary to permit effective participation by beneficiaries unable to speak or understand English; (4) the location of existing or proposed facilities connected with the program and related information adequate for determining whether the location has or will have the effect of unnecessarily denying access to any person on the basis of prohibited discrimination; (5) the present or proposed membership by race, color, national origin, sex, age and disability in any planning or advisory body which is an integral part of the program; and (6) any additional written data determined by the Department of Energy to be relevant to the obligation to assure compliance by recipients with laws cited in the first paragraph of this assurance.

DOE F 1600.5
(06-94)
All Other Editions Are Obsolete

The Applicant agrees to submit requested data to the Department of Energy regarding programs and activities developed by the Applicant from the use of Federal assistance funds extended by the Department of Energy. Facilities of the Applicant (including the physical plants, buildings, or other structures) and all records, books, accounts, and other sources of information pertinent to the Applicant's compliance with the civil rights laws shall be made available for inspection during normal business hours of request of an officer or employee of the Department of Energy specifically authorized to make such inspections. Instructions in this regard will be provided by the Director, Office of Civil Rights, U.S. Department of Energy.

This assurance is given in consideration of and for the purpose of obtaining any and all Federal grants, loans, contracts (excluding procurement contracts), property, discounts or other Federal assistance extended after the date hereof, to the Applicants by the Department of Energy, including installment payments on account after such data of application for Federal assistance which are approved before such date. The Applicant recognizes and agrees that such Federal assistance will be extended in reliance upon the representations and agreements made in this assurance, and that the United States shall have the right to seek judicial enforcement of this assurance. This assurance is binding on the Applicant, the successors, transferees, and assignees, as well as the person(s) whose signatures appear below and who are authorized to sign this assurance on behalf of the Applicant.

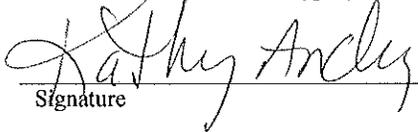
Applicant Certification

The Applicant certifies that it has complied, or that, within 90 days of the date of the grant, it will comply with all applicable requirements of 10 C.F.R. § 1040.5 (a copy will be furnished to the Applicant upon written request to DOE).

Designated Responsible Employee

Kathy Andry, Deputy Director
Name and title (Printed or Typed)

916-576-7109
Telephone Number


Signature

4/29/2014
Date

State of California
Department of Community Services and Development
Applicant's Name

Telephone Number

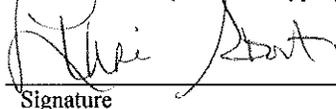
700 North 10th Street, Room 215A
Sacramento CA 95814
Address

Date

Authorized Official:
President, Chief Executive Officer
or Authorized Designee

Linné Stout, Director
Name and title (Printed or Typed)

916-576-7109
Telephone Number


Signature

4.29.14
Date

**CERTIFICATIONS REGARDING LOBBYING; DEBARMENT, SUSPENSION AND OTHER
RESPONSIBILITY MATTERS; AND DRUG-FREE WORKPLACE REQUIREMENTS**

Applicants should refer to the regulations cited below to determine the certification to which they are required to attest. Applicants should also review the instructions for certification included in the regulations before completing this form. Signature of this form provides for compliance with certification requirements under 34 CFR Part 82, "New Restrictions on Lobbying," and 34 CFR Part 85, "Government-wide Debarment and Suspension (Nonprocurement) and Government-wide Requirements for Drug-Free Workplace (Grants)." The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of Energy determines to award the covered transaction, grant, or cooperative agreement.

1. LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief, that:

No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement. Standard Form-LLL not required

Funds than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement. If checked, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

2. DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

(1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

(b) Have not within a three-year period receding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal,

falsification or destruction of records, making false statements, or receiving stolen property;

(c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and

(d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

(2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

3. DRUG-FREE WORKPLACE

This certification is required by the Drug-Free Workplace Act of 1988 (Pub. L. 100-690, Title V, Subtitle D) and is implemented through additions to the Debarment and Suspension regulations, published in the Federal Register on January 31, 1989, and May 25, 1990.

**ALTERNATE I
(GRANTEES OTHER THAN INDIVIDUALS)**

(1) The grantee certifies that it will or will continue to provide a drug-free workplace by:

(a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;

(b) Establishing an ongoing drug-free awareness program to inform employees about:

(1) The dangers of drug abuse in the workplace;

(2) The grantee's policy of maintaining a drug-free workplace;

(3) Any available drug counseling, rehabilitation, and employee assistance programs; and

(4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);

(d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will:

- (1) Abide by the terms of the statement; and
- (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the work-place not later than five calendar days after such conviction.

(e) Notifying the agency, in writing, within ten calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to energy grant officer or other designee on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification number(s) of each affected grant;

(f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted:

- (1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
- (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
- (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e), and (f).

(2) The grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant:

Place of Performance:
(Street address, city, county, state, zip code)

Check if there are workplaces on file that are not identified here.

State, or local) transaction under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery,

4. LOBBYING DISCLOSURE ACT OF 1995, SIMPSON-CRAIG AMENDMENT

Applicant organizations which are described in section 501(c)(4) of the Internal Revenue Code of 1986 and engage in lobbying activities after December 31, 1995, shall not be eligible for the receipt of Federal funds constituting an award, grant, or loan. Section 501(c)(4) of the Internal Revenue Code of 1986 covers:

Civic leagues or organizations not organized for profit but operated exclusively for the promotion of social welfare, or local associations of employees, the membership of which is limited to the employees of a designated person or persons in a particular municipality, and the net earnings of which are devoted exclusively to charitable, educational, or recreational purposes.

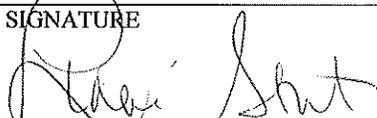
As set forth in the Lobbying Disclosure Act of 1995 (Public Law 104-65, December 19, 1995), as amended ["Simpson-Craig Amendment," see Section 129 of The Balanced Budget Downpayment Act, I (Public Law 104-99, January 26, 1996)], lobbying activities is defined broadly. (See section 3 of the Act.)

The undersigned certifies, to the best of his or her knowledge and belief, that: it IS NOT an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; OR that it IS an organization described in section 501(c)(4) of the Internal Revenue Code of 1986, which, after December 31, 1995, HAS NOT engaged in any lobbying activities as defined in the Lobbying Disclosure Act of 1995, as amended.

ALTERNATE II (GRANTEES WHO ARE INDIVIDUALS)

- (1) The grantee certifies that, as a condition of the grant, he or she will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substances in conducting any activity with the grant.
- (2) If convicted of a criminal drug offense resulting from a violation occurring during the conduct of any grant activity, he or she will report the conviction, in writing, within 10 calendar days of the conviction, to every grant officer or other designee, unless the Federal agency designates a central point for the receipt of such notices. When notice is made to such a central point, it shall include the identification number(s) of each affected grant.

As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above certifications.

NAME OF APPLICANT State of California Department of Community Services and Development	PR/AWARD NUMBER AND/OR PROJECT NAME Weatherization Assistance Program for Low-Income Persons
PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE Linné Stout, Director	
SIGNATURE 	DATE 4.29.14

Program Year 2013 Carryover

Reason for Carryover Amount

Due to minimal funding available for 2013, CSD carried over the entire 2013 DOE WAP grant into 2014 as one award. It was determined that the combination of available resources between the two grants was greatly more efficient for administrative, monitoring and production purposes and for meeting program requirements. This strategy was accepted by DOE on February 19, 2014.

Initially the minimal 2013 allocation did not provide funding sufficient enough to sustain the program at the local level for at least three Subgrantees. Based upon the department's standard three-factor formula used to allocate funds among the provider network, these three Subgrantees were allocated less than \$5,000 and another seven with less than \$10,000. With the combination of the two grants, there are no Subgrantees with less than a \$14,900 allocation.

Justification for Carryover Amount

The entire 2013 budget has been incorporated into 2014.

Budget Line Item	Previously Submitted 2013 Budget	2014 Budget	Total Combined 2014 Budget
Grantee Admin	\$76,181	\$245,394	\$321,575
Grantee T&TA	106,654	530,050	636,704
Subgrantee Admin	76,182	245,394	321,576
Subgrantee T&TA	45,709	353,367	399,076
Program Operations	960,532	3,002,151	3,962,683
Health & Safety	240,133	512,777	752,910
Liability Insurance	18,237	18,744	36,981
Total Budget	\$1,523,628	\$4,907,877	\$6,431,505

Subgrantee	Previously Submitted 2013 Budget	2014 Budget	Total Combined 2014 Budget
-------------------	---	--------------------	-----------------------------------

ATCAA	11,395	34,079	45,474
CAA of Butte County	20,578	61,544	82,122
Campeños Unidos	47,197	141,153	188,350
Community Action Marin	6,464	19,332	25,796
CA of Ventura County	24,490	76,236	101,726
CAC of Santa Barbara County	15,516	46,405	61,921
CAP of Kern County	66,796	199,768	266,564
CAP of Orange County	48,880	146,185	195,065
CAP of Riverside County	76,650	229,237	305,887
CAP of San Bernardino County	76,367	228,393	304,760
CAP of San Luis Obispo	9,535	28,517	38,052
Central Coast Energy Services	49,367	147,641	197,008
Central Valley Opportunity Center	30,474	91,139	121,613
Community Resource Project	68,877	205,991	274,868
Community Services & Employment Training	42,196	126,197	168,393
Contra Costa Employment & Human Services	31,754	94,966	126,720
El Dorado County Health & Human Services	17,915	53,579	71,494
EOC of San Francisco	17,747	53,106	70,863
Fresno County EOC	73,262	219,106	292,368
Glenn County Human Resource	4,526	13,534	18,060
Great Northern Corporation	11,381	34,038	45,419
Inyo Mono Advocates for Community Action	3,737	11,175	14,912
Kings CAO	9,054	27,079	36,133
Lassen Economic Development	4,836	14,463	19,299
Long Beach CAP	73,491	219,791	293,282
Maravilla Foundation	113,109	338,279	451,388
Mariposa County Human Services	3,783	11,314	15,097
Merced County CAA	28,175	84,262	112,437
Metropolitan Area Advisory Committee	18,792	56,202	74,994
North Coast Energy Services	63,901	191,113	255,014
Pacific Asian Consortium in Employment	84,238	251,931	336,169

Plumas County CDC	4,164	12,452	16,616
Project Go	25,733	76,960	102,693
Redwood CAA	23,341	69,805	93,146
Sacred Heart Community Service	37,336	111,662	148,998
San Joaquin County Department of Aging & Community Services	35,046	104,814	139,860
Self-Help Home Improvement Project	22,602	67,595	90,197
Spectrum Community Services	37,078	110,890	147,968
Total	\$1,340,793	\$4,132,433	\$5,473,226

STATE OF CALIFORNIA

DEPARTMENT OF COMMUNITY SERVICES AND
DEVELOPMENT (CSD)

Eligibility and Verification Guide

Revision Date 12/2013

Eligibility and Verification Guide

Table of Contents

Contents

This publication contains the following topics:

Topic	Page
Overview: Income Eligibility Guideline Changes	3-4
Section I: Eligibility Criteria	
Subsection 1: Eligibility Summary	5
Subsection 2: Collecting Date of Birth	6
Subsection 3: Citizenship and Alien Status Public Agencies	7-9
Subsection 4: Citizenship Status – Private Non Profit Agencies	10
Subsection 5: Household Composition	11-12
Subsection 6: Definition of a Dwelling	13
Subsection 7: Priority	14
Subsection 8: Qualifying an Client as Disabled	15
Subsection 9: Processing Applications without a SSN	16-17
Subsection 10: Qualifying for Fast Track Assistance	18-19
Subsection 11: Completing the Intake Form CSD 43	20-22
Subsection 12: Client file Documentation	23-24
Section II: Income Verification	
Subsection 1: Income Calculation	25-27
Subsection 2: Acceptable Income Documentation	28-41
Subsection 3: Excluded Income Sources	42-45
Subsection 4: Undocumented Sources of Income	46
Subsection 5: Zero Income	47-48
Section III: Energy Cost Verification	
Subsection 1: Energy Bill Criteria	49-50
Subsection 2: Interpreting Energy Cost	51
Subsection 3: Utilities Included in Rent	52
Subsection 4: Energy Burden	53-54
Section V: Appeals	
Subsection 1: Appeals Process	55-56
Subsection 2: Ineligible Applications	57
Subsection 3: Fraud	58

Overview: Income Eligibility Guideline Changes

Purpose

The Eligibility and Verification Guide is designed to be an easy-to-use reference for determining eligibility, processing intake forms, addressing policies and procedural requirements, and other pertinent program information for all energy programs administered through CSD, such as LIHEAP and DOE.

Reminder: All the policy and procedural changes in the Eligibility and Verification Guide (Revision Date 12/2013) apply exclusively to the 2014 Program Year.

Agency Instructions

Agencies must obtain income documentation fully supporting the total gross monthly income earnings (stated on the Energy Intake Form CSD 43) for qualified households receiving LIHEAP and DOE weatherization/energy assistance. Income documentation must be within 6 weeks of the application intake date, and further must comply with the stated acceptable forms of income documentation referenced within pages 28-41 of the Eligibility and Verification Guide and/or on the Countable and Non-Countable Income Chart.

The Energy Intake Form was modified to oblige applicants to disclose the number of household members providing income support to the household or in clearer terms, individuals with countable income earnings. Agencies must obtain documentation substantiating gross monthly income earnings for all household members stated on the Energy Intake Form.

Agencies should use the new CSD 43B to accompany the Energy Intake Form to further assist applicants with their understanding of the eligibility requirements and provide the necessary information to successfully complete the application for energy assistance.

General Rule

Agencies must make an attempt to obtain income documentation supporting the qualifying household's gross monthly income, such as but not limited to: the collection of all paystubs substantiating the gross earnings for the month; statements from adult members confirming income earnings from non-reportable sources (e.g., odd jobs, collecting and cashing in recyclables, etc.) and benefit letters substantiating benefits from Social Security or public benefit programs (e.g., TANF, General Assistance, etc.). However, in those isolated cases, where it poses a true hardship on the client to provide documentation supporting monthly income earnings, agencies may apply the use of the following income procedures to calculate the monthly income

earnings using partial paystub information:

- Client must submit a signed written statement confirming the inability to provide the required income documentation substantiating gross monthly earnings and the hardship posed with obtaining additional income documentation.
- Client must offer information describing the partial income documentation submission and confirm the gross monthly income for the missing income documentation.
- Using the offered statements from the applicant, agencies can determine the appropriate calculation to be used to compute the gross monthly earnings using the partial wage stub submission.

Note:

The income calculation is to assist applicants experiencing hardships and not be used as a common practice to circumvent the requirements for collecting income documentation substantiating gross monthly income from all sources for qualified households.

Section I: Eligibility Criteria

Subsection 1: Eligibility Summary

Introduction

Eligibility is based on the household's total monthly gross income, which cannot exceed the income guidelines. The federal government requires that states target households with lowest incomes and high energy costs, while taking into consideration households with elderly, disabled persons and children under six.

All clients

A client for all energy and/or weatherization programs must meet the following criteria:

1. Be a resident of California.
 2. Be a permanent and legal United States resident.
 3. Meet the income guidelines and provide proof of income from all sources for all members of the household.
 4. Be responsible for energy costs and provide copies of energy bills.
 5. Prove citizenship status if the client is being served by a public agency.
 6. Meet the definition of a household.
 7. Housing unit must meet the definition of a dwelling.
 8. Meet agency's priority plan.
-

Crisis component

LIHEAP crisis/emergency services have additional eligibility requirements for substantiating the condition of emergency under the various LIHEAP emergency services (ECIP, EHCS, ECIP WPO, and Fast Track).

Documentation

All factors of eligibility must be verified and documented in the client file. Copies of all verifications must also be maintained in the client file.

Section I: Eligibility Criteria

Subsection 2: Collecting Date of Birth

Background CSD collects the full 9 digit Social Security Number (SSN) for identifying and tracking client participation to ensure that duplicate payments are not issued. While the practice of collecting the full SSN assists in tracking client services, and preventing duplicate payments, CSD does not possess the legal authority to collect the SSN, nor can a client be denied services for failure to provide a full SSN.

Requirement Agencies are required to obtain and document the date of birth of the client on the Energy Intake Form CSD 43. This additional data will assist in verifying an applicant's identity, streamlining the prevention of fraud and the duplication of benefits.

No Documentation It will not be necessary for the client to verify their date of birth and no documentation is required in the client file.

Intake Form The date of birth must be written on the intake form in the following format: 2 digit month/2 digit day/2 digit year (mm/dd/yy). It is located in the upper right of the Intake form, near the last name field.

Section I: Eligibility Criteria

Subsection 3: Citizenship and Alien Status for Public Agencies

Background Federal law requires that all public agencies verify that clients are a United States citizen, national, or an alien in a qualified immigration status. A copy of the verification and documentation of their qualified status must be retained in the client file.

Citizen or Naturalized Citizen An individual is a United States (U.S.) citizen if:

- Born in the U.S., regardless of the citizenship of his/her parents
- Born outside of the U.S. of U.S. citizen parents
- Born outside the U. S. of alien parents and has been naturalized as a U.S. citizen. A child born outside of the U.S. of alien parents automatically becomes a citizen after birth if his/her parents are naturalized before he becomes age 16.

Citizenship Documentation Acceptable verification includes but is not limited to:

- U.S. birth certificate
- U.S. passport
- Naturalization certificate, N-550 or N-570. Certificate cannot be copied but agency should review, verify and document in the file that the “naturalized certificate was verified and valid”
- Report of birth abroad of a U.S. Citizen FS-240
- United States Citizen Identification Card, I-197
- Certificate of Citizenship, N-560 or N-561
- Statement provided by the U.S. consular officer certifying the individual is a U.S. citizen
- American Indian card with a classification code KIC
- Documentation of direct receipt of SSI or SSA benefits.

Qualified Alien The following table lists acceptable status and corresponding documentation for qualified aliens:

Status	Documentation
Lawful Permanent Resident	<ul style="list-style-type: none">• INS form I-551 (Alien Registration Receipt Card, also called Resident Alien Card or ‘green card’). This card contains a photo and fingerprint. It does not include the AI-551 form number. Older versions do not include a fingerprint.• An unexpired temporary I-551 stamp in a foreign passport or on a Form I-94

Status	Documentation
Parolee	<ul style="list-style-type: none"> • INS Form I-94 with a stamp showing admission under Section 212(d)(5) of the INA. An expiration date of 1 year or more from the date the status was granted (or indefinite) will be noted on the I-94 and can be used to indicate a qualified alien's status • INS Forms I-688 coded 274a.12(c) (11) • Form I-766 coded C11, indicates parolee status
Conditional Entrant	<ul style="list-style-type: none"> • INS Form I-94 with a stamp showing admission under Section 203(a)(7) of the INA • INS Form I-688 coded 274a.12(a)(3) • Form I-766 coded A3, which indicates status as a condition entrant
Cuban/Haitian Entrant	<ul style="list-style-type: none"> • INS Form I-94 with a stamp showing parole as a Cuban/Haiti Entrant under Section 212(d)(5) of the INA • Form I-94 showing parole into the U.S. on or after October 10, 1980 and reasonable evidence that the parolee had been a national of Cuba or Haiti • Note: This guideline does not apply when the individual was paroled solely to testify as a witness in a judicial administrative, or legislative proceeding or when the parolee is in legal custody pending criminal prosecution
Deportation or Removal Withheld	<ul style="list-style-type: none"> • An immigration judge's order showing that deportation was withheld pursuant to Section 243(h) of the INA removal was withdrawn pursuant to Section 241(b)(3) of the INA and the date of the judge's order • An INS Form I-688 with the code of 274a.12(a)(10) • Form I-766 coded A10, which indicates deportation or removal withheld under Section 241(b)(3) or 243(h)
Battered Spouse	<ul style="list-style-type: none"> • The individual must have filed a petition with INS base on: <ul style="list-style-type: none"> Status as a spouse or child of a United States citizen or classification to immigrant status as a spouse or child of a lawful permanent resident or Suspension of deportation and adjustment to lawful permanent resident status based on battery or extreme cruelty by a spouse or parent who is a United States Citizen or lawful permanent resident • The individual must allege that he or she was subjected to battering or extreme cruelty; and the person responsible for the battery or extreme cruelty must no longer reside with the individual in

	question.
Asylee-Alien granted asylum	<ul style="list-style-type: none"> • INS Form I-94 (Arrival Departure Record) with a stamp showing grant of asylum under Section 208 of the INA • A grant letter from the INS Asylum Office. • An order of an immigration judge. • INS Form I-688B (Employment Authorization Card) with the code 274a.12(a)(5) • Form I-766 (Employment Authorization Document) coded A5 that indicates status as an Asylee
Refugee	<ul style="list-style-type: none"> • INS Form I-94 with a stamp showing admission under Section 207 of the INA • INS Form I-688B with the code 274a.12(a)(3). • Form I-766 coded A3 that indicates status as a refugee.

Ineligible

Persons ineligible to participate in the energy and/or weatherization programs with public agencies are:

- Individuals who hold an INS I-94 who are admitted as temporary entrants (such as students, visitors, tourists, diplomats, etc.).
- Aliens who have no other INS document.
- Individuals possessing an Individual Taxpayer Identification Number (ITIN). An ITIN does not create an inference regarding the person's immigration status. An ITIN is issued by the U.S. Internal Revenue Service to individuals who are required to have a U.S. taxpayer identification number but who do not have, and are not eligible to obtain a Social Security Number issued by the Social Security Administration.
- Individuals possessing an ID card issued by a foreign consulate.

Calculating Income

An individual is not counted in the household size, if citizenship or qualified alien criteria is not met. However, his/her income is counted in the household's total income.

Section I: Eligibility Criteria

Subsection 4: Citizenship Status – Private, Non-Profit Agencies

Background Previously, private, non-profit charitable organizations were required to verify client eligibility in accordance with CSD’s client verification of eligibility procedures and regulations, forms, and other written guidance provided by CSD.

However, Section 432(d) of the 42 USC 1305 (Public Law 104-193, 110 Stat. 2168, Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA)), exempts non-profit charitable organizations from any requirement to determine, verify, or otherwise require proof of alien eligibility or status in order to provide a federal, state or local or public benefit.

Program Guidance CSD issued Program Guidance (PG-11-03) Eligibility of Non-Qualified Aliens. Private, non-profit agencies are not required to verify citizenship, but if during the intake process the agency is made aware the client is a non-qualified alien, services must be denied. CSD has issued Program Guidance (PG-11-03) to clarify procedures and requirements for determining the eligibility of clients who are non-qualified aliens.

Ineligible Qualified aliens are those who have both permanent and legal residency. If a client has legal residency but is not here on a permanent basis, they are considered a non-qualified alien. If the agency is made aware of the applicant’s non-qualified status, the client is ineligible for services and must be denied. Some indicators of non-qualified alien status are:

1. The client declares that he/she is not qualified (documented).
 2. The client provides a copy of a foreign consulate ID card.
 3. The client provides a copy of their Individual Taxpayer Identification Number (ITIN) card or number. An ITIN is issued by the U.S. Internal Revenue Service to individuals who are required to have a U.S. taxpayer identification number but who do not have, and are not eligible to obtain a Social Security Number issued by the Social Security Administration. These are not valid SSNs and will all start with the number nine (9).
 4. The client provides a copy of a passport from a country outside of the U.S.
 5. The client provides a copy of their student visa.
 6. The client provides a copy of their SSN card that says “Valid For Work Only”.
-

Calculating Income An individual is not counted in the household size if citizenship or qualified alien criteria is not met. However, his/her income is counted in the household’s total income.

Section I: Eligibility Criteria

Subsection 5: Household Composition

Definition

A household is defined as an individual or group of individuals related or unrelated, who function as one economic unit, who share residential energy, and who have an energy cost.

Ineligible Households for Cash Assistance

1. Subsidized households that do not pay any out of pocket energy costs.
 2. Persons living in licensed facilities (nursing homes, assisted living, etc.).
 3. Temporary shelters or group homes with residents who have no energy expense or who pay a nominal fee to live there.
 4. Single room dwelling, within a larger dwelling and the single room dwelling is not considered a separate household.
 5. Persons who have no physical address.
 6. Individuals who previously received assistance in another household during the same program year are considered ineligible household members.
 7. Applicants under the age of 18 who are not legally emancipated and do not have a parent or legal guardian to apply on their behalf.
-

Ineligible Households for Weatherization

1. Persons living in licensed facilities (nursing homes, assisted living, etc.).
 2. Persons who reside in only one room within a larger dwelling and is not considered a separate household.
 3. Persons who have no physical address.
 4. Applicants under the age of 18 who are not legally emancipated and do not have a parent or legal guardian to apply on their behalf.
-

Calculating Income for Ineligible Household Members

The income from ineligible household members should be counted toward the household's total income. However, the ineligible household members should not be counted towards the total household count.

Exceptions

1. Live-in Attendants - Individuals who reside with a household to provide necessary medical services and whose services are paid for in part or in full by a third party.
2. Persons living in multi-unit buildings - If a building contains more than one housing unit but has only one meter or tank that is shared by all the units, each unit may contain a separate household if each one functions as a separate economic unit (also known as submetered).
3. A person out of the home for reasons of employment, education,

hospitalization, etc.; who continues to support or be supported by the unit and who intends to return to the unit, will remain a member of the household.

4. A dependent child who is a student living away from his/her primary residence to attend an educational facility is considered to be a member of the primary residence.

Previously Served

Individuals who previously received LIHEAP assistance in another LIHEAP household during the same program year are considered ineligible household members to receive services. However, his/her income is counted in the household's total income.

Section I: Eligibility Criteria

Subsection 6: Dwelling Composition

Definition

A housing unit is a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied (or if vacant is intended for occupancy) as separate living quarters.

All dwellings must be a permanent building and located in California. Clients can have a mail address in another state, but the location where they receive utility services must be in California.

Separate Dwelling

Separate dwellings are those in which the occupants live and eat separately from any other persons in the building and have direct access from the outside of the building or through a common hall.

The occupants may be a single family, one person living alone, two or more families living together, or any group of related or unrelated persons who share living arrangements.

Separate living quarters are defined as: “quarters in which the occupants do not live and eat with any other persons in the structure and which have either direct access from the outside of the building or through a common hall or complete kitchen facilities for the exclusive use of the occupants.”

Ineligible Dwellings

The following are considered ineligible dwellings:

- Clients renting a room in someone else’s home.
(Exception: client provides proof that his/her living arrangement adheres to the definition of “separate living quarters”)
 - Clients living in transitory, tent or temporary encampments (such as Slab City in Niland).
 - Clients living in board-and-care facilities, nursing or convalescent homes, or in jail or prison.
 - Clients that are homeless
-

Exception

The following are exceptions for dwelling eligibility:

- Clients living on boats, in a marina with a dock number and utility hook-up, are eligible for HEAP assistance.
 - Clients living in mobile homes or RVs are ineligible for energy and weatherization services unless they meet the following criteria:
 1. The dwelling must not be mobile (i.e.: wheels have been removed, attached porch, etc.).
 2. The dwelling must have resided in the same location for a reasonable length of time.
-

Section I: Eligibility Criteria

Subsection 7: Priority

Background The federal government enacted a law requiring states to target households with low-incomes and high energy costs, while taking into consideration households with elderly, disabled persons, and/or children under six (Public Law 103-252 Section 2603(1)(4)). The results will mean that households that received assistance in the past may no longer receive assistance because they fall into a low priority group and are not considered among the neediest of the needy.

Prioritization is a method to consistently and fairly determine the need of individual clients, and how the agency elects to provide services based on need.

Policy CSD issued a CSD Program Notice regarding prioritizing services (CPN E-12-08). Per the CPN, agencies are required to prioritize the delivery of services for all LIHEAP programs in accordance with approved "Prioritization Plans" (Exhibit H). Also, **all** clients must be screened and evaluated using the agency's approved priority plans.

Priority Plan The following categories comprise the LIHEAP Cash Assistance priority plan. The points received in each category when totaled will determine if an application will be approved for assistance. Reference CPN E-12-08 for additional guidance on the Priority Plan.

Part	Function
Income	By assigning point values to households with the lowest incomes, those households most in need will receive greater weighting (priority consideration) for receiving services and ensure compliance with Federal law requirements for targeting.
Energy Burden	Higher point values are assigned to households paying a higher percentage of their income towards utility cost.
Vulnerable Population	Agencies must assign points if the household contains an elderly or disabled person or a child under the age of 5 years.
Agency-Defined	Agencies may further customize their plans by establishing additional categories and point values unique to the needs of their community. The Agency-Defined must fit within the following set categories: medically needy, frail elderly, severe financial hardship, hard to reach and priority offsets.

Section I: Eligibility Criteria

Subsection 8: Qualifying an Client as Disabled

Policy

CSD does not require agencies to obtain written documentation to verify the disability of an applicant. However, at the agency's discretion, it is reasonable to ask for proof of disability.

Proof of Disability

The following documentation is acceptable proof:

- Participation in a federal disability program (SSI, Veteran's disability, developmental disability programs in education).
- A statement from a doctor is reasonable to ask for if an client falls under the federal definition of disability.
- Self-certification statement.

Under federal law, if a person is "regarded as having impairment," the individual is considered to be disabled, whether or not it has ever been diagnosed or documented. Any self-certification statement should have a place where the client initials or signs the following statement: "I declare that I or one of my household members has a disability within the meaning of the Rehabilitation Act of 1973."

Section I: Eligibility Criteria

Subsection 9: Processing Social Security Numbers for Applications

Policy

CSD does not maintain the legal authority to require the submission of a SSN as part of the eligibility criteria. In such, a client cannot be denied for refusing to submit their SSN. However, CSD strongly encourages agencies to continue to request the SSN, as a unique client identifier, and to streamline the eligibility verification of clients.

Collecting Documentation

If an agency determines that copies of Social Security cards and/or drivers licenses are necessary, they can continue to request the information but cannot deny a client for refusing to submit the documents.

Due care must be taken to secure this sensitive information. It must be stored in a secure and locked location. Access to the location where client file information is maintained must be limited and regulated by internal controls.

Applications Received without a SSN

If after the initial review of the application, it is noted that the application was submitted without an SSN and a verbal confirmation is received from the client that they refuse to provide their SSN, the agency will complete the following step by step procedure for processing an application without an SSN:

Step	Action
1	Agency must confirm identity of client with any picture identification card. A copy of the picture identification used to confirm identity must be retained in the client file. Examples of acceptable forms of picture identification: <ul style="list-style-type: none">• Driver's license• Employee ID card• School, library, bus pass etc.
2	After confirming the applicant's identity, perform a data base search using the following information to assure that the client has not been served in the current program year: <ol style="list-style-type: none">1. Last and first name2. Service address3. Phone number4. Utility Account Number
3	If the applicant's record is located in a prior year with an SSN, agencies can enter the application and use the SSN from the prior year on the current application. The application should be processed in the standard manner and will not need to be submitted to CSD.
4	When the client is determined eligible (meets income guidelines, agency's priority plan and has not been served in the current year) agency will arrange for the handling of the application

	without an SSN, by completing a fax coversheet, and submitting the cover sheet, a copy of the intake form and supporting documents to CSD's Help Desk, via fax. Supporting documents must include: <ol style="list-style-type: none"> 1. Utility bill or a landlord statement for utilities included in rent 2. Copy of picture ID
5	CSD's Help Desk staff will perform a secondary duplicate check to confirm the client has not previously applied with an SSN. If a positive match is found, the Help Desk will provide the agency the previously used SSN for processing of the application.
6	If no match is found a unique filler number will be assigned by the Help Desk in lieu of an SSN.
7	Help Desk will confirm the filler number assigned to the client and provide the agency the temporary SSN via the return of the completed fax cover sheet.
8	Once the agency receives the confirmation with the assigned filler number the agency will process the application in the standard manner. Note: Once a client is assigned a temporary filler number, this number is to be used each and every year the client applies.

The attempt to obtain the SSN and the reason for not providing the SSN by the client must be documented in the client file.

This procedure applies to both Cash Assistance and Weatherization applicants.

Requesting Additional Information

Agencies that require documentation above the minimum requirements (a copy of Social Security card, copy of a driver's license, or name, ages and Social Security numbers for all household members) cannot deny a client for services for failure to provide this additional information.

Guidelines for Protecting SSNs

The Department of Consumer Affairs offers the following guidelines to protect Social Security numbers and other confidential information:

1. Develop a written security plan for record systems that contain SSNs.
2. Develop written security policies for protecting the confidentiality of SSNs.
3. Provide training and written material for employees on their responsibilities in handling SSNs.
4. Conduct training at least annually and train all new employees, temporary employees and contract employees.
5. Impose discipline on employees for non-compliance with organizational policies and practices for protecting SSNs.

When discarding or destroying records in any medium containing SSNs or

other confidential information, do so in a way that protects their confidentiality, such as shredding.

Section II: Eligibility Criteria

Subsection 10: Qualifying for Fast Track Assistance

Crisis Services

Crisis/emergency services have additional eligibility requirements for substantiating the condition of emergency under the various energy/weatherization programs. Emergency services can be provided under the following components: ECIP EHCS, ECIP WPO, SWEATS, and Fast Track.

Additional Requirements for Crisis Payments

There are additional requirements for processing crisis/emergency applications for cash assistance under the Fast Track program:

1. Fast Track payments shall only be made where an emergency energy-related crisis exists.
 2. Clients must receive energy services from one of the following energy providers: utility companies; mobile home parks that own their own power source; or submetering billing services with legal authority to shut-off utility services.
 3. An emergency energy related crisis does not exist if the cost of energy is included in the applicant's rent, in which case Fast Track payments shall not be made.
 4. Documentation of the energy related crisis must be maintained in the client file.
-

Documentation

To qualify for a Fast Track benefit the client must provide proof of one of the following:

- Proof a utility account is past due
 - Proof of utility shutoff notice
 - Proof of energy termination
 - Insufficient funds to establish a new energy account
 - Energy related crisis or life-threatening emergency exists within the applicant's household
 - Declared disaster
-

Pledge Process

Agencies are required by law (if the application is accepted) to resolve an energy crisis situation within 48 hours and a life threatening energy crisis situation within 18 hours.

To comply with this law, once an application has been approved, a pledge (promise to pay) is made to the utility company via phone, fax or e-mail.

Supplemental Payment

Under the Fast Track supplemental benefit provision the total amount of the Fast Track payment cannot exceed the total amount of the entire bill or \$1,000, whichever is less. The client file must contain proof of total bill amount and the current monthly energy cost.

Deposits

Fast Track funds can be used to pay for the deposits if the utility company adds the deposit amount to the service account. If the utility company assigns a separate account for the deposit, Fast Track funds cannot be used to pay on the deposit account.

LIHEAP funds cannot be used to pay on deposits if the deposit ultimately gets refunded to the customer.

Section I: Eligibility Criteria

Subsection 11: Completing the Intake Form CSD 43

Purpose To assess a household's need and to determine eligibility for LIHEAP and DOE services.

The client is the primary source of information in establishing eligibility for LIHEAP and DOE assistance and must furnish the required verification to establish household eligibility. The proceeding sections must be filled out on the intake form.

Agency Information The agency name and initials of the intake worker must be included on the intake form.

Intake Date The intake date can be one of two dates:

1. The date in which the application was received by the agency
2. The date in which the application is considered complete

Eligibility Cert Date The date in which the client is eligible to receive services. The Eligibility Cert Date is to be used for Utility Assistance and Weatherization applications.

Applicant The individual that is the client must be the person that signs the application. The client does not need to be the head of household or the person named on the utility bill, but they must reside in the residence.

Date of Birth The date of birth of the client must be recorded on the intake form.

Mail Address The address where the client receives mail. Mailing address may be a PO Box. It may also be out of state.

Service Address The address where the applicant's household uses energy. May be a descriptive address. Cannot be a PO Box or out of state.

SSN Agencies must continue to request a nine digit Social Security Number (SSN) from the applicant. The last four digits of the SSN are not acceptable.

Phone Number	Residential phone number with area code for the applicant.
Number in Household	Includes the client and all other members of the household. See Household Composition for definition of household members.
Demographics	Every member of the household must be in the demographics section.
Household Members Receiving Income	The number of members in the household receiving income must be recorded. Each person who receives income must also provide proof of their monthly gross income.
Income	Total gross monthly household income from all sources for all members of the household over 18 years of age. Proof of income from all sources for all members must be in the client file.
Utility Company	For Cash Assistance, the name of the utility company the client wants the benefit applied to.
Bill Name	Name of the customer of record on the utility bill. The client does not have to be the customer of record to receive benefits.
Account Number	For Cash Assistance, the account number for the benefits to be applied to. No account number is required if utilities are included in rent or the client is submetered.
Utilities Included in Rent	Check the box when the client pays for utility costs as part of their rent or if the applicant's utilities are submetered. An actual or estimate of the portion of rent that goes toward the utilities is required to calculate energy burden.
Signature	Must be signed by the client or by a witness if the client is unable to sign their name. The spouse of the client cannot sign the application in lieu of the applicant.
Program	The agency is responsible for selecting the appropriate program that the client will be assisted under. If the client is being assisted with Utility Assistance, either the HEAP or Fast

Track box must be checked. If there is to be a supplemental amount with a Fast Track application, the supplement must be written in the appropriate area.

If the client is being referred from Cash Assistance to Weatherization, check the appropriate referral box.

If the client is being assisted with Weatherization, one of the following boxes must be checked: DOE, LIHEAP WX, or ECIP HCS.

Type of Dwelling

Check the appropriate dwelling type of the household applying for services.

Energy Cost

Total of the most current energy costs, including all sources of energy used in the household. A copy of the energy bill for the company selected for benefits must be in the client file.

Energy Burden

Divide the total monthly energy costs (from all energy sources) by the total monthly household income to arrive at a percent of energy burden.

Agency Defined Priorities

In accordance with the agency's LIHEAP Priority Plan, select which agency defined category or categories the client falls under.

Priority Points

For Cash Assistance, the intake worker must include the points the client received based on the agency's priority plan.

Job Control Code

For all Weatherization programs, the agency's internal code for each job.

Picture Identification

When confirming the identity of clients during the above mentioned process, and requesting picture identification, there is a possibility of being informed of an applicant's ineligible status. Certain forms of picture identification can be indicators that a client is a non-qualified alien, and therefore ineligible for services.

It is not required for Private Non-Profit agencies to verify citizenship, but if during the intake process the agency is made aware the client is a non-qualified alien, services must be denied. The following forms of identification are indicators that a client might not be eligible for federal service:

1. Foreign consulate ID cards
2. Foreign passport
3. Student visa

Section I: Eligibility Criteria

Subsection 12: Client File Documentation

Purpose

All factors of eligibility must be verified and documented in the client file. Copies of all verifications must be maintained in the client file.

HEAP Required Documentation

HEAP client files must contain specific documents:

1. Completed and signed intake form CSD 43. The client name and signature must be the same person. The client does not need to be the customer on the utility bill.
 2. Copy of the utility bill from the company that will receive the HEAP payment, current within six weeks of intake. It is important to collect bills from all sources of energy used in the household to determine the actual energy burden. However, copies of all sources are not required.
 3. Copies of the proof of income documentation for all members of the household for a one month period, current within six weeks of intake.
 4. Verification of energy conservation education and budget counseling.
 5. If the agency is required to verify citizenship, the file must contain proof as directed.
-

Fast Track Required Documentation

Fast Track client files must contain one of the following proofs of energy crisis, as well as all of the requirements for HEAP listed in the previous section:

- A shut off notice,
 - Proof that services have been disconnected,
 - Proof that the account is in arrears, or
 - A deposit is needed to establish services (as long as the utility company does not assign a new account to the deposit or credits the customer with the deposit amount).
-

LIHEAP WX Requirements

LIHEAP Weatherization files must contain all of the requirements for HEAP listed above, in addition to the following:

- Verification of year built,
- HPO PDS printout (see 'Historic Preservation Review' below),
- Crew labor, costs documentation,
- Material cost documentation,
- Assessment Form (CSD 540)
- Energy Services Agreement for Rental Units (CSD 515) or Service Agreements for Unoccupied Multi-Unit Dwellings (CSD 515D),
- Post WX Inspection Report (25% of all LIHEAP WX files) (CSD 611),

- Documentation and justification for any appliances being replaced, and
 - Blower Door/Duct Blaster Data Sheet.
-

Historic Preservation Review

Certain dwellings in which Weatherization work is to be done require a Historic Preservation Online (HPO) Review. The following criteria under which a HPO Review is required:

- If the dwelling is 45 years or older
 - If the dwelling is listed on the National Register of Historic Places (NRHP)
 - If the dwelling is eligible for listing on the NRHP
-

Not Required by CSD

CSD does not require a copy of the applicant's :

- Social Security card
- Driver's License
- Name, date of birth and social security number for all members of household

It is at the agency's discretion to include these documents in the client file.

NOTE: Exceptions to this are in instances when a SSN is has not been provided. In such cases, a copy of the driver's license is required.

Confidential

Agency personnel will be exposed to and have access to information which is of a confidential nature. All client records are considered to be confidential and are open only to State and local agency personnel carrying out eligibility and audit functions. Such information should not be shared with unauthorized personnel.

Retention

All client files must be retained for 3 years from the contract close out.

Section II: Income Verification

Subsection 1: Income Calculation

Calculation Criteria

To create consistency in calculating income, agencies must calculate monthly income using the same method. The income calculations is to assist clients experiencing hardships and not be used as a common practice to circumvent the requirements for collecting income documentation substantiating gross monthly income from all sources for qualified households.

The following is the criteria is to be used when assessing documentation utilized for calculating income:

- Proof of income must be current to within 6 weeks from the intake date (unless otherwise specified by the agency).
 - Income must be the total gross income before deductions.
 - Income document(s) should cover a one-month period unless client did not work a full month.
 - Income cannot be annualized.
 - Seasonal worker's income must be based on the actual current income at time of intake.
-

Total Income Submitted

When four weekly, two bi-weekly or two bi-monthly consecutive paystubs are submitted as proof, simply add the gross amount of all stubs to calculate monthly income.

Hardship Documentation

Documentation for accepting partial income must be kept in the client file.

If a client will experience an extreme hardship to provide verification of a full month's income or current income verification, the hardship needs to be documented in the client file. The client must submit a statement explaining their inability to provide the full month's income or current income and the hardship they are experiencing.

Income Formulas

How to calculate incomplete earned income documentation

- A weekly gross income must be multiplied by 4.333 to total one month's income.
 - \$550 weekly X 4.333 = \$2,383.15 monthly income
- Bi-weekly gross income should be multiplied by 2.167 to calculate one month's income.
 - \$1,200 bi-weekly X 2.167 = \$2,600.40 monthly income
- Bi-monthly gross income should be multiplied by 2
 - \$1,200 bi-monthly X 2 = \$2,400.00 monthly income

- Quarterly gross income (including any interest and dividends) should be divided by 3 to arrive at a monthly average.
 - \$4,000 quarterly ÷ by 3 = \$1333.33 monthly income

Note: The income calculation is meant to assist clients experiencing hardships and not to be used as a common practice to circumvent the requirements for collecting income documentation or for substantiating gross monthly income from all sources for qualified households.

Exceptions

Example A

Stated Income on Intake Form:	\$800
Weekly Pay Stub:	\$200
Income using formula (\$200 X 4.333)	\$866.60

Example A is an acceptable method for utilizing the income formula for determining monthly income as the monthly calculated income reconciles within reason with the applicant's statement of gross monthly income on intake form. In this example the total household income entered would be \$866.66.

An adjustment to the income statement on the intake form can be made by the intake worker to match the provided proof. The intake worker can line through the statement (in a distinctive color) of \$800 and write in the correct amount of \$866.60 and initial the correction.

Example B

Stated Income on Intake Form:	\$0
Weekly Pay Stub:	\$200

Example B is an unacceptable situation to allow the utilization of the income formula for determining applicant's monthly income. The proof of income provided does not reconcile against the income stated on the intake form. The client must declare their monthly income. Another attempt must be made to contact the client to explain and resolve the discrepancy.

Not Working a Full Month

For clients that have not worked a full month, the formulas are not to be used to calculate a month's worth of income.

The client must provide the paystubs of the weeks they have worked and the intake worker must document the file with the amount of time the client has worked in the last month and the income received during that time.

Annual Statements

For award or annual statements, DO NOT use the date the document was issued. You must use the dates covering benefits within the document to

**and Bank
Deposits**

determine eligibility. These dates must be current.

Automatic Bank Deposit - the date of the deposit or the issue date of the statement can be used to determine if the document is current to within 6 weeks of intake date.

**Unqualified
Alien Income**

An individual that is not a citizen or a qualified alien is not counted in the household. However, his/her income is counted towards the household's total income.

Section II: Income Verification

Subsection 2: Acceptable Income Documentation – Public Assistance

Definition Public assistance or welfare payments include cash public assistance payments low-income people receive, such as Aid to Families with Dependent Children (AFDC, ADC), Temporary Assistance to Needy Families (TANF), and General Assistance (GA, GR).

Acceptable Proof Proof of income for these items must cover a one month time period and be current to within 6 weeks of the application intake date. The following are considered acceptable proof:

- Copy of current check
 - Current Notice of Action
 - Current verification from worker with amount of payment and date
 - Food Stamp verification with current income amount listed
 - Current aid printout summary
 - Copy of bank statement showing direct deposit (the date of the deposit or the issue date of the statement can be used to determine if the document is current to within 6 weeks of intake date)
 - Passport to Services printout summary
-

Unacceptable Proof The following are not considered acceptable proof:

- Outdated or altered information
- Medi-Cal cards
- Food Stamp verification with no income amount or date
- CW7 Report
- Notice of Action stating homeless aid

Exceptions The following are not considered as countable income:

- Overpayment adjustments should not be deducted from the gross aid amount.
- Food Stamp allotment amounts are not considered income and should not be used when calculating income.
- Assistance paid directly paid to the rental company, landlord or mortgage company should not be counted towards income
 - (Example: client received \$500 from GR, but \$200 is directly paid for housing costs to the landlord. Only \$300 of the GR should be counted as income.)

Section II: Income Verification

Subsection 2: Acceptable Income Documentation – Earned Income

Definition

Earned income is the total income people receive for work performed as an employee during the income year. Earned income includes wages, salary, armed forces pay, commissions, tips, piece-rate payments, and cash bonuses earned, before deductions are made for items such as taxes, bonds, pensions, and union dues.

Acceptable Proof

Proof of income for these items **must cover a one month time period and be current to within 6 weeks** of the application intake date. The following are considered proof:

- Copy of check(s) or pay stub(s) showing gross amount before deductions (if multiple checks, they must be consecutive).
 - Current copy of pay stub(s) covering 1 month of gross income before deductions (if multiple stubs, they must be consecutive).
 - Letter from employer with company name, address, phone number, the gross amount and current pay period.
 - Notice of Action showing earned income.
-

Unacceptable Proof

The following are not considered proof:

- Outdated information
- Information without dates
- Copy of check(s) showing net amount only
- Federal and State Tax Forms (exception: self-employed)
- W2 Forms
- Non-consecutive pay stubs or checks
- Employers' letter not showing gross income amount
- Food Stamp verification with no dollar amount listed
- Renter's Credit Form
- Copy of bank statement
- Military pay showing base pay only.

Note: Documentation for earned income must may not be annualized and then calculated to a monthly level.

Section II: Income Verification

Subsection 2: Acceptable Income Documentation – Social Security

Definition Social Security includes pensions, survivor's benefits and permanent disability insurance payments made by the Social Security Administration (SSA) prior to deductions for medical insurance.

Acceptable Proof Proof of income for these items **must cover a one month time period and be current to within 6 weeks** of the application intake date. The following are considered proof:

- Copy of check
- Payee's (income recipient) letter of verification showing income amount
- Notice of planned action
- Copy of bank statement showing direct deposit - The date of the deposit or the issue date of the statement can be used to determine whether the document is current to within 6 weeks of intake date.
- HUD statement from Department of Housing with a Social Security amount.
- Form 1099 (only acceptable if intake date is within the 6 week period following January 1st of the current year).

For the following items, DO NOT use the actual date the document was issued. You must use the dates covering benefits within the document to determine eligibility. These dates must be current.

- Annual benefit letter with current dates (Example: date of letter is December 2013, but letter states client will receive \$500 beginning January 2014).
- Computer printout or letter that states the current annual benefit amount.
- Form 2458 completed by Social Security Office.

Unacceptable Proof The following are not considered proof:

- Outdated information
- Benefit letter with no income amount or date
- Payee's letter of verification not showing income amount
- Medicare cards

Exceptions The following are exceptions:

- Overpayment adjustments should not be deducted from the gross aid amount.
- Medicare premiums are not considered income and must be deducted from the total gross amount.

**Hardship
Documentation**

Clients should be expected to provide current verification for one month. The only exception would be when the request for additional documentation would cause undue hardship for the client and the income can be substantiated using an outdated form of documentation. The client must submit a statement explaining their inability to provide the documentation and the hardship they are experiencing.

Example: Elderly woman, 90 years old, using public transportation to the agency, submits a copy of a Social Security check that is beyond the 6 week limit. It is reasonable, in this case, to assume that her income, Social Security, has not changed and it is acceptable to process the application with the income verification submitted. It would be an extreme hardship for the client to return with current documentation.

Note: The alternate documentation should be in the same calendar year.

Section II: Income Verification

Subsection 2: Acceptable Income Documentation – SSI/SSP

Definition Supplemental Security I (SSI) income includes federal and state payments to low-income people who are 65 years of age and older or people of any age who are blind or disabled.

Acceptable Proof Proof of income for these items **must cover a one month time period and be current to within 6 weeks** of the application intake date. The following are considered proof:

- Copy of check
- Payee's (income recipient) letter of verification showing income amount
- Notice of Planned Action
- Copy of bank statement showing direct deposit - The date of the deposit or the issue date of the statement can be used to determine whether the document is current to within 6 weeks of intake date.
- HUD statement from Department of Housing with a Social Security amount (current within year of the eligibility period)
 - This document can be used to document the total household income, similar to a Passport to services.

For the following items, DO NOT use the actual date the document was issued. You must use the dates covering benefits within the document to determine eligibility. These dates must be current.

- Annual benefit letter with current dates (Example: date of letter is December 2013, but letter states client will receive \$500 beginning January 2014).
- Computer printout or letter that states the current annual benefit amount.
- Form 2458 completed by Social Security Office.

Unacceptable Proof

The following are not considered proof:

- Outdated information
 - Benefit letter with no income amount or date
 - Payee's letter of verification not showing income amount
 - Medicare cards
-

Countable Income

The following are exceptions:

- Overpayment adjustments should not be deducted from the gross aid amount.
- Medicare premiums are not considered income and must be deducted from the total gross amount.

Section II: Income Verification

Subsection 2: Acceptable Income Documentation – Pensions/Retirement

Definition

Pensions and retirements include payments received from the following sources: companies or unions; federal government (Civil Service); military; state or local governments; railroad retirement; annuities or paid-up insurance policies; individual retirement accounts (IRAs), Keogh or 401 (k) payments; or other retirement income.

Acceptable Proof

Proof of income for these items **must cover a one month time period and be current to within 6 weeks** of the application intake date. The following are considered proof:

- Copy of check.
- Form 1099 (Only acceptable if intake date is within the 6 week period following January 1st of the current year).
- Bank statement showing direct deposit made from pension or retirement source.

For award or annual statements, DO NOT use the date the document was issued. You must use the dates covering benefits within the document to determine eligibility. These dates must be current to within 6 weeks of the application intake date.

- Pension verification (i.e., letter or printout. Time frame of benefit must be current).
- Annual statement from pension plan.

Unacceptable Proof

The following are not considered proof:

- Outdated or altered information
 - Benefit letter with no income amount or date
-

Section II: Income Verification

Subsection 2: Acceptable Income Documentation – Unemployment Compensation

Definition Unemployment compensation includes payments received from government unemployment agencies or private companies during periods of unemployment, including any strike benefits from union funds.

Acceptable Proof Proof of income for these items **must cover a one month time period and be current to within 6 weeks** of the application intake date. The following are considered proof:

- Copy of current checks (must be consecutive)
- Current check stubs (must be consecutive)
- Current printout
- Current award letter
- Current printout of bank statement showing original deposit from awarding entity (Example: Employment Development Department uses an automatic deposit to a Bank of America debit card. Printouts showing the deposit can be obtained directly from any Bank of America.)

Unacceptable Proof The following are not considered proof:

- Outdated information
- Information without a date
- Award letter without income or date
- Non-consecutive checks or stubs
- Less than one month's verification

Section II: Income Verification

Subsection 2: Acceptable Income Documentation – Workers’ Compensation

Definition Workers’ Compensation includes payments people receive periodically from public or private insurance companies for injuries received at work.

Acceptable Proof Proof of income for these items **must cover a one month time period and be current to within 6 weeks** of the application intake date. The following are considered proof:

- Copy of current check(s)
 - Current check stub(s)
 - Current printout
 - Current award letter
-

Unacceptable Proof The following are not considered proof:

- Outdated information
- Information without a date
- Award letter without income or date

Section II: Income Verification

Subsection 2: Acceptable Income Documentation – Veterans' Benefits

Definition Includes payments to disabled members of the armed forces or survivors of deceased veterans receiving periodically from the Department of Veterans Affairs for education and on-the-job training, and means-tested assistance to veterans.

Acceptable Proof Proof of income for these items **must cover a one month time period and be current to within 6 weeks** of the application intake date. The following are considered proof:

- Copy of current check
- Current check stub
- Current printout
- Current award letter
- Bank statement with direct deposit - The date of the deposit or the issue date of the statement can be used to determine whether the document is current to within 6 weeks of intake date.

Unacceptable Proof The following are not considered proof:

- Outdated or altered information
- Benefit letter with no income amount or date

Exceptions The following are not considered as countable income:

- Assistance paid directly paid to the rental company, landlord or mortgage company should not be counted towards income
 - (Example: Client received \$500 from the VA, but \$200 is directly paid for housing costs to the landlord. Only \$300 of the VA benefit should be counted as income.)

Section II: Income Verification

Subsection 2: Acceptable Income Documentation – Self-Employment and Rental Income

Definition

Countable income from self-employment is the gross income from any trade or operated business, minus the applicant's operating expenses for that trade or business, as specified below. Countable income shall also reflect the applicant's share of profit or loss in any partnership for the most recent tax year, as reported on Federal income tax returns. Countable rental income is the gross income from subleasing, leasing or renting a property less the applicant's share of operating expenses for the rental property.

Operational Expenses for Self-Employed

The following are operational expenses for self-employed and are not considered income:

- Taxes required for operation of the business
 - Licenses and permit fees
 - Rent payments
 - Insurance
 - Labor costs
 - Maintenance
 - Products used to operate the business
 - Interest on debts
 - Actual food costs for self-employed babysitters
-

Not Included in Operational Expenses

Business expenses do not include:

- Payments on the principal of the purchase price of and loans for capital assets such as real property, equipment, machinery and other goods of durable nature.
 - Principal and interest on loans for capital improvement of real property
 - Net losses from previous periods
 - Federal, state, and local taxes
 - Money set aside for retirement purposes
 - Personal expenses, entertainment expenses, and personal transportation
 - Depreciation on equipment, machinery, or other capital investments necessary to the self-employment enterprise
-

Operational Expenses for Rentals

The following are operational expenses for rentals and are not considered income:

- Interest on debts
- Taxes
- Insurance

- Maintenance
- Utilities, if paid by client
- Real estate agent's fees

Acceptable Proof

Proof of income for these items **must cover a one month time period and be current to within 6 weeks** of the application intake date. The following are considered proof:

- Current copy of ledger or journal (Handwritten information is acceptable)
- Signed self-employment statement showing gross receipts, gross expenses, and net income for a one month time period
- Copy of current signed and dated 1040 Federal Tax Form, signed by applicant(s) OR licensed tax return preparer (or both).
 - The current year's Tax Form 1040 is acceptable until the following year's filing date of April 15 (ex: 1040 for 2013 is acceptable until April 15, 2014).
 - Form 1040 must show a dollar amount, either on line 12 or 17, to be valid income verification for self-employment or rental income. When using a 1040 Tax Form, calculate monthly gross income from rental or self-employment by dividing the amount on line 22 by 12 months. If line 22 is zero or a negative amount, set the income amount on the application to zero (0). Any carryover of net operating loss(es) from previous tax years (may be listed on line 21) shall NOT be deducted from countable income.
 - Schedule C (for self-employment) or Schedule E (for rental income) must be submitted with the current 1040.

Unacceptable Proof

- Outdated or altered information
- Unsigned 1040 Federal Income Tax Form
- 1040 Tax Form showing no dollar amount on self-employment or rental income (line 12 or 17)
- Profit or Loss Tax Form (Schedule C) without 1040
- Supplemental Income and Loss Tax Form (Schedule E) without 1040
- Any other tax form (i.e.: 540 State Tax Form, 1040EZ Tax Form, 1040A Tax Form)

Example: Determining Self Employment Income from 1040 Tax Form

John Doe is a freelance writer with a household of three. His most recent 1040 tax return contains the following information:

Line 12: Business Income (or Loss) Amount = \$14,500.

Schedule C: Identifies total receipts from business, minus itemized operating expenses. Should match Form 1040, Line 12 = \$15,000.

Line 22: If different from Line 12, check for countable rental income on Line 17. *Only amounts listed on Lines 12 and 17 should be used to calculate*

income – disregard other distributions, net operating loss carryovers, etc.

- John's Line 22 includes only the business income from Line 12. Therefore, $14,500 / 12 = \$1,208.33$. This is John's countable income from self-employment for purposes of determining LIHEAP eligibility.
-

Section II: Income Verification

Subsection 2: Acceptable Income Documentation – Survivors’ Benefits

Definition Survivors benefits include payments received from survivors' or widows' pensions, estates, trusts, annuities, or any other types of survivor benefits, from private companies or unions; federal government (Civil Service); military; state or local governments; rail road retirement; worker's compensation; black lung payments; estates and trusts; annuities or paid-up insurance policies; and other survivors benefits.

Acceptable Proof Proof of income for these items **must cover a one month time period and be current to within 6 weeks** of the application intake date. The following are considered proof:

- Copy of current check
- Current check stub
- Current printout
- Current award letter
- Bank statement with direct deposit - The date of the deposit or the issue date of the statement can be used to determine whether the document is current to within 6 weeks of intake date.

Unacceptable Proof The following are not considered proof:

- Outdated information
- Information without a date
- Award letter without income or date

Section II: Income Verification

Subsection 2: Acceptable Income Documentation – Interest

Definition

Interest includes payments received or have credited to accounts from bonds, treasury notes, IRAs, certificates of deposit, interest-bearing savings and checking accounts, and all other investments that pay interest.

Note: Only the interest used for household support is considered income, not the original deposit.

Acceptable Proof

Proof of income for these items **must cover a one month time period and be current to within 6 weeks** of the application intake date. The following are considered proof:

- Current copy of check(s)
 - Current statement(s) from financial institution(s)
 - Current copy of financial statement(s) showing direct deposit - The date of the deposit or the issue date of the statement can be used to determine whether the document is current to within 6 weeks of intake date
 - Form 1099 (Only acceptable if intake date is within the 6 week period following January 1st of the current year).
-

Unacceptable Proof

The following are not considered proof:

- Outdated information
 - Information without a date
 - Financial statement(s) without a dollar amount listed
 - Federal and State Tax Forms
-

Section II: Income Verification

Subsection 2: Acceptable Income Documentation – Dividends/Royalties

Definition Dividends are returns on capital investments, such as stocks, bonds, or savings accounts. Royalties are compensation paid to the owner for the use of property, usually copyrighted material or natural resources such as mines, oil wells, or timber tracts. Royalty compensation maybe expressed as a percentage of receipts from using the property or as an amount per unit produced.

Acceptable Proof Proof of income for these items **must cover a one month time period and be current to within 6 weeks** of the application intake date. The following are considered proof:

- Current copy of check(s)
- Current statement(s) from financial institution(s)
- Current copy of financial statement(s) showing direct deposit - The date of the deposit or the issue date of the statement can be used to determine whether the document is current to within 6 weeks of intake date.
- Form 1099 (Only acceptable if intake date is within the 6 week period following January 1st of the current year)

Unacceptable Proof The following are not considered proof:

- Outdated information
- Information without a date
- Financial statement(s) without a dollar amount listed
- Federal and State Tax Forms

Section II: Income Verification

Subsection 3: Excluded Income Sources

Policy

Certain types of income are to be excluded from the total household income, for the purposes of the LIHEAP and DOE programs. Verification of the non-countable income or excluded income being received must be retained in the client file.

Authority

Federal Law Title 42 Chapter 94

In verifying income eligibility for purposes of subsection (b) (2) (B) of this section, the State may apply procedures and policies consistent with procedures and policies used by the State agency administering programs under part A of title IV of the Social Security Act [42 U.S.C. 601 et seq.], under title XX of the Social Security Act [42 U.S.C. 1397 et seq.], under subtitle B of title VI of this Act (relating to community services block grant program) [42 U.S.C. 9901 et seq.], under any other provision of law which carries out programs which were administered under the Economic Opportunity Act of 1964 [42 U.S.C. 2701 et seq.] before August 13, 1981, or under other income assistance or service programs (as determined by the State).

Subsection (b) (2) (B) - households with incomes which do not exceed the greater of- (i) an amount equal to 150 percent of poverty level for such state; or (ii) an amount equal to 60 percent of the State median income;

Student Assistance

All student assistance is excluded. This includes Grants, Scholarships, Fellowships and Gifts/Pell Grants/Federal Perkins Loans, Federal Supplemental Education Opportunity Grants, Leveraging Educational Assistance Program (LEAP), Department of Education and Bureau of Indian Affairs (BIA), University Year for Action and work study.

Foster Care Payments

Payments received for the care of foster children or foster adults, who are unable to live alone, are not counted income.

Child Support Payments

The amount paid as a result of a Court ordered or mandated child support agreement, should be deducted from the total household income. Proof of the mandated child support payments is to be kept in the client file.

Parental entities receiving child support payments should include the amount

paid for the child(ren) in the total household income.

In Home Care Provider

The income of a live-in aid* or amounts paid by a State agency (In Home Supportive Services) to a family or non-family member to offset the cost of services and equipment needed to keep the family member at home will not be included in total household income.

*Live-in aid is defined a person who resides with one or more elderly persons (at least 62 years old), or near elderly persons (at least 50 years old), or persons with disabilities, and who:

1. Is determined to be essential to the care and well-being of the person(s);
 2. Is not obligated for the support of the person(s); and
 3. Would not be living in the unit except to provide the necessary supportive services.
-

Income from a Minor

Income from employment of children (including foster children) under the age of 18 years will be excluded from countable household income.

Food Stamps

The value of the coupon allotment provided to any eligible household.

Medicare and Medical

The value of medical expenses paid directly to a health care provider on behalf of the household.

Medicare Deductions

The deduction for Medicare from Social Security benefits.

Gifts and Inheritances

One time lump sum inheritances or gifts. Such as gifts occasioned by a death or gifts of domestic travel tickets.

Disaster Assistance

Payments made by federal service providers under a presidential declaration of disaster including, but not limited to, individual family grants from the Federal Emergency Management Agency (FEMA).

Victims of Crime Payments

All reparation payments to victims of a crime (Victim's Compensation).

Reparation Payments

Payments to Aleut people and people of Japanese ancestry under Public Law 100-383.

**Victims of
Nazi
Persecution**

Payments made to individuals because of their status as victims of Nazi persecution shall be disregarded in determining eligibility.

**Older
Volunteers**

Older Americans Volunteers Act of 1965 – Income paid to participants in programs carried out under the Community Service Employment Program (Title V of the Older Americans Act), including Green Thumb, Senior Health Aides, Senior Companions.

**Domestic
Volunteers**

Domestic Volunteer Service Act of 1973(P.L.93113) - Income paid to participants - Title I: Volunteers in Service to America (VISTA), AmeriCorps, University Year for Action (UYA), Urban Crime Prevention Program. Title II: Retired Senior Volunteer Program (RSVP), Foster Grandparent Program, Older American Community Service Program (Senior Health Aides, Senior Companions). Title III: Service Corps of Retired Executives (ACE)

**Vietnam
Veterans**

Vietnam Agent Orange Benefits. Benefits **given** for the children of woman-Vietnam veterans who suffer from certain birth defects must not be considered as income in determining eligibility or benefits.

**Native
American
Land**

The value of land taken from and later added back to Indian reservations must not be considered income.

**Native
American
Judgments**

Indian per capita judgment payments made to any tribe or group whose trust relationship with the federal government has been terminated and for which legislation was in effect before October 12, 1973 authorized the disposition of its judgment funds.

Non-cash

Any non-cash Federal or State Benefits.

WIA

Title I of the Workforce Investment Act of 1998: Supportive services to participants including assistance that enables people to participate in the program, such as transportation, health care, child care, handicapped assistance, meals, temporary shelter, counseling, and other reasonable expenses or participation in the program.

**Nutrition
Programs**

Benefits from Women, Infant, and Children (WIC) program, Agriculture Nutrition Act of 1949 Section 416: value of federally donated food acquired through price support operations for school lunch or other distribution to needy people. Child Nutrition Act: the value of assistance to children under

this Act. National School lunch Act: the value of assistance to children under this Act. Meals for Older Americans, School breakfasts and lunches and milk programs.

Job related Expenses

For non, self-employed clients that do not file income tax as self-employed (a sales person or a truck driver/taxicab driver) and who pay business expenses and also receive a paycheck, deduct the business expenses from the household's total gross income.

Employer Paid Benefits

Most employers providing benefits make a contribution to the cost of the benefit, with any remaining cost to be paid by the employee through payroll deduction. The employer contribution is not income. The payroll deduction is income.

Prizes and Awards

A prize is generally something received in a contest, lottery or game of chance. An award is usually received as the result of a decision by a court, board of arbitration, or the like.

Sale or Exchange of Property

Capital gains people received (or losses they incur) from the sale of property, including stocks, bonds, a house, or a car (unless the person was engaged in the business of selling such property, in which case count the net proceeds as income from self-employment).

Other Exclusions

- Military combat pay
 - Draw down from Reverse Mortgage
 - Tax Refunds
 - Loans
 - Withdrawal from Savings
 - Food or housing received in lieu of wages.
 - The value of food and fuel produced and consumed on farms
 - One-time Insurance Payments
 - Compensation for Injury
 - Federal or State Mortgage Assistance Programs (i.e., Keep Your Home California)
-

Section II: Income Verification

Subsection 4: Undocumented Sources of Income

Definition Cash income from irregular sources including but not limited to, babysitting, mowing lawns, redeeming cans/bottles, paid in cash or selling personal property.

Self-Certification Self-declaration is only acceptable when all reasonable steps to obtain hardcopy or supporting verification have been exhausted and it would create an undue hardship for the client if they are required to pursue other verifications. Undue hardship is defined as special or specified circumstances that can partially or fully exempt a person from performance of a legal obligation so as to avoid an unreasonable or disproportionate burden or obstacle.

Acceptance of this type of verification must be fully justified and documented in the client file. A client self-certification statement CSD 43B, may be used for proof of income when the client does odd jobs from various sources and cannot obtain verification or if the third party who is asked to complete a form or statement on behalf of the client refuses to provide a signed document. If the self-certification statement is used, it must provide enough information to accurately determine the applicant's countable income.

NOTE: Third party non-cooperation cannot cause the client to be denied services.

Section II: Income Verification

Subsection 14: Zero Income

Introduction

Clients claiming no income must reveal their source(s) of support. Client households with zero income or expenses that exceed the income, requires the intake worker to determine how the household is meeting its current living expenses. Current living expenses include but are not limited to: rent/mortgage, utilities (gas, power, trash, and phone), food, insurance and car payments.

This procedure does not apply to households that submit proof of non-countable income and/or excluded income, even though their income is set to zero. The verification of non-countable income or excluded income must be included in the client file.

LIHEAP Policy – No Income Certification

For LIHEAP applicants, after all attempts to collect documentation have failed, a self-certification statement, CSD 43B, completed and signed by the client claiming no income, is acceptable. A LIHEAP self-certification statement **does not require notarization**. All attempts to obtain documentation and the reason for accepting the self-certification must be documented in the client file.

First Year - The first year a client claims no income, the household may declare their sources of support on the Survey of Income and Expenses CSD 43B, without documentation.

If every adult in the household reports no income for the eligibility period, the client must complete the CSD 43B. Eligibility should be based on the reported information.

Succeeding Years - When a client reports no income for two or more years, the client must complete the CSD 43B, and provide documentation where requested. Support claims must include documentation or sources for verification.

Agencies must obtain written or verbal verification of regular support from others reported on the form. Eligibility will be based on documentation submitted with the form or verified during the follow-up.

**DOE Policy –
No Income
Certification**

In accordance with The Department of Energy, Weatherization Program Notice 10-18, effective December 2011, all applicants applying for DOE services with undocumented income or zero income, only after all other avenues of documenting income eligibility are exhausted, self-certification is allowable. Evidence of the various attempts at proving eligibility must be contained in the client file, including a **notarized statement** signed by the client that he has no other proof of income.

If the applicant qualifies for either LIHEAP program (Cash Assistance or Weatherization), then is moved to the DOE program for weatherization, their CSD 43B will travel with them and qualify them for DOE, it does not need to be notarized.

Note: If 120 days passes and their income eligibility for DOE needs to be re-established, they will follow the same “Zero Income Notarization” rules that apply to an applicant entering through the DOE program.

On an exceptional basis, if an agency absolutely cannot obtain a notarized self-certification statement, the Executive Director of the agency may sign the form and take responsibility for the self-certification statement.

Denial

Inadequate information on the form is cause for denial of benefits.

Section III: Energy Cost Verification

Subsection 1: Energy Cost Criteria

Introduction The utility bill provides verification of the physical address, energy costs and other valuable utility account information to ensure the delivery of cash assistance benefits by means of direct payment to utility service providers.

Bills must include Energy bill(s) must contain a billing period of at least 22 days and be **current to within 6 weeks** of the application intake date. The energy bill also must provide the amount of the household's current energy costs and the following:

1. Service address - In rural areas, the service address can be descriptive (Example: 3rd house on the left, past the gas station, etc.)
 2. Account number
 3. Name of the utility company
 4. Customer's name
 5. The dollar amount of a full month's energy costs (at least 22 days), some exceptions may apply. Please contact the Help Desk for assistance.
 6. Fast Track applications: the documentation must include the total amount due on the bill (current and past due and all other changes).
-

Acceptable Acceptable energy bills include current, delinquent, shut-off notices, or energy statement/print-outs that indicate usage without added fees and provide the required information referenced above.

All utility bills must be current to within six weeks of the intake date using the service dates, not the issue date of the bill.

Exception: When clients are trying to re-establish services on a closed account (closed due to non-payment) that has no current charges, the issue date of the bill is to be used to determine if it is current. Since the service period will not be current, the current energy charges for that utility will be set to zero on the application.

Unacceptable Verification The following are considered unacceptable energy cost verification:

1. Closing bills
2. Altered bills
3. Service address on the utility bill does not match the client's

- service address
 - 4. Outdated utility bill
 - 5. Deposit accounts or accounts in collections
-

Section III: Energy Cost Verification

Subsection 2: Interpreting Energy Cost

Introduction The total monthly energy cost consists of the entire amount of energy costs incurred for the most current month. Allowable energy costs include usage and all monthly charges.

Example Energy Bill Below is an example of the charges to be included in calculating energy cost:

Summary of Charges	CARE Discount Applied	Amount
Customer Charge	29 Days x 0.13151=	\$3.81
CARE Baseline	14 Therms x 0.61643=	\$8.63
CARE Over Baseline	15 Therms x 0.76267=	\$11.44
Gas Charges		\$23.88
State Regulatory Fee	29 Therms x 0.00076=	\$0.02
CARE Public Purpose Surcharge	29 Therms x 0.01881=	\$0.55
Taxes & Fees on Gas Charges		\$0.57
Total Gas Charges Including Taxes and Fees		\$24.45
Current Level Pay Amount		\$34.00
Total Amount Due		34.00

The total amount of monthly energy cost is **\$24.45**.

$$(23.88 + 0.57 = \$24.45)$$

Note: The balance pay amount is not used to calculate energy cost.

Section III: Energy Cost Verification

Subsection 3: Utilities Included In Rent

Introduction Clients that pay their utility costs as a portion of their rent are eligible to receive LIHEAP assistance. Public Law 97-35, Title XXVI, Section 2602 (8)(B) “the State will treat owners and renters equitably under the program assisted under this title”.

Documentation To qualify to receive services clients must provide the following documentation:

1. Date
 2. Tenant/Customer’s Name
 3. Service Address
 4. The amount of rental charges covering energy expenses
 5. Landlord’s signature
 6. Photocopied and faxed letters of utility cost verification
 - Agency must keep a dated copy with a wet signature on file for each multi-family dwelling. Letter must contain service address, date, and the location of the original signature.
 - This document maybe photocopied for insertion into the client file of other tenants in that building.
 - A newly signed landlord letter must be obtained each program year.
-

Acceptable Documentation Documentation must include a time frame current to six weeks from intake date

- Must indicate the dollar amount of the applicant’s monthly rent that is applied towards energy costs.
- Rental agreement that indicates utilities included in rent
- Rental receipt that indicates utilities included in rent
- Original or faxed letter signed by landlord/manager
- HUD statement showing zero utility allowance
- Billing services statement that indicates submetered

Unacceptable

- Documents that do not show energy charges
- Documents that have been altered
- Outdated information
- Landlord statements that are unsigned
- Letter that does not indicate customer name and apartment number if applicable.

Section III: Energy Cost Verification

Subsection 4: Energy Burden

Definition The percentage of household income used to pay household energy expenses. This is determined by dividing the household's monthly energy cost by the household's total gross monthly income.

Utility Bills Clients are requested to submit all of their energy utility bills for a one-month period (gas and electric, wood and propane, or any combination thereof).

In instances where a household is unable to obtain a copy of a secondary energy bill, it is acceptable to have the client estimate the cost of their absent energy bill(s). This estimation should be documented and maintained in the applicant's file. HEAP assistance can only be made to a utility company where a bill is present; therefore, the client must provide the bill from the utility service provider to which the HEAP/Fast Track assistance will be issued.

Utility Provider Eligible households may only select one utility company to receive assistance.

Calculating Energy Burden The following is the methodology for calculating energy burden:

1. Use all energy utility costs to calculate the total energy costs for a one-month period (gas and electric, wood and propane) when calculating energy burden. Use the entire amount owed for the current one-month period. This can include the usage amount, surcharges and/or taxes. Do not include in the total arrearages from a previous month(s).
2. Total all household income for one month.
3. Divide the household's total gross monthly income by the household's total monthly energy cost. The resulting percentage is the household energy burden.

Note: For the purpose of calculating energy burden, the costs associated with leasing solar panels should not be included in the calculation.

Utility Allowance Households receiving a utility allowance (i.e., Department of Housing and Urban Development's Allowances from Tenant-Furnished Utilities) shall have their energy burden calculated only by using the out of pocket expense for their utility payment and not the subsidy. The client must substantiate out of pocket expense by showing proof of utility payment outside of the utility allowance paid against the energy cost.

**Sample
Calculation**

Calculating energy costs:

Step	Action								
1	Calculate total energy costs								
	<table border="1"> <thead> <tr> <th>Commodity</th> <th>Charges</th> </tr> </thead> <tbody> <tr> <td>Monthly electricity</td> <td>\$45.15</td> </tr> <tr> <td>Monthly gas</td> <td>\$56.36</td> </tr> <tr> <td>Total energy costs</td> <td>\$101.51</td> </tr> </tbody> </table>	Commodity	Charges	Monthly electricity	\$45.15	Monthly gas	\$56.36	Total energy costs	\$101.51
	Commodity	Charges							
	Monthly electricity	\$45.15							
Monthly gas	\$56.36								
Total energy costs	\$101.51								
2	Calculate total monthly income								
	<table border="1"> <thead> <tr> <th>Source</th> <th>Amount</th> </tr> </thead> <tbody> <tr> <td>Social Security</td> <td>\$1,100.00</td> </tr> <tr> <td>Pension</td> <td>\$250.00</td> </tr> <tr> <td>Total income</td> <td>\$1,350.00</td> </tr> </tbody> </table>	Source	Amount	Social Security	\$1,100.00	Pension	\$250.00	Total income	\$1,350.00
	Source	Amount							
	Social Security	\$1,100.00							
Pension	\$250.00								
Total income	\$1,350.00								
3	Divide total monthly energy costs by total gross monthly household income. \$101.51 divided by \$1,350 = .075								
4	The calculated energy burden is 7.5%								

Section IV: Appeals

Subsection 1: Appeals Process

Introduction

In accordance with State Regulations any person who has applied for benefits and/or services under a grant award from a contractor or a subcontractor whose application has been denied or not acted upon within fifteen working days has the right to first appeal to the local service provider and if not satisfied, subsequently appeal to CSD.

When service to a client is refused it is essential to establish if the application is ineligible or denied. Applications that are ineligible are not considered appealable and therefore, do not have to be advised of their appeal rights (22 CCR § 100805). However, applications that are considered “denied” are appealable and the client must be informed of their appeal rights.

Definition of a Denial

A denial means that all of the following criteria have been met:

- Services and funds are available.
 - The contractor has authority to disburse services or funds.
 - The client meets or believes he/she meets eligibility criteria and
 - The client meets the conditions of the priority plan
-

State Regulations

22 CCR § 100805 define the following situations as appealable:

- The application was not acted upon within 15 working days
 - Unsatisfactory performance
 - Application was denied.
-

Appealable Applications

Other appealable situations include but are not limited to:

- Over the income guidelines
 - Missing or insufficient information
 - Household already serviced
-

Notification Requirements

If an application has been denied, the client must be advised in writing of the reason for denial and their appeal rights and procedures.

The agency also must:

- Give the client a reasonable time frame to respond
 - Require the client to submit any additional information that will prove their eligibility
-

**Suggested
Letter**

Dear Applicant:

Your HEAP application requesting assistance with your energy costs has been received. We regret to inform you that your application is being denied for the following reason (s):

- Over income guidelines
- Incomplete/missing information
- Credit on bill
- Duplicate application
- Other _____

If you disagree with this decision and/or you have additional proof that may establish your eligibility, you have the right to appeal. To initiate the appeal process please send a written request explaining why you feel this decision was in error and any additional proof of eligibility within () days* of this letter.

*** The amount of days is at the agency's discretion, but at a minimum, it must provide a reasonable time frame to allow the client to respond.**

Section IV: Appeals

Subsection 2: Ineligible Applications

Definition

An application that is rejected for the following reasons is considered ineligible not denied and therefore, not appealable:

- Agency is out of funds
 - Household does not meet the agency priority plan
-

Notification

The client must still be notified in writing of the reason for the refusal of service, but it is not necessary to advise them of their appeal rights.

Suggested Letter

Dear Applicant:

Your HEAP application requesting assistance with your energy costs has been received. While your household meets the income eligibility requirements, your household did not meet our agency's priority plan and is not qualified to receive assistance at this time.

The State of California requires Local Service Providers (agencies) to establish a priority plan due to the overwhelming demand and the limited funding resources for assistance. The priority plan provides a method for serving those with the greatest need. However, if your circumstances change, please feel free to reapply.

Section IV: Appeals

Subsection 3: Fraud

Definition

Fraud is a material representation relating to a past or an existing fact which is: false; made with knowledge of its falsity; or in reckless disregard of the truth.

Factors

- Fraud may consist of withholding information which would affect eligibility for assistance or the amount thereof.
 - Fraud may also include giving false information in order to obtain or use benefits from the energy assistance program.
-

Determining Fraud

To determine that fraud exists, it must be established that the giving of false information was done with knowledge of its falsity or that the withholding of information which would affect eligibility for assistance or the amount thereof was deliberate, with knowledge of its implications.

Factors to Consider

1. The incorrect or unreported information affected eligibility
 2. The correct information was, in fact, known to the client and
 3. The client fully understood the eligibility requirements and their responsibility for reporting information, or
 4. The failure to report facts was done intentionally or not.
-

CALIFORNIA DEPARTMENT OF COMMUNITY SERVICES AND DEVELOPMENT

Priority List Policy



**CALIFORNIA DEPARTMENT OF
COMMUNITY SERVICES AND DEVELOPMENT**

PO Box 1947

Sacramento, CA 95812-1947

916-576-7109

CSD PRIORITY LIST POLICY

I. OVERVIEW

The California Department of Community Services and Development (CSD) adopts the following “**CSD Priority List Policy**” for inclusion in the Federal Department of Energy (DOE) Weatherization Assistance Program (WAP). Priority List Policy (List) measures historically have been a small subset of the entire weatherization measure matrix, and these measures were analyzed and proven through the energy audit process to have a Savings-to-Investment Ratio (SIR) of 1.0 or greater. During review of audit data provided by network agencies for 60 sample units, the following measure list was developed based on results of the REM/Design energy audits. Tables are provided for each climate zone, and show those measures that have a proven SIR of 1.0 or greater. List measures that indicate a SIR of 1.0 or greater do not require an energy audit to be conducted before installation per DOE policy.

Priority List measures include:

- Insulation
 - Ceiling (R-30/38)
 - Wall (R-11)
 - Floor (R-19)
- Programmable Thermostats

The List is split into four component lists to address measures with different housing types:

- Pre-1950 Single-family (up to four units)
- Post-1950 Single-family (up to four units)
- Multi-family Dwellings
- Mobile Homes

Further, because of the variability in results for residences with air conditioning present and those without, the majority of analyses were run with air conditioning (w/ AC) and without (w/o AC). This variability made it necessary to create an additional sub-category for the classification in housing type in order to determine the SIR in each of the California Energy Commission-defined climate zones in California.

II. PRIORITY LIST ANALYSIS

In order to develop this List, it was necessary to evaluate previous List (1998-2010) measures with the REM/Design energy audit tool. The length of this revised List appears to be significantly shorter than its predecessor due to three key factors:

- (1) Important reclassification of Cooling Repair and Replacement and Duct Insulation for California’s weatherization program;
- (2) Grouping of certain measures that were previously separate items (described below); and
- (3) Reclassification of window replacement for energy efficiency as based solely on a building specific energy audit.

ATTIC VENTILATION/CEILING INSULATION

For the purposes of the current Priority List, attic ventilation is combined with ceiling insulation as one measure. While attic ventilation has little or no demonstrable energy benefit, due to code and installation standards attic venting is required when insulation is added. The full cost of venting is included in the analysis of ceiling insulation. Attics are assumed to need venting if there was no existing insulation. Supplemental venting may be needed when some insulation is present.

FLOOR FOUNDATION VENTING/FLOOR INSULATION

For this Priority List, floor foundation ventilation is combined with the floor insulation as one measure. Venting a raised floor foundation is required by building code, but has little or no energy benefit. Due to code and installation standards, floor venting is required when insulation is added.

KNEEWALL INSULATION:

Kneewall insulation was factored at the same R-value as wall insulation. Although CSD's measure matrix identifies kneewall insulation as a separate measure, for the purposes of this analysis, it is treated as wall insulation. Where wall insulation is feasible due to SIR value, kneewall shall be considered also.

WALL INSULATION

Wall insulation was factored by taking into consideration two types of wall insulation: fiberglass and cellulose. Given the basic installation differences in the REM/Design energy audit modeled homes used to create this List, the maximum R-value for fiberglass was set at R-11 while cellulose is set at R-13.

WINDOW REPLACEMENTS FOR ENERGY EFFICIENCY

Pursuant to CSD Broadcast Bulletin B 11-01, window replacement for energy efficiency has been removed from this List, and instead is reclassified as an Audit-Driven Measure.

EVAPORATIVE COOLER REPAIR AND/OR REPLACEMENT OR INSTALLATION

Evaporative cooler repair or replacement is eliminated as a Priority List measure because evaporative cooler installation in a home with no cooling cannot be demonstrated to "save energy," and in most cases, will result in the consumption of additional energy. Cooling repair and replacements (including evaporative coolers) have been reclassified as health and safety measures.

DUCT INSULATION

Duct insulation previously was included as a priority measure; however, because the amount and type of duct insulation needed is highly variable, it is impossible to calculate a reasonable energy savings estimate. In addition, duct insulation shall be considered an integral part of the entire duct system measure that includes pressure diagnostics, repair, and duct sealing. Under health and safety rules, state energy codes require specific levels of duct insulation and duct repair when replacing any component of a forced air system. For this reason, duct insulation has been reclassified as a mandatory measure for rigid ducts where no existing insulation is present, and requires addition of R-8 insulation.

STORM WINDOWS/STORM DOORS/THERMAL SHUTTERS/WINDOW FILM

Cost and life span information vary widely for these products and it was found that the variance made calculation of the SIR values difficult for inclusion in the List. Thus, these measures have been removed from this List, and instead they are reclassified as Audit-Driven Measures.

MOBILE HOME MEASURES

Measures are slightly different for mobile homes than conventional framed (stick-built) homes. It is assumed that most mobile homes have minimum amounts of insulation in the walls and ceiling, and are manufactured with belly/floor insulation.

Ceiling insulation calculations were based on having an existing insulation level of R-11 and adding R-19 blown insulation into space between the ceiling and roof. The costs were estimated to be much higher than standard ceiling insulation due to the amount of labor involved, special installation techniques, repairing the roof by adding a waterproof membrane, or sealing and patching the roof. This measure did not meet the SIR needed to become a Priority List measure. This measure will require that an energy audit be conducted, using accurate cost estimates for the job to determine the SIR value.

In many cases the belly insulation may be missing or badly damaged and needs to be replaced. This will require an energy audit with actual costs to determine the SIR value.

MULTI-FAMILY MEASURES

CSD's Energy Policy & Procedures EP 11-07A Weatherizing Multi-family Buildings – Whole-Building and Individual-Unit Approaches defines the criteria for multi-family weatherization approaches and clearly defines CSD's position with regard to DOE WAP weatherization of multi-family buildings. The document may be found on CSD's website at www.csd.ca.gov.

Due to the difficulty and cost associated with accurately assessing energy savings opportunities in multi-family buildings using a computer-generated energy audit approach, individual units are to be treated under the Priority List / prescriptive approach only. This prescriptive list of measures includes all feasible diagnostics, health and safety measures, feasible mandatory energy measures and any additional measures that may be approved under the Priority List. Note: These limitations are summarized below in Table 1.

With this approach, priority measures designed to be installed in the entire building are not eligible for individual units. These include ceiling and wall insulation, windows and any other "building envelope" measures. Individual unit air sealing measures are allowed, in accordance with existing protocols and standards. For additional information on this policy, please refer to the Energy Policy & Procedures 11-07A described above.

Table 1: Measures to be installed in Whole Buildings and Single Units

APPROVED MULTI-FAMILY DWELLING MEASURES	
Whole Building Weatherization	Single Unit Weatherization
<ul style="list-style-type: none">• Ceiling Insulation• Wall Insulation• Floor Insulation• Programmable Thermostat• Mandatory Weatherization Measures	<ul style="list-style-type: none">• Programmable Thermostat• Mandatory Weatherization Measures

III. AUDIT-DRIVEN MEASURES

In addition to the List measures described above, California has identified measures that require SIR calculation before installation may be performed. These measures are classified as Audit-Driven Measures, are for *energy efficient purposes*, and include:

- HVAC Change-out (Heating or Cooling)
- Low-E Windows
- Storm Windows
- Storm Doors
- Thermal Shutters
- Tinted Window Film
- DOE Appendix A Measures: Solar Water Heating Systems
(*Note: TREAT—Audit-Driven Measures: Heat Exchangers, Boiler/Furnace Control Systems, Boilers, Chillers, and Solar Water Heating Systems)

IV. OTHER SIR-DRIVEN MEASURES

One additional measure requires that SIR must be documented before replacement is allowed:

- Replacement Refrigerators

Per the May 1, 2011 update to the CSD Weatherization Installation Standards (WIS) manual, refrigerators shall require documentation of a SIR of 1.0 or greater in accordance with the guidelines defined in the WIS. The excerpted replacement criteria provided below is intended to be informational only; additional requirements apply as described in the WIS.

Excerpt from Refrigerator Replacement General Guidelines:

- a. For all refrigerator replacements, existing refrigerator energy consumption/cost must have a savings-to-investment ratio (SIR) of 1.0 or higher.
- b. For units manufactured in 1992 or earlier, verify deemed cost effectiveness using the online energy use database described at www.WAPTAC.org.
- c. For units manufactured in 1993 or later, verify cost effectiveness using the online assessment tool: <http://www.energytools.com/calc/RefrigEcon.xls>. Any utility rate information shall be entered at the correct utility "Blended Rate" cited in CSD's Energy Policy & Procedures (EP 11-05) document. This document is available at www.csd.ca.gov.
- d. At minimum, 10% of refrigerators considered for replacement shall be metered.
- e. Malfunctioning refrigerators shall be replaced for the following reasons:
 - The refrigerator is inoperable.
 - Defects that compromise operating efficiency—such as damaged door gaskets, minimum achievable inside temperature too warm, excessive run time, ice buildup, etc.—cannot feasibly be repaired (repair cost exceeds 50% of replacement cost, including disposal fees).
 - The appliance is unable to maintain safe food storage temperature.

V. INTERPRETING THE CLIMATE ZONE LIST TABLES

Each climate zone established by the California Energy Commission (CEC) is represented in a separate table. Each List measure is described separately, with special notations made when it pertains to only one housing type

(Example: MH = mobile home only; MFD = Multi-family dwelling only, etc.) The measures are circled in blue in the graphic below. If one of the priority measures does not pertain to a housing type, a dash (“-”) is inserted in the appropriate box as indicated by the arrow below.

When study has proven a SIR value of 1.0 or greater, the SIR value is provided in the shaded boxes below, as in the red circled value “5.8”. If a value is 1.0 or greater, agencies need only apply the List and an energy audit is not required.

If a value below is *italicized*, this indicates that the calculated SIR value is less than 1.0 for that climate zone. If the home meets the energy audit policy requirements, an audit should be performed using the current energy audit protocol to confirm appropriateness of measure installation.

Each zone’s table shows what can be installed without performing an energy audit to determine feasibility. All insulation measures in this List shall be installed pursuant to applicable WIS instructions for the respective type (ceiling, wall, or floor).

If data was not available during the compilation of the tables, the table shows a “(A)” symbol, as in the green circled value below. This symbol means that an energy audit is required to prove the SIR value of the measure prior to installation.

For ease of reference, a key for these items is provided at the foot of each climate zone table. For assistance in interpreting these List tables, please call the Technical Assistance Hotline at (877) 831-7596.

CZ-01	Pre-1950 SFU		Post-1950 SFU		Multi-Family		Mobile Home	
	SIR		SIR		SIR		SIR	
	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC
PRIORITY LIST MEASURES								
Ceiling Insulation (When R-0, add R-38)	(A)	5.8	(A)	2.4	(A)	6.4	-	-
Ceiling Insulation (When R-1 to R-11, add R-30)	(A)	1.6	(A)	0.8	(A)	1.7	-	-
Ceiling Insulation (When R-12 to R-19; add R-19)	(A)	2.3	(A)	0.6	(A)	1.8	-	-
MH Ceiling Insulation (When up to R-11; increase to R-30)	-	-	-	-	-	-	(A)	0.4
Wall Insulation (R-11 to R-13, based on type)	(A)	6.1	(A)	3.4	(A)	(A)	(A)	(A)
MFD Wall Insulation (R-11) 2-walls exterior	-	-	-	-	(A)	7.4	-	-
MFD Wall Insulation (R-11) North-facing exterior	-	-	-	-	(A)	4.8	-	-
MFD Wall Insulation (R-11) South-facing exterior	-	-	-	-	(A)	8.1	-	-
MFD Wall Insulation (R-11) East-facing exterior	-	-	-	-	(A)	6.3	-	-
MFD Wall Insulation (R-11) West-facing exterior	-	-	-	-	(A)	7.4	-	-
Floor Insulation (R-19)	(A)	4.2	(A)	1.0	(A)	(A)	(A)	(A)
Programmable Thermostat	(A)	7.9	(A)	4.2	(A)	0.5	(A)	2.7

1. CLIMATE ZONE - 1 PRIORITY LIST

Climate Zone - 1 Priority List

The energy analysis for the List for Climate Zone - 1 did not include an analysis of measures on residences with air conditioning, as the need for it is negligible or non-existent in this coastal climate zone. When a home is found with an AC unit (window, wall, or central), an energy audit is required to determine measure feasibility. Measures in the List table with a SIR value of less than 1.0 are subject to the CSD Audit Policy.

Each zone's table shows what can be installed without performing an energy audit to determine feasibility. All insulation measures in this List shall be installed pursuant to applicable WIS instructions for the respective type (ceiling, wall, or floor).

Measures shall be ranked from highest SIR value to lowest, and installed in that order.

CZ-01	Pre-1950 SFU		Post-1950 SFU		Multi-Family		Mobile Home	
	SIR		SIR		SIR		SIR	
	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC
PRIORITY LIST MEASURES								
Ceiling Insulation (When R-0, add R-38)	(A)	5.8	(A)	2.4	(A)	6.4	-	-
Ceiling Insulation (When R-1 to R-11, add R-30)	(A)	1.6	(A)	0.8	(A)	1.7	-	-
Ceiling Insulation (When R-12 to R-19; add R-19)	(A)	2.3	(A)	0.6	(A)	1.8	-	-
MH Ceiling Insulation (When up to R-11; increase to R-30)	-	-	-	-	-	-	(A)	<i>0.4</i>
Wall Insulation (R-11 to R-13, based on type)	(A)	6.1	(A)	3.4	(A)	(A)	(A)	(A)
MFD Wall Insulation (R-11) 2-walls exterior	-	-	-	-	(A)	7.4	-	-
MFD Wall Insulation (R-11) North-facing exterior	-	-	-	-	(A)	4.8	-	-
MFD Wall Insulation (R-11) South-facing exterior	-	-	-	-	(A)	8.1	-	-
MFD Wall Insulation (R-11) East-facing exterior	-	-	-	-	(A)	6.3	-	-
MFD Wall Insulation (R-11) West-facing exterior	-	-	-	-	(A)	7.4	-	-
Floor Insulation (R-19)	(A)	4.2	(A)	1.0	(A)	(A)	(A)	(A)
Programmable Thermostat	(A)	7.9	(A)	4.2	(A)	0.5	(A)	2.7
Key/Notes:								
<ul style="list-style-type: none"> ▶ (A) = Energy Audit required to determine feasibility for specific home. ▶ Measures with value (SIR) less than 1.0 (<i>shown in italics</i>) may be Energy Audited to determine feasibility for specific home. ▶ Wall Insulation (R-11) is specified for fiberglass insulation; Wall insulation (R-13) is specified for cellulose insulation. ▶ Empty (dashed) area indicates, in most instances, that measure is not applicable to the housing type. Energy audit may be used to determine feasibility for specific home if conditions warrant. 								

2. CLIMATE ZONE - 2 PRIORITY LIST

Climate Zone 2 encompasses a long territory in northern California (see map below) and is bordered by 5 different climate zones: 1, 3, 11, 12, and 16. Research within the REM/Design audit software showed that no climate information was available for any of the cities in the zone. Due to the variations in topography, Climate Zone 2 shares the climatic conditions of many of its neighboring zones. The priority tables for Climate Zone 2 may not be based on the climate zone that they abut, but rather by the climatic similarity to a known zone/weather station.

For that reason, the seven counties represented in Climate Zone 2 have been broken out as follows:

- Humboldt County, Mendocino County, Trinity County, and Lake County: use Climate Zone 11.
- Sonoma County and Napa County: use Climate Zone 12.
- Marin County: use Climate Zone 3.

The energy analysis for the Priority List for Climate Zone 2 did not include an analysis of measures on residences with air conditioning, as the need for it is negligible or non-existent in this coastal climate region.

When a home is found with an air conditioning unit (window, wall, or central), an energy audit shall be required to determine measure feasibility.

Measures in the List table with a SIR value of less than 1.0 are subject to the CSD Audit Policy.

Each zone's table shows what can be installed without performing an energy audit to determine feasibility. All insulation measures in this List shall be installed pursuant to applicable WIS instructions for the respective type (ceiling, wall, or floor).

Measures shall be ranked from highest SIR value to lowest, and installed in that order.



Climate Zone 2 – Pre-1950 Single-Family	Climate Zone 11		Climate Zone 12		Climate Zone 3	
COUNTIES:	Humboldt, Trinity, Mendocino, Lake		Sonoma, Napa		Marin	
Climate Zone 2 - Pre-1950 Single-Family	SIR		SIR		SIR	
PRIORITY LIST MEASURES	w AC	w/out AC	w AC	w/out AC	w AC	w/out AC
Ceiling Insulation (When R-0, increase to min. R-30; Max. R-38)	8.5	3.7	7.6	4.7	(A)	2.8
Ceiling Insulation (When R-1 to R-11, increase to min. R-30; Max. R-38)	2.0	0.9	1.6	1.0	(A)	0.7
Ceiling Insulation (When R-12 to R-19, increase to min. R-30; Max. R-38)	1.8	0.8	1.7	1.1	(A)	0.6
Wall Insulation (R-11 to R-13, based on type)	6.4	3.7	4.2	3.3	(A)	2.6
Floor Insulation (R-19)	1.3	1.1	(A)	(A)	(A)	2.9
Programmable Thermostat	3.3	3.3	10.1	3.7	(A)	0.8

Climate Zone 2 - Post-1950 Single-Family	Climate Zone 11		Climate Zone 12		Climate Zone 3	
COUNTIES:	Humboldt, Trinity, Mendocino, Lake		Sonoma, Napa		Marin	
PRIORITY LIST MEASURES	w AC	w/out AC	w AC	w/out AC	w AC	w/out AC
Ceiling Insulation (When R-0, increase to min. R-30; Max. R-38)	7.7	3.2	6.7	5.0	(A)	3.4
Ceiling Insulation (When R-1 to R-11, increase to min. R-30; Max. R-38)	1.8	0.9	1.6	1.2	(A)	1.0
Ceiling Insulation (When R-12 to R-19, increase to min. R-30; Max. R-38)	1.7	0.8	1.4	1.1	(A)	1.0
Wall Insulation (R-11 to R-13, based on type)	4.5	2.7	5.7	5.0	(A)	3.6
Floor Insulation (R-19)	0.8	0.8	(A)	(A)	(A)	4.3
Programmable Thermostat	3.3	1.3	2.5	1.6	(A)	4.7

Climate Zone 2 – Multi-Family	Climate Zone 11		Climate Zone 12		Climate Zone 3	
COUNTIES:	Humboldt, Trinity, Mendocino, Lake		Sonoma, Napa		Marin	
PRIORITY LIST MEASURES	w AC	w/out AC	w AC	w/out AC	w AC	w/out AC
Ceiling Insulation (When R-0, increase to min. R-30; Max. R-38)	6.8	2.6	5.1	3.3	(A)	2.8
Ceiling Insulation (When R-1 to R-11, increase to min. R-30; Max. R-38)	1.8	0.6	1.7	1.1	(A)	0.7
Ceiling Insulation (When R-12 to R-19, increase to min. R-30; Max. R-38)	1.5	0.5	5.7	1.3	(A)	1.0
MFD Wall Insulation (R-11) 2-walls exterior	4.8	3	1.4	3.8	(A)	3.2
MFD Wall Insulation (R-11) North-facing exterior	5.2	3.3	1.4	3.9	(A)	3.4
MFD Wall Insulation (R-11) South-facing exterior	4.4	2.8	1.3	3.7	(A)	2.5
MFD Wall Insulation (R-11) East-facing exterior	(A)	(A)	(A)	(A)	(A)	3.2
MFD Wall Insulation (R-11) West-facing exterior	(A)	(A)	(A)	(A)	(A)	3.8
Floor Insulation (R-19)	(A)	(A)	(A)	(A)	(A)	(A)
Programmable Thermostat	0.3	0.3	0.6	0.4	(A)	0.3

Key:

- ▶ (A) = Energy Audit required to determine feasibility for specific home.
- ▶ Measures with value (SIR) less than 1.0 (*shown in italics*) may be Energy Audited to determine feasibility for specific home.
- ▶ Wall Insulation (R-11) is specified for fiberglass insulation; Wall insulation (R-13) is specified for cellulose insulation.
- ▶ Empty (dashed) area indicates, in most instances, that measure is not applicable to the housing type. Energy audit may be used to determine feasibility for specific home if conditions warrant.

Climate Zone 2 - Mobile Home	Climate Zone 11		Climate Zone 12		Climate Zone 3	
COUNTIES:	Humboldt, Trinity, Mendocino, Lake		Sonoma, Napa		Marin	
PRIORITY LIST MEASURES	w AC	w/out AC	w AC	w/out AC	w AC	w/out AC
MH Ceiling Insulation (When up to R-11, increase to R-30)	7.4	<i>0.7</i>	1.1	<i>0.7</i>	(A)	<i>0.5</i>
Floor Insulation (R-19)	(A)	(A)	(A)	(A)	(A)	(A)
Programmable Thermostat	3.4	1.9	1.0	1.1	(A)	1.2
Key:						
<ul style="list-style-type: none"> ▶ (A) = Energy Audit required to determine feasibility for specific home. ▶ Measures with value (SIR) less than <i>1.0 (shown in italics)</i> may be Energy Audited to determine feasibility for specific home. ▶ Wall Insulation (R-11) is specified for fiberglass insulation; Wall insulation (R-13) is specified for cellulose insulation. ▶ Empty (dashed) area indicates, in most instances, that measure is not applicable to the housing type. Energy audit may be used to determine feasibility for specific home if conditions warrant. 						

3. CLIMATE ZONE - 3 PRIORITY LIST

The energy analysis for the List for Climate Zone - 3 did not include an analysis of measures on residences with air conditioning, as the need for it is negligible or non-existent in this coastal climate zone. When a home is found with an AC unit (window, wall, or central), an energy audit is required to determine measure feasibility. Measures in the List table with a SIR value of less than 1.0 are subject to the CSD Audit Policy.

Each zone's table shows what can be installed without performing an energy audit to determine feasibility. All insulation measures in this List shall be installed pursuant to applicable WIS instructions for the respective type (ceiling, wall, or floor).

Measures shall be ranked from highest SIR value to lowest, and installed in that order.

CZ-03 PRIORITY LIST MEASURES	Pre-1950 SFU		Post-1950 SFU		Multi-Family		Mobile Home	
	SIR		SIR		SIR		SIR	
	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC
Ceiling Insulation (When R-0, increase to min. R-30; Max. R-38)	(A)	2.8	(A)	3.4	(A)	2.8	-	-
Ceiling Insulation (When R-1 to R-11, increase to min. R-30; Max. R-38)	(A)	<i>0.7</i>	(A)	1.0	(A)	<i>0.7</i>	-	-
Ceiling Insulation (When R-12 to R-19, increase to min. R-30; Max. R-38)	(A)	<i>0.6</i>	(A)	1.0	(A)	1.0	-	-
MH Ceiling Insulation (When up to R-11, increase to R-30)	-	-	-	-	-	-	(A)	<i>0.5</i>
Wall Insulation (R-11 to R-13, based on type)	(A)	2.6	(A)	3.6	-	-	(A)	(A)
MFD Wall Insulation (R-11) 2-walls exterior	-	-	-	-	(A)	3.2	-	-
MFD Wall Insulation (R-11) North-facing exterior	-	-	-	-	(A)	3.4	-	-
MFD Wall Insulation (R-11) South-facing exterior	-	-	-	-	(A)	2.5	-	-
MFD Wall Insulation (R-11) East-facing exterior	-	-	-	-	(A)	3.2	-	-
MFD Wall Insulation (R-11) West-facing exterior	-	-	-	-	(A)	3.8	-	-
Floor Insulation (R-19)	(A)	2.9	(A)	4.3	(A)	(A)	(A)	(A)
Programmable Thermostat	(A)	<i>0.8</i>	(A)	4.7	(A)	<i>0.3</i>	(A)	1.2
Key:								
<ul style="list-style-type: none"> ▶ (A) = Energy Audit required to determine feasibility for specific home. ▶ Measures with value (SIR) less than 1.0 (<i>shown in italics</i>) may be Energy Audited to determine feasibility for specific home. ▶ Wall Insulation (R-11) is specified for fiberglass insulation; Wall insulation (R-13) is specified for cellulose insulation. ▶ Empty (dashed) area indicates, in most instances, that measure is not applicable to the housing type. Energy audit may be used to determine feasibility for specific home if conditions warrant. 								

4. CLIMATE ZONE - 4 PRIORITY LIST

The energy analysis for the List for Climate Zone 4 included analysis of measures on residences with and without air conditioning.

Measures with a SIR greater than 1.0 are on the List. Measures with a SIR less than 1.0 will require an energy audit and a SIR result greater than 1.0 to install.

Each zone's table shows what can be installed without performing an energy audit to determine feasibility. All insulation measures in this List shall be installed pursuant to applicable WIS instructions for the respective type (ceiling, wall, or floor).

Measures shall be ranked from highest SIR value to lowest, and installed in that order.

CZ-04 PRIORITY LIST MEASURES	Pre-1950 SFU		Post-1950 SFU		Multi-Family		Mobile Home	
	SIR		SIR		SIR		SIR	
	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC
Ceiling Insulation (When R-0, increase to min. R-30; Max. R-38)	4.7	3.2	4.8	3.2	4.3	2.9	-	-
Ceiling Insulation (When R-1 to R-11, increase to min. R-30; Max. R-38)	1.2	0.8	1.2	0.8	1.1	0.8	-	-
Ceiling Insulation (When R-12 to R-19, increase to min. R-30; Max. R-38)	1.2	0.7	1.0	0.7	0.9	0.6	-	-
MH Ceiling Insulation (When up to R-11, increase to R-30)	-	-	-	-	-	-	0.7	0.5
Wall Insulation (R-11 to R-13, based on type)	4.2	3.6	4.6	3.1	-	-	(A)	(A)
MFD Wall Insulation (R-11) 2-walls exterior	-	-	-	-	4.1	3.5	-	-
MFD Wall Insulation (R-11) North-facing exterior	-	-	-	-	(A)	(A)	-	-
MFD Wall Insulation (R-11) South-facing exterior	-	-	-	-	(A)	(A)	-	-
MFD Wall Insulation (R-11) East-facing exterior	-	-	-	-	3.6	3.1	-	-
MFD Wall Insulation (R-11) West-facing exterior	-	-	-	-	4.4	3.8	-	-
Floor Insulation (R-19)	0.8	1.1	(A)	0.8	(A)	(A)	(A)	(A)
Programmable Thermostat	3.6	0.3	0.6	0.4	0.8	0.2	3.1	1.6
Key:								
<ul style="list-style-type: none"> ▶ (A) = Energy Audit required to determine feasibility for specific home. ▶ Measures with value (SIR) less than 1.0 (<i>shown in italics</i>) may be Energy Audited to determine feasibility for specific home. ▶ Wall Insulation (R-11) is specified for fiberglass insulation; Wall insulation (R-13) is specified for cellulose insulation. ▶ Empty (dashed) area indicates, in most instances, that measure is not applicable to the housing type. Energy audit may be used to determine feasibility for specific home if conditions warrant. 								

5. CLIMATE ZONE - 5 PRIORITY LIST

The energy analysis for the List for Climate Zone 5 included analysis of measures on residences with and without air conditioning.

Measures with a SIR greater than 1.0 are on the List. Measures with a SIR less than 1.0 will require an energy audit and a SIR result greater than 1.0 to install.

Each zone's table shows what can be installed without performing an energy audit to determine feasibility. All insulation measures in this List shall be installed pursuant to applicable WIS instructions for the respective type (ceiling, wall, or floor).

Measures shall be ranked from highest SIR value to lowest, and installed in that order.

CZ-05 PRIORITY LIST MEASURES	Pre-1950 SFU		Post-1950 SFU		Multi-Family		Mobile Home	
	SIR		SIR		SIR		SIR	
	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC
Ceiling Insulation (When R-0, increase to min. R-30; Max. R-38)	3.1	2.3	3.2	2.5	3.7	2.9	-	-
Ceiling Insulation (When R-1 to R-11, increase to min. R-30; Max. R-38)	<i>0.7</i>	<i>0.6</i>	<i>0.8</i>	<i>0.6</i>	1.0	<i>0.7</i>	-	-
Ceiling Insulation (When R-12 to R-19, increase to min. R-30; Max. R-38)	<i>0.7</i>	<i>0.6</i>	<i>0.7</i>	<i>0.5</i>	<i>0.8</i>	<i>0.6</i>	-	-
MH Ceiling Insulation (When up to R-11, increase to R-30)	-	-	-	-	-	-	0.7	0.4
Wall Insulation (R-11 to R-13, based on type)	2.9	2.8	4.2	4.2	-	-	(A)	(A)
MFD Wall Insulation (R-11) 2-walls exterior	-	-	-	-	3.8	2.5	-	-
MFD Wall Insulation (R-11) North-facing exterior	-	-	-	-	3.8	3.7	-	-
MFD Wall Insulation (R-11) South-facing exterior	-	-	-	-	5.1	5.0	-	-
MFD Wall Insulation (R-11) East-facing exterior	-	-	-	-	3.5	3.4	-	-
MFD Wall Insulation (R-11) West-facing exterior	-	-	-	-	(A)	(A)	-	-
Floor Insulation (R-19)	<i>0.4</i>	<i>0.6</i>	<i>0.6</i>	<i>0.8</i>	(A)	(A)	(A)	(A)
Programmable Thermostat	1.4	1.0	0.4	0.3	0.3	0.1	1.5	1.5
Key:								
<ul style="list-style-type: none"> ▶ (A) = Energy Audit required to determine feasibility for specific home. ▶ Measures with value (SIR) less than 1.0 (<i>shown in italics</i>) may be Energy Audited to determine feasibility for specific home. ▶ Wall Insulation (R-11) is specified for fiberglass insulation; Wall insulation (R-13) is specified for cellulose insulation. ▶ Empty (dashed) area indicates, in most instances, that measure is not applicable to the housing type. Energy audit may be used to determine feasibility for specific home if conditions warrant. 								

6. CLIMATE ZONE - 6 PRIORITY LIST

The energy analysis for the List for Climate Zone 6 included analysis of measures on residences with and without air conditioning.

Measures with a SIR greater than 1.0 are on the List. Measures with a SIR less than 1.0 will require an energy audit and a SIR result greater than 1.0 to install.

Each zone's table shows what can be installed without performing an energy audit to determine feasibility. All insulation measures in this List shall be installed pursuant to applicable WIS instructions for the respective type (ceiling, wall, or floor).

Measures shall be ranked from highest SIR value to lowest, and installed in that order.

CZ-06	Pre-1950 SFU		Post-1950 SFU		Multi-Family		Mobile Home	
	SIR		SIR		SIR		SIR	
	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC
PRIORITY LIST MEASURES								
Ceiling Insulation (When R-0, increase to min. R-30; Max. R-38)	2.0	1.2	2.4	1.5	1.8	1.1	-	-
Ceiling Insulation (When R-1 to R-11, increase to min. R-30; Max. R-38)	<i>0.4</i>	<i>0.3</i>	<i>0.5</i>	<i>0.3</i>	<i>0.6</i>	<i>0.5</i>	-	-
Ceiling Insulation (When R-12 to R-19, increase to min. R-30; Max. R-38)	<i>0.4</i>	<i>0.3</i>	<i>0.5</i>	<i>0.3</i>	<i>0.5</i>	<i>0.3</i>	-	-
MH Ceiling Insulation (When up to R-11, increase to R-30)	-	-	-	-	-	-	-	0.2
Wall Insulation (R-11 to R-13, based on type)	2.9	2.7	2.7	2.7	-	-	(A)	(A)
MFD Wall Insulation (R-11) 2-walls exterior	-	-	-	-	2.2	2.1	-	-
MFD Wall Insulation (R-11) North-facing exterior	-	-	-	-	(A)	(A)	-	-
MFD Wall Insulation (R-11) South-facing exterior	-	-	-	-	(A)	(A)	-	-
MFD Wall Insulation (R-11) East-facing exterior	-	-	-	-	2.1	2.0	-	-
MFD Wall Insulation (R-11) West-facing exterior	-	-	-	-	2.3	2.1	-	-
Floor Insulation (R-19)	0.7	0.8	(A)	(A)	(A)	(A)	(A)	(A)
Programmable Thermostat	1.4	0.9	1.5	0.4	(A)	(A)	(A)	1.4
Key:								
<ul style="list-style-type: none"> ▶ (A) = Energy Audit required to determine feasibility for specific home. ▶ Measures with value (SIR) less than 1.0 (<i>shown in italics</i>) may be Energy Audited to determine feasibility for specific home. ▶ Wall Insulation (R-11) is specified for fiberglass insulation; Wall insulation (R-13) is specified for cellulose insulation. ▶ Empty (dashed) area indicates, in most instances, that measure is not applicable to the housing type. Energy audit may be used to determine feasibility for specific home if conditions warrant. 								

7. CLIMATE ZONE - 7 PRIORITY LIST

The energy analysis for the List for Climate Zone 7 included analysis of measures on residences with and without air conditioning.

Measures with a SIR greater than 1.0 are on the List. Measures with a SIR less than 1.0 will require an energy audit and a SIR result greater than 1.0 to install.

Each zone's table shows what can be installed without performing an energy audit to determine feasibility. All insulation measures in this List shall be installed pursuant to applicable WIS instructions for the respective type (ceiling, wall, or floor).

Measures shall be ranked from highest SIR value to lowest, and installed in that order.

CZ-07 PRIORITY LIST MEASURES	Pre-1950 SFU		Post-1950 SFU		Multi-Family		Mobile Home	
	SIR		SIR		SIR		SIR	
	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC
Ceiling Insulation (When R-0, increase to min. R-30; Max. R-38)	4.8	3.4	2.1	1.5	2.8	1.6	-	-
Ceiling Insulation (When R-1 to R-11, increase to min. R-30; Max. R-38)	1.1	<i>0.8</i>	<i>0.4</i>	<i>0.3</i>	<i>0.7</i>	<i>0.4</i>	-	-
Ceiling Insulation (When R-12 to R-19, increase to min. R-30; Max. R-38)	1.1	3.9	<i>0.4</i>	<i>0.3</i>	<i>0.6</i>	<i>0.3</i>	-	-
MH Ceiling Insulation (When up to R-11, increase to R-30)	-	-	-	-	-	-	0.3	0.2
Wall Insulation (R-11 to R-13, based on type)	3.8	3.8	2.4	2.3	-	-	(A)	(A)
MFD Wall Insulation (R-11) 2-walls exterior	-	-	-	-	2.4	2.1	-	-
MFD Wall Insulation (R-11) North-facing exterior	-	-	-	-	2.4	2.1	-	-
MFD Wall Insulation (R-11) South-facing exterior	-	-	-	-	2.2	1.9	-	-
MFD Wall Insulation (R-11) East-facing exterior	-	-	-	-	(A)	(A)	-	-
MFD Wall Insulation (R-11) West-facing exterior	-	-	-	-	2.5	2.2	-	-
Floor Insulation (R-19)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)
Programmable Thermostat	5.2	1.7	4.5	2.4	0.3	(A)	(A)	(A)
Key:								
<ul style="list-style-type: none"> ▶ (A) = Energy Audit required to determine feasibility for specific home. ▶ Measures with value (SIR) less than 1.0 (<i>shown in italics</i>) may be Energy Audited to determine feasibility for specific home. ▶ Wall Insulation (R-11) is specified for fiberglass insulation; Wall insulation (R-13) is specified for cellulose insulation. ▶ Empty (dashed) area indicates, in most instances, that measure is not applicable to the housing type. Energy audit may be used to determine feasibility for specific home if conditions warrant. 								

8. CLIMATE ZONE - 8 PRIORITY LIST

The energy analysis for the List for Climate Zone 8 included analysis of measures on residences with and without air conditioning.

Measures with a SIR greater than 1.0 are on the List. Measures with a SIR less than 1.0 will require an energy audit and a SIR result greater than 1.0 to install.

Each zone's table shows what can be installed without performing an energy audit to determine feasibility. All insulation measures in this List shall be installed pursuant to applicable WIS instructions for the respective type (ceiling, wall, or floor).

Measures shall be ranked from highest SIR value to lowest, and installed in that order.

CZ-08 PRIORITY LIST MEASURES	Pre-1950 SFU		Post-1950 SFU		Multi-Family		Mobile Home	
	SIR		SIR		SIR		SIR	
	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC
Ceiling Insulation (When R-0, increase to min. R-30; Max. R-38)	2.8	1.4	2.5	2.1	2.5	1.5	-	-
Ceiling Insulation (When R-1 to R-11, increase to min. R-30; Max. R-38)	<i>0.6</i>	<i>0.3</i>	<i>0.7</i>	<i>0.5</i>	<i>0.6</i>	<i>0.4</i>	-	-
Ceiling Insulation (When R-12 to R-19, increase to min. R-30; Max. R-38)	<i>0.6</i>	<i>0.4</i>	<i>0.7</i>	<i>0.5</i>	<i>0.5</i>	<i>0.3</i>	-	-
MH Ceiling Insulation (When up to R-11, increase to R-30)	-	-	-	-	-	-	0.5	0.3
Wall Insulation (R-11 to R-13, based on type)	2.3	2.1	3.0	2.9	-	-	(A)	(A)
MFD Wall Insulation (R-11) 2-walls exterior	-	-	-	-	2.6	2.4	-	-
MFD Wall Insulation (R-11) North-facing exterior	-	-	-	-	(A)	(A)	-	-
MFD Wall Insulation (R-11) South-facing exterior	-	-	-	-	3.2	2.9	-	-
MFD Wall Insulation (R-11) East-facing exterior	-	-	-	-	2.0	1.9	-	-
MFD Wall Insulation (R-11) West-facing exterior	-	-	-	-	2.6	2.3	-	-
Floor Insulation (R-19)	<i>0.3</i>	<i>0.5</i>	(A)	(A)	(A)	(A)	(A)	(A)
Programmable Thermostat	4.5	2.2	4.9	3.1	0.2	(A)	2.2	0.3
Key:								
<ul style="list-style-type: none"> ▶ (A) = Energy Audit required to determine feasibility for specific home. ▶ Measures with value (SIR) less than 1.0 (<i>shown in italics</i>) may be Energy Audited to determine feasibility for specific home. ▶ Wall Insulation (R-11) is specified for fiberglass insulation; Wall insulation (R-13) is specified for cellulose insulation. ▶ Empty (dashed) area indicates, in most instances, that measure is not applicable to the housing type. Energy audit may be used to determine feasibility for specific home if conditions warrant. 								

9. CLIMATE ZONE - 9 PRIORITY LIST

The energy analysis for the List for Climate Zone 9 included analysis of measures on residences with and without air conditioning.

Measures with a SIR greater than 1.0 are on the List. Measures with a SIR less than 1.0 will require an energy audit and a SIR result greater than 1.0 to install.

Each zone's table shows what can be installed without performing an energy audit to determine feasibility. All insulation measures in this List shall be installed pursuant to applicable WIS instructions for the respective type (ceiling, wall, or floor).

Measures shall be ranked from highest SIR value to lowest, and installed in that order.

CZ-09 PRIORITY LIST MEASURES	Pre-1950 SFU		Post-1950 SFU		Multi-Family		Mobile Home	
	SIR		SIR		SIR		SIR	
	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC
Ceiling Insulation (When R-0, increase to min. R-30; Max. R-38)	1.8	1.2	1.9	1.2	2.2	1.2	-	-
Ceiling Insulation (When R-1 to R-11, increase to min. R-30; Max. R-38)	<i>0.5</i>	<i>0.3</i>	<i>0.5</i>	<i>0.3</i>	<i>0.5</i>	<i>0.3</i>	-	-
Ceiling Insulation (When R-12 to R-19, increase to min. R-30; Max. R-38)	<i>0.7</i>	<i>0.4</i>	<i>0.6</i>	<i>0.4</i>	<i>0.6</i>	<i>0.4</i>	-	-
MH Ceiling Insulation (When up to R-11, increase to R-30)	-	-	-	-	-	-	0.2	0.2
Wall Insulation (R-11 to R-13, based on type)	3.1	3.0	2.8	2.6	-	-	(A)	(A)
MFD Wall Insulation (R-11) 2-walls exterior	-	-	-	-	2.7	2.2	-	-
MFD Wall Insulation (R-11) North-facing exterior	-	-	-	-	3.8	3.2	-	-
MFD Wall Insulation (R-11) South-facing exterior	-	-	-	-	3.8	3.2	-	-
MFD Wall Insulation (R-11) East-facing exterior	-	-	-	-	3.1	2.6	-	-
MFD Wall Insulation (R-11) West-facing exterior	-	-	-	-	2.4	2.0	-	-
Floor Insulation (R-19)	<i>0.7</i>	<i>0.7</i>	<i>0.6</i>	<i>0.8</i>	(A)	(A)	(A)	(A)
Programmable Thermostat	0.2	(A)	1.9	1.2	0.2	0.3	2.1	2.1
Key:								
<ul style="list-style-type: none"> ▶ (A) = Energy Audit required to determine feasibility for specific home. ▶ Measures with value (SIR) less than 1.0 (<i>shown in italics</i>) may be Energy Audited to determine feasibility for specific home. ▶ Wall Insulation (R-11) is specified for fiberglass insulation; Wall insulation (R-13) is specified for cellulose insulation. ▶ Empty (dashed) area indicates, in most instances, that measure is not applicable to the housing type. Energy audit may be used to determine feasibility for specific home if conditions warrant. 								

10. CLIMATE ZONE - 10 PRIORITY LIST

The energy analysis for the List for Climate Zone 10 included analysis of measures on residences with and without air conditioning.

Measures with a SIR greater than 1.0 are on the List. Measures with a SIR less than 1.0 will require an energy audit and a SIR result greater than 1.0 to install.

Each zone's table shows what can be installed without performing an energy audit to determine feasibility. All insulation measures in this List shall be installed pursuant to applicable WIS instructions for the respective type (ceiling, wall, or floor).

Measures shall be ranked from highest SIR value to lowest, and installed in that order.

CZ-10 PRIORITY LIST MEASURES	Pre-1950 SFU		Post-1950 SFU		Multi-Family		Mobile Home	
	SIR		SIR		SIR		SIR	
	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC
Ceiling Insulation (When R-0, increase to min. R-30; Max. R-38)	5.5	3.0	4.9	2.5	4.2	2.1	-	-
Ceiling Insulation (When R-1 to R-11, increase to min. R-30; Max. R-38)	1.3	<i>0.7</i>	1.2	<i>0.6</i>	1.3	<i>0.6</i>	-	-
Ceiling Insulation (When R-12 to R-19, increase to min. R-30; Max. R-38)	1.3	<i>0.7</i>	1.1	<i>0.5</i>	1.1	<i>0.5</i>	-	-
MH Ceiling Insulation (When up to R-11, increase to R-30)	-	-	-	-	-	-	<i>0.4</i>	<i>0.4</i>
Wall Insulation (R-11 to R-13, based on type)	4.7	3.7	4.6	3.6	-	-	(A)	(A)
MFD Wall Insulation (R-11) 2-walls exterior	-	-	-	-	3.1	2.2	-	-
MFD Wall Insulation (R-11) North-facing exterior	-	-	-	-	1.5	1.1	-	-
MFD Wall Insulation (R-11) South-facing exterior	-	-	-	-	3.9	2.8	-	-
MFD Wall Insulation (R-11) East-facing exterior	-	-	-	-	(A)	(A)	-	-
MFD Wall Insulation (R-11) West-facing exterior	-	-	-	-	(A)	(A)	-	-
Floor Insulation (R-19)	1.6	1.8	(A)	(A)	(A)	(A)	(A)	(A)
Programmable Thermostat	6.9	4.0	<i>0.2</i>	<i>0.1</i>	(A)	(A)	1.3	1.3
Key:								
<ul style="list-style-type: none"> ▶ (A) = Energy Audit required to determine feasibility for specific home. ▶ Measures with value (SIR) less than 1.0 (<i>shown in italics</i>) may be Energy Audited to determine feasibility for specific home. ▶ Wall Insulation (R-11) is specified for fiberglass insulation; Wall insulation (R-13) is specified for cellulose insulation. ▶ Empty (dashed) area indicates, in most instances, that measure is not applicable to the housing type. Energy audit may be used to determine feasibility for specific home if conditions warrant. 								

11. CLIMATE ZONE - 11 PRIORITY LIST

The energy analysis for the List for Climate Zone 11 included analysis of measures on residences with and without air conditioning.

Measures with a SIR greater than 1.0 are on the List. Measures with a SIR less than 1.0 will require an energy audit and a SIR result greater than 1.0 to install.

Each zone's table shows what can be installed without performing an energy audit to determine feasibility. All insulation measures in this List shall be installed pursuant to applicable WIS instructions for the respective type (ceiling, wall, or floor).

Measures shall be ranked from highest SIR value to lowest, and installed in that order.

CZ-11 PRIORITY LIST MEASURES	Pre-1950 SFU		Post-1950 SFU		Multi-Family		Mobile Home	
	SIR		SIR		SIR		SIR	
	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC
Ceiling Insulation (When R-0, increase to min. R-30; Max. R-38)	8.5	3.7	7.7	3.2	6.8	2.6	-	-
Ceiling Insulation (When R-1 to R-11, increase to min. R-30; Max. R-38)	2.0	0.9	1.8	0.9	1.8	0.6	-	-
Ceiling Insulation (When R-12 to R-19, increase to min. R-30; Max. R-38)	1.8	0.8	1.7	0.8	1.5	0.5	-	-
MH Ceiling Insulation (When up to R-11, increase to R-30)	-	-	-	-	-	-	7.4	0.7
Wall Insulation (R-11 to R-13, based on type)	6.4	3.7	4.5	2.7	-	-	(A)	(A)
MFD Wall Insulation (R-11) 2-walls exterior	-	-	-	-	4.8	3.0	-	-
MFD Wall Insulation (R-11) North-facing exterior	-	-	-	-	5.2	3.3	-	-
MFD Wall Insulation (R-11) South-facing exterior	-	-	-	-	4.4	2.8	-	-
MFD Wall Insulation (R-11) East-facing exterior	-	-	-	-	(A)	(A)	-	-
MFD Wall Insulation (R-11) West-facing exterior	-	-	-	-	(A)	(A)	-	-
Floor Insulation (R-19)	1.3	1.1	0.8	0.8	(A)	(A)	(A)	(A)
Programmable Thermostat	3.3	3.3	3.3	1.3	0.3	0.3	3.4	1.9
Key:								
<ul style="list-style-type: none"> ▶ (A) = Energy Audit required to determine feasibility for specific home. ▶ Measures with value (SIR) less than 1.0 (<i>shown in italics</i>) may be Energy Audited to determine feasibility for specific home. ▶ Wall Insulation (R-11) is specified for fiberglass insulation; Wall insulation (R-13) is specified for cellulose insulation. ▶ Empty (dashed) area indicates, in most instances, that measure is not applicable to the housing type. Energy audit may be used to determine feasibility for specific home if conditions warrant. 								

12. CLIMATE ZONE - 12 PRIORITY LIST

The energy analysis for the List for Climate Zone 12 included analysis of measures on residences with and without air conditioning.

Measures with a SIR greater than 1.0 are on the List. Measures with a SIR less than 1.0 will require an energy audit and a SIR result greater than 1.0 to install.

Each zone's table shows what can be installed without performing an energy audit to determine feasibility. All insulation measures in this List shall be installed pursuant to applicable WIS instructions for the respective type (ceiling, wall, or floor).

Measures shall be ranked from highest SIR value to lowest, and installed in that order.

CZ-12 PRIORITY LIST MEASURES	Pre-1950 SFU		Post-1950 SFU		Multi-Family		Mobile Home	
	SIR		SIR		SIR		SIR	
	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC
Ceiling Insulation (When R-0, increase to min. R-30; Max. R-38)	7.6	4.7	6.7	5.0	5.1	3.3	-	-
Ceiling Insulation (When R-1 to R-11, increase to min. R-30; Max. R-38)	1.6	1.0	1.6	1.2	1.7	1.1	-	-
Ceiling Insulation (When R-12 to R-19, increase to min. R-30; Max. R-38)	1.7	1.1	1.4	1.1	5.7	1.3	-	-
MH Ceiling Insulation (When up to R-11, increase to R-30)	-	-	-	-	-	-	1.1	0.7
Wall Insulation (R-11 to R-13, based on type)	4.2	3.3	5.7	5.0	-	-	(A)	(A)
MFD Wall Insulation (R-11) 2-walls exterior	-	-	-	-	1.4	3.8	-	-
MFD Wall Insulation (R-11) North-facing exterior	-	-	-	-	1.4	3.9	-	-
MFD Wall Insulation (R-11) South-facing exterior	-	-	-	-	1.3	3.7	-	-
MFD Wall Insulation (R-11) East-facing exterior	-	-	-	-	(A)	(A)	-	-
MFD Wall Insulation (R-11) West-facing exterior	-	-	-	-	(A)	(A)	-	-
Floor Insulation (R-19)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)
Programmable Thermostat	10.1	3.7	2.5	1.6	0.6	0.4	1.0	1.1
Key:								
<ul style="list-style-type: none"> ▶ (A) = Energy Audit required to determine feasibility for specific home. ▶ Measures with value (SIR) less than 1.0 (<i>shown in italics</i>) may be Energy Audited to determine feasibility for specific home. ▶ Wall Insulation (R-11) is specified for fiberglass insulation; Wall insulation (R-13) is specified for cellulose insulation. ▶ Empty (dashed) area indicates, in most instances, that measure is not applicable to the housing type. Energy audit may be used to determine feasibility for specific home if conditions warrant. 								

13. CLIMATE ZONE - 13 PRIORITY LIST

The energy analysis for the List for Climate Zone 13 included analysis of measures on residences with and without air conditioning.

Measures with a SIR greater than 1.0 are on the List. Measures with a SIR less than 1.0 will require an energy audit and a SIR result greater than 1.0 to install.

Each zone's table shows what can be installed without performing an energy audit to determine feasibility. All insulation measures in this List shall be installed pursuant to applicable WIS instructions for the respective type (ceiling, wall, or floor).

Measures shall be ranked from highest SIR value to lowest, and installed in that order.

CZ-13 PRIORITY LIST MEASURES	Pre-1950 SFU		Post-1950 SFU		Multi-Family		Mobile Home	
	SIR		SIR		SIR		SIR	
	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC
Ceiling Insulation (When R-0, increase to min. R-30; Max. R-38)	10.3	5.6	6.2	9.2	7.4	3.8	-	-
Ceiling Insulation (When R-1 to R-11, increase to min. R-30; Max. R-38)	2.5	1.4	1.2	2.0	1.7	1.1	-	-
Ceiling Insulation (When R-12 to R-19, increase to min. R-30; Max. R-38)	2.2	1.2	1.3	2.1	1.6	1.2	-	-
MH Ceiling Insulation (When up to R-11, increase to R-30)	-	-	-	-	-	-	<i>0.2</i>	<i>0.7</i>
Wall Insulation (R-11 to R-13, based on type)	8.7	6.2	5.3	9.3	-	-	(A)	(A)
MFD Wall Insulation (R-11) 2-walls exterior	-	-	-	-	5.4	3.6	-	-
MFD Wall Insulation (R-11) North-facing exterior	-	-	-	-	5.4	3.6	-	-
MFD Wall Insulation (R-11) South-facing exterior	-	-	-	-	7.1	4.8	-	-
MFD Wall Insulation (R-11) East-facing exterior	-	-	-	-	5.1	3.4	-	-
MFD Wall Insulation (R-11) West-facing exterior	-	-	-	-	(A)	(A)	-	-
Floor Insulation (R-19)	2.5	2.3	(A)	(A)	(A)	(A)	(A)	(A)
Programmable Thermostat	5.0	2.6	10.2	18.3	0.7	0.2	3.0	3.0
Key:								
<ul style="list-style-type: none"> ▶ (A) = Energy Audit required to determine feasibility for specific home. ▶ Measures with value (SIR) less than 1.0 (<i>shown in italics</i>) may be Energy Audited to determine feasibility for specific home. ▶ Wall Insulation (R-11) is specified for fiberglass insulation; Wall insulation (R-13) is specified for cellulose insulation. ▶ Empty (dashed) area indicates, in most instances, that measure is not applicable to the housing type. Energy audit may be used to determine feasibility for specific home if conditions warrant. 								

14. CLIMATE ZONE - 14 PRIORITY LIST

The energy analysis for the List for Climate Zone 13 included analysis of measures on residences with and without air conditioning.

Measures with a SIR greater than 1.0 are on the List. Measures with a SIR less than 1.0 will require an energy audit and a SIR result greater than 1.0 to install.

Each zone's table shows what can be installed without performing an energy audit to determine feasibility. All insulation measures in this List shall be installed pursuant to applicable WIS instructions for the respective type (ceiling, wall, or floor).

Measures shall be ranked from highest SIR value to lowest, and installed in that order.

CZ-14 PRIORITY LIST MEASURES	Pre-1950 SFU		Post-1950 SFU		Multi-Family		Mobile Home	
	SIR		SIR		SIR		SIR	
	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC
Ceiling Insulation (When R-0, increase to min. R-30; Max. R-38)	9.8	5.0	7.6	4.4	6.8	3.1	-	-
Ceiling Insulation (When R-1 to R-11, increase to min. R-30; Max. R-38)	2.0	1.0	1.8	1.1	1.9	<i>0.8</i>	-	-
Ceiling Insulation (When R-12 to R-19, increase to min. R-30; Max. R-38)	2.3	1.0	2.0	4.9	1.5	<i>0.7</i>	-	-
MH Ceiling Insulation (When up to R-11, increase to R-30)	-	-	-	-	-	-	1.5	1.1
Wall Insulation (R-11 to R-13, based on type)	5.4	3.8	6.1	4.6	-	-	(A)	(A)
MFD Wall Insulation (R-11) 2-walls exterior	-	-	-	-	5.0	3.3	-	-
MFD Wall Insulation (R-11) North-facing exterior	-	-	-	-	5.8	3.8	-	-
MFD Wall Insulation (R-11) South-facing exterior	-	-	-	-	4.2	2.7	-	-
MFD Wall Insulation (R-11) East-facing exterior	-	-	-	-	(A)	(A)	-	-
MFD Wall Insulation (R-11) West-facing exterior	-	-	-	-	(A)	(A)	-	-
Floor Insulation (R-19)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)
Programmable Thermostat	6.0	2.3	2.9	1.5	0.5	0.2	4.4	4.4
Key:								
<ul style="list-style-type: none"> ▶ (A) = Energy Audit required to determine feasibility for specific home. ▶ Measures with value (SIR) less than 1.0 (<i>shown in italics</i>) may be Energy Audited to determine feasibility for specific home. ▶ Wall Insulation (R-11) is specified for fiberglass insulation; Wall insulation (R-13) is specified for cellulose insulation. ▶ Empty (dashed) area indicates, in most instances, that measure is not applicable to the housing type. Energy audit may be used to determine feasibility for specific home if conditions warrant. 								

15. CLIMATE ZONE - 15 PRIORITY LIST

The energy analysis for the List for Climate Zone 15 included analysis of measures on residences with and without air conditioning. Because this climate zone is cooling dominated with very few heating degree days, there is little cost savings from heating only units, even though measures would improve comfort.

Measures with a SIR greater than 1.0 are on the List. Measures with a SIR less than 1.0 will require an energy audit and a SIR result greater than 1.0 to install.

Each zone's table shows what can be installed without performing an energy audit to determine feasibility. All insulation measures in this List shall be installed pursuant to applicable WIS instructions for the respective type (ceiling, wall, or floor).

Measures shall be ranked from highest SIR value to lowest, and installed in that order.

CZ-15 PRIORITY LIST MEASURES	Pre-1950 SFU		Post-1950 SFU		Multi-Family		Mobile Home	
	SIR		SIR		SIR		SIR	
	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC
Ceiling Insulation (When R-0, increase to min. R-30; Max. R-38)	11.6	2.1	2.9	0.3	5.0	1.0	-	-
Ceiling Insulation (When R-1 to R-11, increase to min. R-30; Max. R-38)	2.2	0.5	0.6	0.1	1.4	0.2	-	-
Ceiling Insulation (When R-12 to R-19, increase to min. R-30; Max. R-38)	2.2	0.5	0.6	0.1	1.3	0.2	-	-
MH Ceiling Insulation (When up to R-11, increase to R-30)	-	-	-	-	-	-	0.9	0.1
Wall Insulation (R-11 to R-13, based on type)	9.4	5.0	3.6	3.5	-	-	(A)	(A)
MFD Wall Insulation (R-11) 2-walls exterior	-	-	-	-	4.3	1.5	-	-
MFD Wall Insulation (R-11) North-facing exterior	-	-	-	-	4.3	1.5	-	-
MFD Wall Insulation (R-11) South-facing exterior	-	-	-	-	3.4	1.2	-	-
MFD Wall Insulation (R-11) East-facing exterior	-	-	-	-	(A)	(A)	-	-
MFD Wall Insulation (R-11) West-facing exterior	-	-	-	-	5.3	1.8	-	-
Floor Insulation (R-19)	2.8	2.1	(A)	(A)	(A)	(A)	(A)	(A)
Programmable Thermostat	5.5	3.0	2.0	0.5	0.7	0.1	4.4	0.7
Key:								
<ul style="list-style-type: none"> ▶ (A) = Energy Audit required to determine feasibility for specific home. ▶ Measures with value (SIR) less than 1.0 (<i>shown in italics</i>) may be Energy Audited to determine feasibility for specific home. ▶ Wall Insulation (R-11) is specified for fiberglass insulation; Wall insulation (R-13) is specified for cellulose insulation. ▶ Empty (dashed) area indicates, in most instances, that measure is not applicable to the housing type. Energy audit may be used to determine feasibility for specific home if conditions warrant. 								

16. CLIMATE ZONE - 16 PRIORITY LIST

The energy analysis for the List for Climate Zone 16 included analysis of measures on residences with and without air conditioning.

Measures with a SIR greater than 1.0 are on the List. Measures with a SIR less than 1.0 will require an energy audit and a SIR result greater than 1.0 to install.

Each zone's table shows what can be installed without performing an energy audit to determine feasibility. All insulation measures in this List shall be installed pursuant to applicable WIS instructions for the respective type (ceiling, wall, or floor).

Measures shall be ranked from highest SIR value to lowest, and installed in that order.

CZ-16 PRIORITY LIST MEASURES	Pre-1950 SFU		Post-1950 SFU		Multi-Family		Mobile Home	
	SIR		SIR		SIR		SIR	
	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC	w AC	w/o AC
Ceiling Insulation (When R-0, add R-38)	24.7	24.6	14.8	14.7	21.3	21.1	-	-
Ceiling Insulation (When R-1 to R-11, add R-30)	6.2	6.2	3.3	3.3	6.2	6.2	-	-
Ceiling Insulation (When R-12 to R-19; add R-19)	5.5	5.5	3.3	3.3	4.6	4.6	-	-
MH Ceiling Insulation (When up to R-11; increase to R-30)	-	-	-	-	-	-	2.0	4.8
Wall Insulation (R-11 to R-13, based on type)	21.5	22.0	11.7	12.1	-	-	(A)	(A)
MFD Wall Insulation (R-11) 2-walls exterior	-	-	-	-	18.0	18.4	-	-
MFD Wall Insulation (R-11) North-facing exterior	-	-	-	-	(A)	(A)	-	-
MFD Wall Insulation (R-11) South-facing exterior	-	-	-	-	(A)	(A)	-	-
MFD Wall Insulation (R-11) East-facing exterior	-	-	-	-	19.0	19.3	-	-
MFD Wall Insulation (R-11) West-facing exterior	-	-	-	-	17.0	17.4	-	-
Floor Insulation (R-19)	8.3	5.4	(A)	(A)	(A)	(A)	(A)	(A)
Programmable Thermostat	3.2	3.2	6.9	6.9	2.4	2.4	1.7	1.7
Key:								
<ul style="list-style-type: none"> ▶ (A) = Energy Audit required to determine feasibility for specific home. ▶ Measures with value (SIR) less than 1.0 (<i>shown in italics</i>) may be Energy Audited to determine feasibility for specific home. ▶ Wall Insulation (R-11) is specified for fiberglass insulation; Wall insulation (R-13) is specified for cellulose insulation. ▶ Empty (dashed) area indicates, in most instances, that measure is not applicable to the housing type. Energy audit may be used to determine feasibility for specific home if conditions warrant. 								

CALIFORNIA DEPARTMENT OF COMMUNITY SERVICES AND DEVELOPMENT

DOE WEATHERIZATION ASSISTANCE PROGRAM

SINGLE-FAMILY / SMALL MULTI-FAMILY ENERGY AUDIT PROTOCOL



**CALIFORNIA DEPARTMENT OF
COMMUNITY SERVICES AND DEVELOPMENT
PO Box 1947
SACRAMENTO, CA 95812-1947
916-576-7109**

Table of Contents

1. SINGLE-FAMILY / SMALL MULTI-FAMILY ENERGY AUDIT PROTOCOL OVERVIEW	3
2. AUDIT POLICY OVERVIEW	4
2.1. PRIORITY LIST METHOD (PRESCRIPTIVE APPROACH)	4
2.2. ENERGY AUDIT METHOD (PERFORMANCE APPROACH)	4
3. ON-SITE PROCESS	5
3.1. AUDITOR CONDUCTS STANDARDS AND MINIMUM CREDENTIALS	5
3.2. SITE VISIT	5
4. ENERGY MODELING AND ANALYSIS PROCESS	7
4.1. UTILITY RATES	7
4.2. SINGLE-FAMILY (2-4 UNIT) AND SMALL MULTI-FAMILY MODELING CONSIDERATIONS	7
4.3. DEFAULT VALUES USED IN ANALYSIS	8
4.4. EXCEPTIONAL CALCULATIONS	10
4.5. SAVINGS INVESTMENT RATIO (SIR) CALCULATIONS	11
5. ENERGY AUDIT SUBMITTAL AND QUALITY ASSURANCE REVIEWS.....	11
5.1. SINGLE-FAMILY DWELLING (SINGLE UNIT) SUBMITTAL	11
5.2. SINGLE-FAMILY DWELLING (2-4 UNITS) AND SMALL MULTI-FAMILY DWELLING SUBMITTAL	12
5.3. TECHNICAL REVIEW	13
5.4. INSTALLATION OF MEASURES	13
Appendix A: CSD Audit Policy.....	14
Appendix B: DOE Approved Measures (10CFR440, Appendix A).....	17
Appendix C: On-Site Data Collection Sheet	17
Appendix D: Blended Rate Schedule.....	35
Appendix E: Maximum Allowable Estimated Useful Life of Optional Measures	36
Appendix F: Manual Calculation of Measure and Package SIR.....	37
Appendix G: Justification Images	39
Appendix H: Multi-Family Input Cost Sheet.....	40

1. SINGLE-FAMILY / SMALL MULTI-FAMILY ENERGY AUDIT PROTOCOL OVERVIEW

The California Department of Community Services and Development (CSD) adopts the following “Single-family /Small Multi-family Energy Audit Protocol” for inclusion in its Federal Department of Energy (DOE) Weatherization Assistance Program (WAP). The Single-family / Small Multi-family Energy Audit Protocol is a guidance document that describes required criteria for development of a site specific energy audit designed to justify the cost effectiveness for specific weatherization measures under CSD’s WAP. This document specifically addresses the audit protocol for single-family and small multi-family dwellings, as defined by the CSD energy audit policies including, without limitation, CSD Energy Policy & Procedures (EP) 11-06 and EP 11-07A.

Underlying this protocol are the principles of transparency, consistency, and accountability. Data contained in the audit shall be transparent in methodology of data collection and calculation. The report format and content must be presented in a consistent manner; and persons completing the audit must be accountable for their work by adhering to protocol requirements, maintaining professional certifications, and providing quality assurance measures.

It is important to note that this audit policy enhances and augments the standard assessment, diagnostic procedures and installation policies under CSD’s WAP. Any conflicts between the audit protocol and standard policies and standards should be brought to the attention of CSD for interpretation.

A key objective of an energy audit is to identify feasible and relevant energy conservation measures (measures) that qualify for funding under CSD’s DOE WAP program. In addition to identifying ways to reduce the energy burden, the audit process must also conduct standard assessment of the integrity of the building to identify any deficiencies that could result in health and safety violations as defined by CSD’s WAP.

The outcome of the site specific audit process is a report that identifies cost effective weatherization measures based on the:

- Location, climate zone, utility information and other relevant site information;
- Building profile, configuration and existing energy systems;
- Related health and safety checks and conditions;
- Calculated savings-to-investment ratio (SIR) of each measure including interactive effects of higher SIR measures (calculated in REM/Design); and
- Total calculated reduction in energy usage for the recommended measures (calculated in REM/Design).

The three main processes that constitute the CSD WAP Single-Family / Small Multi-family Energy Audit Protocol standards include the: 1) on-site visit, 2) energy modeling with energy savings analysis, and 3) report submittal. For energy audit purposes, CSD and DOE consider single-family dwellings to be those containing fewer than five units. In addition, this policy refers to multi-family dwellings containing fewer than 25 units and meeting the criteria of the CSD Energy Audit Policy referenced herein, and provided in Appendix A of this document.

2. AUDIT POLICY OVERVIEW

Agencies shall use one of two methods to determine feasible measures appropriate for any dwelling to be weatherized in accordance with the energy audit policy attached in Appendix A. The two methods are:

2.1. PRIORITY LIST METHOD (PRESCRIPTIVE APPROACH)

DOE-approved priority list for the dwelling climate zone and building type is used to determine allowable measures based on dwelling type and California Energy Commission (CEC) climate zone.

2.2. ENERGY AUDIT METHOD – REM/DESIGN (PERFORMANCE APPROACH)

Site-specific energy audit is used to justify energy saving measures based on cost effectiveness.

Table 1 shows the different categories of measures that are allowed under the two methods listed above. Measure categories are taken from “The DOE ARRA¹ Standard Agreement”, and 10 CFR 440 “Appendix A to Part 440—Standards for Weatherization Materials” (provided in Appendix B).

Table 1: Measure Matrix

MEASURE CATEGORY	PRIORITY LIST METHOD (PRESCRIPTIVE APPROACH)	ENERGY AUDIT METHOD (PERFORMANCE APPROACH)
MANDATORY; ASSESSMENT/DIAGNOSTICS	Mandatory for all dwellings	Mandatory for all dwellings
MANDATORY; HEALTH AND SAFETY	Mandatory for all dwellings	Mandatory for all dwellings
MANDATORY; INFILTRATION REDUCTION	Mandatory for all dwellings	Mandatory for all dwellings
MANDATORY; OTHER MEASURES	Mandatory for all dwellings	Mandatory for all dwellings
EXHIBIT F, ATTACHMENT IV ² - DOE PRIORITY LIST	Refer to priority list to determine if measures may be installed based on dwelling type and CEC Climate zone.	Measures implemented if Audit demonstrates cost effectiveness
OPTIONAL/AUDIT DRIVEN	Does Not Apply ³	Measures implemented if Audit demonstrates cost effectiveness
10 CFR 440 APPENDIX A	Does Not Apply ²	Measures implemented if Audit demonstrates cost effectiveness AND submitted to CSD for approval prior to installation

As shown in Table 1, there is the potential for a greater quantity of measures using energy audit method than the priority list method. Also shown in Table 1 is that all mandatory diagnostics, air sealing, duct sealing and health and safety measures must be installed per program rules, regardless of which path is taken. This adds complexity to the energy audit process because the calculations must be performed assuming that the air sealing, duct sealing and health and safety

¹ American Recovery and Reinvestment Act of 2009 (ARRA)

² 2009 DOE ARRA WAP Contract Amendment, Exhibit F, Attachment IV

³ Use of the 10 CFR 440 Appendix A and Audit Driven measures are not allowed when using the Priority List Method/Prescriptive Approach

measures have already been performed. Details will be addressed in Section 4, Energy Modeling and Analysis Process.

3. ON-SITE PROCESS

Every dwelling evaluation begins with a complete assessment of the building and building systems, including all environmental, structural and health and safety checks per the DOE program rules. In addition, a site-specific energy audit is designed to gather complete and accurate information in order to conduct energy calculations and produce an audit report.

3.1. AUDITOR CONDUCT STANDARDS AND MINIMUM CREDENTIALS

Auditors conducting audits shall have the minimum skills, credentials and experience required to effectively perform the audits. In the event that a single auditor lacks all of the required skills, a qualified team⁴ may be assembled to complete the audit. At a minimum, the audit team shall be capable of effectively performing the following tasks:

- Energy modeling (utilizing approved software);
- Building assessment (identifying safety, code , durability and energy systems issues) and field data collection;
- Diagnostic testing for energy efficiency and health and safety;
- Combustion appliance safety testing;
- Feasibility analysis for the installation of energy efficient building improvements;
- Construction cost estimating; and
- Financial analysis that generates investment grade level information/data.

3.2. SITE VISIT

The on-site energy audit shall be comprised of an in-person visit to the project by a qualified Auditor (or Audit Team) to complete the following tasks:

3.2.1. Dwelling Assessment

The dwelling assessment shall be performed by a person or team qualified to perform assessments under CSD's DOE WAP program and as described herein. The assessment is required for all properties regardless of prescriptive (priority list)-based approach or the performance (audit)-based approach. The assessment is used to ensure that all health and safety concerns are identified and the information collected during the assessment may be used in the modeling and analysis phase of the energy audit.

⁴ The audit team may include qualified non-agency/service provider personnel for purposes of building assessment if such personnel are otherwise disinterested third parties to the installation of weatherization services. Third party assessors/auditors/verifiers that assess dwelling units for energy purposes including, without limitation, mechanical systems, shall not be nor be affiliated with any person or entity responsible for installation or post-inspection of dwelling units receiving weatherization measure installation. Notwithstanding this requirement, nothing shall preclude the agency/service provider obtaining from any reliable party applicable construction costs to include in the energy audit.

3.2.2. On-Site Audit

In addition to the standard assessment, the information needed to populate an energy model must be collected for a REM/Design energy audit. This includes the information listed below. This data is recorded on the On-Site Data Collection Sheet included in Appendix C.

- General Building Design Characteristics
 - Foundation type
 - Total conditioned area
 - Approximate conditioned area of each floor
 - Number of bedrooms
 - Ceiling height and ceiling/attic characteristics
- Building Envelope Characteristics
 - Ceiling type and insulation level
 - Above-grade wall type and insulation level
 - Foundation wall type and insulation level
 - Frame floor type and insulation level
 - Door type and insulation level
- Window Properties of all Windows
 - Window Area (for each window/glazed area.) Includes: sliding glass doors, glass block, etc.
 - Window Type (single pane, dual pane low-E, etc.)
 - Window Material (metal frame, wood, vinyl, metal clad etc.)
 - Window Orientation (typically associated with each wall surface)
 - Window Overhang Details:
 - Depth of overhang
 - Distance between top of window and bottom of overhang at window center
 - Distance between bottom of window and bottom of overhang at window center
- Mechanical Equipment Properties
 - Heating Equipment
 - Fuel Type
 - Location and Type
 - Rated Output Capacity (in BTUh)
 - Seasonal Equipment Efficiency (AFUE, HSPF, %EFF, COP)
 - Cooling Equipment
 - Fuel Type
 - Rated Output Capacity (In BTUh)
 - Seasonal Equipment Efficiency (SEER, EER, %EFF, COP) Note: For most AC systems, SEER or EER are the most common metrics.
 - Ventilation Types (if applicable)
 - Ventilation Rate (CFM)
 - Hours/Day of Operation

- Ventilation Strategy for Passive Cooling (i.e., natural ventilation or whole house fan installed)
- Distribution Systems for HVAC Systems
 - Noted when the HVAC system has ducts (central HVAC) or is a ductless system (evaporative cooler or mini-split system).
- Water Heating Equipment
 - Water Heater Type
 - Fuel Type
 - Energy Factor
 - Tank Size
 - Extra Tank Insulation R-value

4. ENERGY MODELING AND ANALYSIS PROCESS

An energy model of the building's pre- and post- weatherization energy performance is the basis for the cost effectiveness calculation (the "SIR") and shall be completed using information collected during the on-site assessment. REM/Design is the adopted software program for single-family and small multi-family dwellings in the CSD WAP program, and is used to estimate annual energy consumption and energy cost savings of the optional energy conservation measures identified in Table 1.

4.1. UTILITY RATES

The energy consultant shall model electricity and natural gas utility rates using the blended electrical rates contained in Appendix D to determine SIR of the measures. These rates are based on statewide and utility-wide average rates and may not be an accurate representation of the actual rates paid by the tenant. These rates factor in applicable monthly service charges.

For all other fuel types such as wood, propane, fuel oil and others, the fuel cost shall be based on available billing data on a case-by-case basis.

4.2. SINGLE-FAMILY (2-4 UNIT) AND SMALL MULTI-FAMILY MODELING CONSIDERATIONS

These considerations apply to all small multi-family dwellings as well as any single-family dwelling composed of more than one individual unit, per the CSD Energy Audit Policy attached in Appendix A.

In REM/Design the building must be modeled in one simulation, and follow specific specifications as shown below:

Table 2: REM/Design Building Specifications

PARAMETER	REQUIREMENT
REM/DESIGN INPUT MODE	Detailed Mode
HOUSING TYPE	Multi-family whole building
WALLS	Account for all walls adjacent to unconditioned space such as garages or outdoors. (Do not model walls between units)
FLOOR	Account for all floors adjacent to unconditioned space such as garages, ground, crawlspace, etc. Do not include floors adjacent to other apartments or common areas.
CEILING	Account for all ceilings adjacent to unconditioned space such as

	attics or vaulted ceilings adjacent to outdoors. Do not include any ceilings adjacent to other apartments or conditioned space.
NUMBER OF BEDROOMS	Includes all bedrooms in the entire building
MECHANICAL EQUIPMENT	Each model of similar equipment types must be accounted for. Instances of similar models may be input as increases quantities of that model.

As seen in the specifications above, all interior walls and ceilings are omitted. When inputting the number of bedrooms the model must account for the TOTAL number of bedrooms in the entire building, not just the number of bedrooms per dwelling.

The model must also account for all mechanical equipment in the building. When inputting mechanical equipment each piece can be manually created or if all pieces of equipment are identical the number of units can be increased on the “Mechanical Equipment Properties Summary” page in REM/Design. The program will automatically split the system load based on capacity.

4.3. DEFAULT VALUES USED IN ANALYSIS

Certain measures (Per CSD contract measure matrix--Appendix B of each DOE standard and DOE ARRA contract) are mandatory for every dwelling weatherized. Some of these measures can be evaluated in the REM/Design software, but due to the mandatory requirement for these measures these need not be calculated in the program. (For example, a very leaky house will be sealed regardless of an energy audit; therefore the energy audit calculations are based on the estimated post-weatherization infiltration rate.). For this reason, this section provides guidance on the use of “default” values to represent accurate energy savings based on post retrofit building conditions.

4.3.1. Mechanical Equipment Properties

Whenever possible, actual equipment information indicated on the mechanical equipment, or made available by manufacturer or professional web site, are to be input as existing properties, e.g., AFUE, SEER and EF, for the furnace, air conditioner, and hot water heater, respectively. Further, a performance adjustment of 100% (functions as new) is used when modeling mechanical equipment for the building. Default properties are to be used ONLY when values are unavailable from equipment nameplates, equipment tags, etc., and must not be used as a standard operating procedure. Using the REM/Design energy audit for change out of mechanical equipment is strictly for “efficiency” purposes. The actual existing (not hypothetical) equipment must be represented as in its original installation; the audit is not for replacement of equipment that is deficient or faulty on its face.

Each piece of mechanical equipment must be considered at top efficiency as if new, and the replacement unit must reflect a SIR of 1.0 or better. Adjusting efficiency, noting a piece of equipment is inoperable, or using a “default” (without some type of reliable substantiation, e.g. a bona fide research print out) is generally not allowed. The client file must contain justification for use of any mechanical equipment default, including photographs (identifiable to the existing equipment being audited for efficiency change out) and, if applicable, any copy/print out of research results, for example, from the AHRI web site (<http://www.ahridirectory.org/ahridirectory/pages/home.aspx>) referenced in the

REM/Design program “help”. This applies to any mechanical equipment measure contemplated for installation. (See also Appendix G, Justification Images.)

4.3.2. Duct System

The duct system will be sealed and repaired during weatherization. Thus, any energy savings should be based on the estimated leakage of the duct system after repairs have been completed. On the “Duct System Properties Summary” screen in REM/Design the “Use Qualitative Default” button should be selected, and “RESNET/HERS Default” should be selected in the drop down box.

4.3.3. Shell Leakage

The building envelope will be sealed and repaired during weatherization; therefore, any energy retrofit savings should be based on the estimated shell leakage after repairs have been performed. On the “Whole House Infiltration” screen in REM/Design the following values should be specified:

Table 3: REM/Design Specified Values

MEASUREMENT TYPE:	USER ESTIMATE
HEATING SEASON INFILTRATION VALUE:	.4 (Natural ACH)
COOLING SEASON INFILTRATION VALUE:	.4 (Natural ACH)
SHELTER CLASS:	1
2009 IECC VERIFICATION	Visually Inspected
MECHANICAL VENTILATION:	As applicable based on type of mechanical ventilation present (ref. CSD WIS section 49)
VENTILATION STRATEGY FOR COOLING:	Natural ventilation or Whole House Fan

4.3.4. Lights and Appliances

Default values of lights and appliances may be used in analysis as follows. Justification must be included in the audit input form and kept in the client file for any values differing from these defaults. Actual measured performance and listed energy consumption may be used when available.

- Refrigerator: Total consumption needs to reflect “0” (zero) kWh/yr.
Note: Refrigerator replacement is addressed outside the REM/D energy audit in the Weatherization Installation Standards (WIS) manual at section 37.
- Dishwasher: EF 0.46, kWh/yr entry will be “0” (zero), place setting capacity is “12” if standard size dishwasher or “8” if a compact dishwasher
- Range/Oven: Select the correct “Fuel” used for cooking. If range and oven use different fuels, select fuel representing the dominant use (usually the range).
- Clothes Dryer:
 - The auditor/verifier may either obtain the “Efficiency Factor” (for new dryers) from the California Energy Commission (CEC) (go to

<http://www.appliances.energy.ca.gov/>, click on either “Quick Search” or “Advanced Search” tab, and proceed from there), or allow REM/D to auto fill this field with a default value if unable to find actual value.

- The Washer MEF (modified energy factor) is obtained from the same CEC database as the Efficiency Factor, above (note this is the *dryer* input area, but needs the *washer* MEF). If unable to obtain the Washer MEF, REM/D auto fills this field with a default value.

Note: If using the CEC information, copy, print, and keep in file the copied page of the CEC database that describes characteristics of the clothes dryer

- Clothes Washer:
 - Obtain the “Label Energy Rating” (kWh/hr) from the EnergyGuide label, and if washer has ENERGY STAR® label information can also be found at the ENERGY STAR® Products web site:
http://www.energystar.gov/index.cfm?fuseaction=clotheswash.search_clotheswashers.
 - “Capacity Cubic Ft.” is the washer tub capacity and is obtained in manufacturer data or from the EnergyGuide label or at the ENERGY STAR® Products web site, above. If the actual capacity cannot be found, REM/D auto fills this field with a default value
 - Obtain and input the Electric Rate, Gas Rate, and Annual Gas Cost from the EnergyGuide label, or REM/D auto fills these three fields with default values if you are unable to find actual values on the label

Note: If information from the EnergyGuide label, photograph the label and keep copy of the photograph in file; if information from the ENERGY STAR® web site, copy, print, and keep in file the copied page from the database that describes characteristics of the clothes washer

- Lighting:
 - CFL (%) input/leave “0.0” (zero percent); this is the REM/D default value
 - Pin-Based FL (%) input/leave at “10.0” (ten percent); this is the REM/D default value
 - Exterior Fixtures (%) input “100.0” (100 percent)
 - Garage Fixtures (%) input/leave at “0.0” (zero percent); this is the REM/D default value
- Ceiling Fan: Model as if there are no ceiling fans in the home, i.e. input “0” (zero)

4.4. EXCEPTIONAL CALCULATIONS

Energy conservation measures not directly modeled with REM/Design energy modeling software can be calculated outside of the program, provided that accepted engineering calculations and methodologies are used. Interactive effects must be accounted for in exceptional calculations. The methodologies, assumptions, and constants used in the exceptional calculations must be clearly documented and submitted to CSD as indicated in Sections 5.1. and 5.2. Sources of deemed savings must be referenced.

4.5. SAVINGS INVESTMENT RATIO (SIR) CALCULATIONS

When using REM/Design, the measure and package SIRs are calculated automatically by the software when the proposed measures are analyzed. The energy efficiency measures in REM/Design, the measure performance, and the cost to implement the measure must be carefully defined in the software. When calculating the cost to implement a measure, it shall only reflect the labor and materials needed to complete the measure, along with any incidental repair measure documented cost. Any administrative costs shall not be included in the SIR calculation.

DOE requires that all SIRs are calculated based on a “Discount Rate” of 3%. This must be entered in the “Mortgage/Discount Rate (%)” box during “Improvement Analysis Criteria” in REM/Design. Additionally, the “Mortgage Term” and “Appraised Value” need to reflect “0” (zero).

The allowable estimated useful life (EUL) for the audit-driven measures is provided in Appendix E. In the event that a proposed measure requires exceptional calculations, the measure and package SIRs shall be calculated using the methods outlined in Appendix F.

5. ENERGY AUDIT SUBMITTAL AND QUALITY ASSURANCE REVIEWS

A key objective of an energy audit under the CSD WAP is to identify feasible and relevant energy conservation measures that qualify for funding under the program. In order to ensure accuracy and integrity of site specific energy audits, and to assist service providers in improving the quality of audits, all energy audits are subject to review by CSD.

There are two distinct review levels, Tier 1 and Tier 2, each with respective submittal guidelines. The specifics of the required submittal materials are explained below. All auditors/verifiers begin in Tier 1. Upon successful completion of a minimum of 3 audits, with minor or no changes required, and at the sole discretion of CSD, the auditor/verifier will be notified by CSD of advancement to Tier 2 review status. However, at any time if submitted audits from Tier 2 auditor/verifiers need changes or do not meet CSD audit standards, the auditor/verifier’s Tier 2 status will revert back to Tier 1 review status.

NOTE: The submittal and audit review process outlined below is an interim process until an automated web-based system can be implemented. Upon release of the automated audit review process, submittal requirements and other details shown in Sections 5.1 through 5.3 of this document may be redefined. This document will be updated to reflect the new submittal requirements at that time.

5.1. SINGLE-FAMILY DWELLING (SINGLE UNIT) SUBMITTAL

100% OF COMPLETED ENERGY AUDITS SHALL BE SUBMITTED ELECTRONICALLY TO CSD VIA EMAIL TO REM@CSD.CA.GOV. THE SUBMITTAL SHALL CONSIST OF THE FOLLOWING:

5.1.1. TIER 1 Submittal:

- REM/Design digital building file (*.blg)
- REM/Design Improvement Analysis Report (IAR) (automatically generated in REM/Design)
- REM/Design Building File Report (BFR), generated and saved in REM/Design
- Justification Images (See Appendix G)
- Explicit Identification of any recommended measures not listed in the DOE standard or DOE ARRA contract. See Table 2 of this protocol.

- Documentation of any external calculations defined in Section 4.4.

5.1.2. TIER 2 Submittal:

- REM/Design digital building file (*.blg)
- REM/Design Improvement Analysis Report (IAR) (automatically generated in REM/Design)
- REM/Design Building File Report (BFR), generated and saved in REM/Design
- Explicit Identification of any recommended measures not listed in the DOE standard or DOE ARRA contract. See Table 2 of this protocol.
- Documentation of any external calculations defined in Section 4.4.

NOTE: CSD may request Justification Images on Tier 2 submissions.

5.2. *SINGLE-FAMILY DWELLING (2-4 UNITS) AND SMALL MULTI-FAMILY DWELLING SUBMITTAL*

100% OF COMPLETED ENERGY AUDITS SHALL BE SUBMITTED ELECTRONICALLY TO CSD VIA EMAIL TO REM@CSD.CA.GOV. THE SUBMITTAL SHALL CONSIST OF THE FOLLOWING:

5.2.1. TIER 1 Submittal:

- REM/Design digital building file (*.blg)
- REM/Design Improvement Analysis Report (IAR) reflecting the entire building (automatically generated in REM/Design)
- REM/Design Building File Report (BFR), generated and saved in REM/Design
- Justification Images (See Appendix G)
- REM/Design Multi-Family Input Cost Sheet (See Appendix H)
- Explicit Identification of any recommended measures not listed in the DOE standard or DOE ARRA contract. See Table 2 of this protocol.
- Documentation of any external calculations defined in Section 4.4.

5.2.2. TIER 2 Submittal:

- REM/Design digital building file (*.blg)
- REM/Design Improvement Analysis Report (IAR) reflecting the entire building (automatically generated in REM/Design)
- REM/Design Building File Report (BFR), generated and saved in REM/Design
- REM/Design Multi-Family Input Cost Sheet (See Appendix H)
- Explicit Identification of any recommended measures not listed in the DOE standard or DOE ARRA contract. See Table 2 of this protocol.
- Documentation of any external calculations defined in Section 4.4.

NOTE: CSD may request Justification Images on Tier 2 submissions.

5.3. TECHNICAL REVIEW

- 5.3.1. TIER 1: CSD will review a minimum 60% (3/5) of the first five audits from new agencies or new auditors/verifiers within an agency. Upon successful completion of a minimum of 3 audits (with minor or no changes required) and at the sole discretion of CSD, the auditor/verifier is notified by CSD of advancement to Tier 2 review status.
- 5.3.2. TIER 2: Once an agency or auditor/verifier has successfully advanced to Tier 2 status CSD will review approximately 15% (1/7) of all audits submitted by each Tier 2 auditor/verifier. EXCEPTION: Due to increased complexity all small multi-family energy audits are reviewed by CSD. Small multi-family audits should be discussed with CSD prior to submittal for approval to ensure conformance with current requirements.
- 5.3.3. CSD may, at its sole discretion, review any submitted energy audit for completeness and accuracy. Level of review will be determined on case by case basis by CSD staff and may require (re)submission of supporting documentation and/or site visit.
- 5.3.4. “Notice of Approval” of all approved (reviewed and non-reviewed) audits submitted to CSD will be issued electronically within 3 business days of receipt of REM/Design Building File (*.blg), REM/Design Improvement Analysis Report (IAR), and REM/Design Building File Report (BFR).
- 5.3.5. If, during quality assurance review, additional information is required prior to CSD approval, CSD will contact agency electronically to request information to complete the review. This contact normally will occur within 3 business days of receipt of REM/Design Building File (*.blg), REM/Design Improvement Analysis Report (IAR), and REM/Design Building File Report (BFR).
- 5.3.6. If an auditor/verifier is found to have submitted an energy audit that needs changed or otherwise does not meet CSD energy audit standards, the verifier’s Tier 2 status will revert to Tier 1 technical review status.

5.4. INSTALLATION OF MEASURES

- 5.4.1. TIER 1: Installation of measures may begin immediately after notice of approval from CSD has been received.
- 5.4.2. TIER 2: Installation of audited measures that indicate a savings-to-investment ratio (SIR) of 1.0 or greater may begin immediately after the submittal process, and need not wait for a formal letter of approval from CSD. See also “exception” in Section 5.3.2, above, related to small multi-family energy audits.

APPENDIX A: CSD AUDIT POLICY

REV. 10/24/11 • NAA/PLG

WEATHERIZATION ANALYSIS OVERVIEW

There are multiple weatherization strategies to consider when identifying allowable weatherization measures for homes under CSD's WAP. These strategies vary based on building type, building size, heating fuel type and type of mechanical systems installed in the dwelling being weatherized. This document identifies the allowable paths for each building type under the CSD WAP.

Table 2, below, shows the allowable weatherization strategies for each of four building types defined in this program. For the purposes of this program the four building types are:

- 1) FOUR-PLEX OR SMALLER:
 - a. "Four-Plex or Smaller" is a building containing 1-4 separate dwellings. This includes single-family dwellings and mobile homes.
- 2) SMALL MULTI-FAMILY DWELLING
 - a. "Small Multi-family Dwelling" is a multi-family dwelling that meets all of the following criteria:
 - i. 5-24 units
 - ii. 3 stories or fewer
 - iii. Individually metered (each unit pays its own utility bills)
 - iv. Each unit is heated and cooled independently
 - v. Each unit has its own hot water heater
- 3) MEDIUM MULTI-FAMILY DWELLING
 - a. "Medium Multi-family Dwelling" is a multi-family dwelling that meets the following two criteria:
 - i. 5-24 units
 - ii. Has at least one of the following characteristics
 1. 4 stories or greater
 2. Utilities are master metered
 3. Common heating system
 4. Common cooling system
 5. Common water heating system
- 4) LARGE MULTI-FAMILY DWELLING
 - a. "Large Multi-family Dwelling" is a multi-family dwelling that meets the following criteria:
 - i. 25 units or greater

Table 2: Allowable Weatherization Strategies based on Building Type

HOUSING TYPE	MANDATORY MEASURE LIST	PRIORITY LIST METHOD	REM/DESIGN AUDIT METHOD	TREAT AUDIT METHOD
FOUR-PLEX OR SMALLER	X ^{5,6}	X ⁷	X ⁸	
SMALL MULTI-FAMILY DWELLING	X ^{5,6}	X ⁷	X ⁸	
MEDIUM MULTI-FAMILY DWELLING	X ^{5,6}	X ⁷		X ⁸
LARGE MULTI-FAMILY DWELLING	X ^{5,6}			X ⁸

As shown in Table 2 above, there are three possible methods for identifying installable measures depending on building type. These methods are more fully explained in the following sections.

PRIORITY LIST METHOD

The CSD DOE ARRA priority list is a list of weatherization measures that are deemed to be cost effective by DOE. The priority list identifies cost effective measures in all climate zones for the “Single-family Dwelling” and “Small Multi-family Dwelling” building types.

For more information on how to implement the priority list in single-family and small multi-family dwellings, refer to the “CSD DOE ARRA Priority List.”

In some cases the priority list method is not effective at identifying cost effective measures for a particular dwelling. In these cases identified by the criteria below, the REM/Design audit is mandatory and the priority list may not be used.

WHEN: One or more measures in the priority list (for a particular climate zone and housing type) does not qualify for installation based on the priority list table.

AND a minimum of one of the conditions below exist:

- The primary heating fuel source is other than natural gas or wood (i.e. fuel oil, propane, etc.),
- The client/household is not on a reduced income-qualified rate,
- The building exhibits physical characteristics that fall outside of the range for the building types represented in the priority lists (i.e., pre-1950 single-family; post-1950 single-family; multi-family; and mobile homes). This is determined on a case-by-case basis, however, examples may include:
 - Single-family dwelling of 3 or more stories
 - Multiple ducted forced air systems (heating and/or air conditioning)

⁵ Mandatory Measures include “Mandatory Assessment/Diagnostic Measures”, “Infiltration Reduction”, Health and Safety”, and “Mandatory – Other”

⁶ Mandatory Measures apply only to single units and alteration of common system is not allowed.

⁷ Refer to the CSD Priority List Policy to determine allowable whole building measures and allowable measures when weatherizing a single unit.

⁸ All audits apply to the whole building. Audits may not be used to justify measures in a single unit of any building containing two or more units.

- Dwellings over 2,500 sq. ft.
- Etc.
- There are audit-driven measures provided in the attached “Appendix B: DOE Approved Measures (10CFR440 [2011], Appendix A)” that may be feasible and will require an energy audit to make that determination (i.e., replacing windows, replacing heating and cooling units for energy efficiency, adding a programmable thermostat even though the priority list does not allow for that scenario)

THEN: An energy audit is required. When an audit is conducted, the audit results supersede the priority list table data. Therefore, all available measures shall be evaluated by the audit for installation in the dwelling. In no case shall measures with higher SIRs be skipped or “leapfrogged” for measures with lower SIRs.

REM/DESIGN AUDIT METHOD

The REM/Design audit method is employed in a four-plex or smaller dwellings (i.e., single-family detached, duplex, tri-plex, or mobile home) when the priority list method may not sufficiently identify all cost effective measures. Using the REM/Design audit method, an agency will perform a standard assessment to identify all health and safety issues and will perform a computer based energy audit using site specific information collected on-site.

TREAT AUDIT METHOD

For Medium and Large Multi-family Dwellings, the TREAT Audit Method is appropriate. Due to the scope and expertise required to perform this type of energy audit, a qualified third party is usually employed to audit the building and identify any energy saving measures and health and safety issues.

For more information on the TREAT Audit Method for Medium and Large Multi-family Dwellings, refer to CSD’s “Medium and Large Multi-family Energy Audit Protocol”

APPENDIX B: DOE APPROVED MEASURES (10CFR440 [2011])**APPENDIX A TO PART 440—
STANDARDS FOR WEATHERIZATION
MATERIALS**

The following Government standards are produced by the Consumer Product Safety Commission and are published in title 16, Code of Federal Regulations:

Thermal Insulating Materials for Building Elements Including Walls, Floors, Ceilings, Attics, and Roofs Insulation—organic fiber—conformance to Interim Safety Standard in 16 CFR part 1209;

Fire Safety Requirements for Thermal Insulating Materials According to Insulation Use—Attic Floor—insulation materials intended for exposed use in attic floors shall be capable of meeting the same flammability requirements given for cellulose insulation in 16 CFR part 1209;

Enclosed spaces—insulation materials intended for use within enclosed stud or joist spaces shall be capable of meeting the smoldering combustion requirements in 16 CFR part 1209.

The following standards which are not otherwise set forth in part 440 are incorporated by reference and made a part of part 440. The following standards have been approved for incorporation by reference by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. These materials are incorporated as they exist on April 5, 1993 and a notice of any change in these materials will be published in the **Federal Register**. The standards incorporated by reference are available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

The standards incorporated by reference in part 440 can be obtained from the following sources:

Air Conditioning and Refrigeration Institute, 1501 Wilson Blvd., Arlington, VA 22209; (703) 524-8800.

American Gas Association, 1515 Wilson Blvd., Arlington, VA 22209; (703) 841-8400.

American National Standards Institute, Inc., 1430 Broadway, New York, NY 10018; (212) 642-4900.

American Society of Mechanical Engineers, United Engineering Center, 345 East 47th Street, New York, NY 10017; (212) 705-7800.

American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103; (215) 299-5400.

American Architectural Manufacturers Association, 1540 East Dundee Road, Palatine, IL 60067; (708) 202-1350.

Federal Specifications, General Services Administration, Specifications Section, Room 6654, 7th and D Streets, SW, Washington, DC 20407; (202) 708-5082.

Gas Appliance Manufacturers Association, 1901 Moore St., Arlington, VA 22209; (703) 525-9565.

National Electrical Manufacturers Association, 2101 L Street, NW, Suite 300, Washington, DC 20037; (202) 457-8400.

National Fire Protection Association, Batterymarch Park, P.O. Box 9101, Quincy, MA 02269; (617) 770-3000.

National Standards Association, 1200 Quince Orchard Blvd., Gaithersburg, MD 20878; (301) 590-2300; (NSA is a local contact for materials from ASTM).

National Wood Window and Door Association, 1400 East Touhy Avenue, Des Plaines, IL 60018; (708) 299-5200.

Sheet Metal and Air Conditioning Contractors Association, P.O. Box 221230, Chantilly, VA 22022-1230; (703) 803-2980.

Steel Door Institute, 712 Lakewood Center North, 14600 Detroit Avenue, Cleveland, OH 44107; (216) 899-0100.

Steel Window Institute, 1230 Keith Building, Cleveland, OH 44115; (216) 241-7333.

Tubular Exchanger Manufacturers Association, 25 North Broadway, Tarrytown, NY 10591; (914) 332-0040.

Underwriters Laboratories, Inc., P.O. Box 75530, Chicago, IL 60675-5330; (708) 272-8800.

More information regarding the standards in this reference can be obtained from the following sources:

Environmental Protection Agency, 401 M Street, NW, Washington, DC 20006; (202) 554-1080.

National Institute of Standards and Technology, U.S. Department of Commerce, Gaithersburg, MD 20899, (301) 975-2000.

Weatherization Assistance Programs Division, Conservation and Renewable Energy, Mail Stop 5G-023, Forrestal Bldg, 1000 Independence Ave, SW, Washington, DC 20585, (202) 586-2207.

THERMAL INSULATING MATERIALS FOR BUILDING ELEMENTS INCLUDING WALLS, FLOORS, CEILINGS,
ATTICS, AND ROOFS
[Standards for conformance]

Insulation—mineral fiber:	
Blanket insulation.....	ASTM ¹ C665–88.
Roof insulation board.....	ASTM C726–88.
Loose-fill insulation.....	ASTM C764–88.
Insulation—mineral cellular:	
Vermiculite loose-fill insulation.....	ASTM C516–80 (1990).
Perlite loose-fill insulation.....	ASTM C549–81 (1986).
Cellular glass insulation block.....	ASTM C552–88.
Perlite insulation board.....	ASTM C728–89a.
Insulation—organic fiber:	
Cellulosic fiber insulating board.....	ASTM C208–72 (1982).
Cellulose loose-fill insulation.....	ASTM C739–88.
Insulation—organic cellular:	
Preformed block-type polystyrene insulation.....	ASTM C578–87a.
Rigid preformed polyurethane insulation board.....	ASTM C591–85.
Polyurethane or polyisocyanurate insulation board faced with aluminum foil on both sides.....	FS ² HH-I-1972/1 (1981).
Polyurethane or polyisocyanurate insulation board faced with felt on both sides.....	FS HH-I-1972/2 (1981). And Amendment 1, October 3, 1985.
Insulation—composite boards:	
Mineral fiber and rigid cellular polyurethane composite roof insulation board.....	ASTM C726–88.
Perlite board and rigid cellular polyurethane composite roof insulation.....	ASTM C984–83.
Gypsum board and polyurethane or polyisocyanurate composite board.....	FS HH-I-1972/4 (1981).
Materials used as a patch to reduce infiltration through the building envelope.....	Commercially available.

¹ ASTM indicates American Society for Testing and Materials.

² FS indicates Federal Specifications.

THERMAL INSULATING MATERIALS FOR PIPES, DUCTS, AND EQUIPMENT SUCH AS BOILERS AND
FURNACES
[Standards for conformance]

Insulation—mineral fiber:	
Preformed pipe insulation.....	ASTM ¹ C547–77.
Blanket and felt insulation (industrial type).....	ASTM C553–70 (1977).
Blanket insulation and blanket type pipe insulation (metal-mesh covered) (industrial type).....	ASTM C592–80.
Block and board insulation.....	ASTM C612–83.
Spray applied fibrous insulation for elevated temperature.....	ASTM C720–89.
High-temperature fiber blanket insulation.....	ASTM C892–89.
Duct work insulation.....	Selected and applied according to ASTM C971–82.
Insulation—mineral cellular:	
Diatomaceous earth block and pipe insulation.....	ASTM C517–71 (1979)
Calcium silicate block and pipe insulation.....	ASTM C533–85 (1990).
Cellular glass insulation.....	ASTM C552–88.
Expanded perlite block and pipe insulation.....	ASTM C610–85.
Insulation—Organic Cellular:	
Preformed flexible elastomeric cellular insulation in sheet and Tubular form.....	ASTM C534–88.
Unfaced preformed rigid cellular polyurethane insulation.....	ASTM C591–85.
Insulation skirting.....	Commercially available.

¹ ASTM indicates American Society for Testing and Materials.

FIRE SAFETY REQUIREMENTS FOR INSULATING MATERIALS ACCORDING TO INSULATION USE
[Standards for conformance]

Attic Floor	Insulation materials intended for exposed use in attic floors shall be capable of meeting the same smoldering combustion requirements given for cellulose insulation in ASTM ¹ C739-88.
.....	
Enclosed space	Insulation materials intended for use within enclosed stud or joist spaces shall be capable of meeting the smoldering combustion requirements in ASTM C739-88.
Exposed interior walls and ceilings	Insulation materials, including those with combustible facings, which remain exposed and serve as wall or ceiling interior finish, shall have a flame spread classification not to exceed 150 (per ASTM E84-89a).
Exterior envelope walls and roofs	Exterior envelope walls and roofs containing thermal insulations shall meet applicable local government building code requirements for the complete wall or roof assembly.
Pipes, ducts, and equipment	Insulation materials intended for use on pipes, ducts and equipment shall be capable of meeting a flame spread classification not to exceed 150 (per ASTM E84-89a).

¹ ASTM indicates American Society for Testing and Materials.

STORM WINDOWS
[Standards for conformance]

Storm windows:	
Aluminum insulating storm windows	ANSI/AAMA ¹ 1002.10-83.
Aluminum frame storm windows	ANSI/AAMA 1002.10-83.
Wood frame storm windows.....	ANSI/NWWDA ² I.S. 2-87. (Section 3)
Rigid vinyl frame storm windows.....	ASTM ³ D4099-89.
Frameless plastic glazing storm.....	Required minimum thickness windows is 6 mil (.006 inches).
Movable insulation systems for windows.....	Commercially available.

¹ ANSI/AAMA indicates American National Standards Institute/American Architectural Manufacturers Association.

² ANSI/NWWDA indicates American National Standards Institute/National Wood Window & Door Association.

³ ASTM indicates American Society for Testing and Materials.

STORM DOORS
[Standards for conformance]

Storm doors—Aluminum:	
Storm Doors	ANSI/AAMA ¹ 1102.7-89.
Sliding glass storm doors.....	ANSI/AAMA 1002.10-83.
Wood storm doors	ANSI/NWWDA ² I.S. 6-86.
Rigid vinyl storm doors	ASTM ³ D3678-88.
Vestibules:	
Materials to construct vestibules	Commercially available.
Replacement windows:	
Aluminum frame windows	ANSI/AAMA 101-88.
Steel frame windows.....	Steel Window Institute recommended specifications for steel windows, 1990.
Wood frame windows.....	ANSI/NWWDA I.S. 2-87.
Rigid vinyl frame windows.....	ASTM D4099-89.

¹ ANSI/AAMA indicates American National Standards Institute/American Architectural Manufacturers Association.

² ANSI/NWWDA indicates American National Standards Institute/National Wood Window & Door Association.

³ ASTM indicates American Society for Testing and Materials.

REPLACEMENT DOORS
[Standards for conformance]

Replacement doors—Hinged doors:	
Steel doors	ANSI/SDI ¹ 100–1985.
Wood doors:	
Flush doors.....	ANSI/NWWDA ² I.S. 1–87. (exterior door provisions)
Pine, fir, hemlock and spruce doors	ANSI/NWWDA I.S. 6–86.
Sliding patio doors:	
Aluminum doors.....	ANSI/AAMA ³ 101–88.
Wood doors	NWWDA I.S. 3–83.

¹ ANSI/SDI indicates American National Standards Institute/Steel Door Institute.

² ANSI/NWWDA indicates American National Standards Institute/National Wood Window & Door Association.

³ ANSI/AAMA indicates American National Standards Institute/American Architectural Manufacturers Association.

CAULKS AND SEALANTS:
[Standards for conformance]

Caulks and sealants:	
Putty	FS ¹ TT–P–00791B, October 16, 1969 and Amendment 2, March 23, 1971.
Glazing compounds for metal sash	ASTM ² C669–75 (1989).
Oil and resin base caulks	ASTM C570–72 (1989).
Acrylic (solvent types) sealants	FS TT–S–00230C, February 2, 1970 and Amendment 2, October 9, 1970.
Butyl rubber sealants	FS TT–S–001657, October 8, 1970.
Chlorosulfonated polyethylene sealants...	FS TT–S–00230C, February 2, 1970 and Amendment 2, October 9, 1970.
Latex sealing compounds	ASTM C834–76 (1986).
Elastomeric joint sealants (normally considered to include polysulfide, polyurethane, and silicone)	ASTM C920–87.
Preformed gaskets and sealing materials	ASTM C509–84.

¹ FS indicates Federal Specifications.

² ASTM indicates American Society for Testing and Materials.

WEATHERSTRIPPING
[Standards for conformance]

Weatherstripping	Commercially available.
Vapor retarders.....	Selected according to the provisions cited in ASTM ¹ C755–85 (1990). Permeance not greater than 1 perm when determined according to the desiccant method described in ASTM E96–90.
Items to improve attic ventilation.....	Commercially available.
Clock thermostats.....	NEMA ² DC 3–1989.

¹ ASTM indicates American Society for Testing and Materials.

² NEMA indicates National Electrical Manufacturers Association.

HEAT EXCHANGERS
[Standards for conformance]

Heat exchangers, water-to-water and steam-to-water	ASME ¹ Boiler and Pressure Vessel Code, 1992, Sections II, V, VIII, IX, and X, as applicable to pressure vessels. Standards of Tubular Exchanger Manufacturers Association, Seventh Edition, 1988.
Heat exchangers with gas-fired appliances ²	Conformance to AGA ³ Requirements for Heat Reclaimer Devices for Use with Gas-Fired Appliances No. 1–80, June 1, 1980. AGA Laboratories Certification Seal.
Heat pump water heating heat recovery systems	Electrical components to be listed by UL. ⁴

¹ ASME indicates American Society of Mechanical Engineers.

² The heat reclaimer is for installation in a section of the vent connector from appliances equipped with draft hoods or appliances equipped with powered burners or induced draft and not equipped with a draft hood.

³ AGA indicates American Gas Association.

⁴ UL indicates Underwriters Laboratories.

BOILER/FURNACE CONTROL SYSTEMS
[Standards for conformance]

Automatic set back thermostats	Listed by UL. ¹ Conformance to NEMA ² DC 3–1989.
Line voltage or low voltage room thermostats	NEMA DC 3–1989.
Automatic gas ignition systems	ANSI ³ Z21.21–1987 and Z21.21a-1989. AGA ⁴ Laboratories Certification Seal.
Energy management systems.....	Listed by UL.
Hydronic boiler controls	Listed by UL.
Other burner controls.....	Listed by UL.

¹ UL indicates Underwriters Laboratories.

² NEMA indicates National Electrical Manufacturers Association.

³ ANSI indicates American National Standards Institute.

⁴ AGA indicates American Gas Association.

WATER HEATER MODIFICATIONS
[Standards for conformance]

Insulate tank and distribution piping	(See insulation section of this appendix).
Install heat traps on inlet and outlet piping	Applicable local plumbing code.
Install/replace water heater heating elements ..	Listed by UL. ¹
Electric, freeze-prevention tape for pipes	Listed by UL.
Reduce thermostat settings	State or local recommendations.
Install stack damper, gas-fueled	ANSI ² Z21.66–1988, including Exhibits A&B, and ANSI Z223.1–1988.
Install stack damper, oil-fueled.....	UL 17, November 28, 1988, and NFPA ³ 31–1987.
Install water flow modifiers.....	Commercially available.

¹ UL indicates Underwriters Laboratories.

² ANSI indicates American National Standards Institute.

³ NFPA indicates National Fire Prevention Association.

WASTE HEAT RECOVERY DEVICES
[Standards for conformance]

Desuperheater/water heaters	ARI ¹ 470–1987.
Condensing heat exchangers	Commercially available components and in new heating furnace systems to manufacturers' specifications.
Condensing heat exchangers	Commercially available (Commercial, multi-story building, with teflon-lined tubes institutional) to manufacturers' specifications.
Energy recovery equipment	Energy Recovery Equipment and Systems Air-to-Air (1978) Sheet Metal and Air-Conditioning Contractors National Association (SMACNA). ²

¹ ARI indicates Air Conditioning and Refrigeration Institute.

² SMACNA denotes Sheet Metal and Air Conditioning Contractors' National Association.

BOILER REPAIR AND MODIFICATIONS/EFFICIENCY IMPROVEMENTS
[Standards for conformance]

Install gas conversion burners	ANSI ¹ Z21.8–1984, (for gas or oil-fired systems) ANSI Z21.17–1984, ANSI Z21.17a-1990, and ANSI Z223.1–1988. AGA ² Laboratories Certification seal.
Replace oil burner	UL ³ 296, February 28, 1989 Revision and NFPA ⁴ 31–1987.
Install burners (oil/gas)	ANSI Z223.1–1988 for gas equipment and NFPA 31–1987 for oil equipment.
Re-adjust boiler water temperature or install automatic boiler temperature reset control.	ASME ⁵ CSD–1–1988, ASME CSD–1a-1989, ANSI Z223.1–1988, and NFPA 31–1987.
Replace/modify boilers	ASME Boiler and Pressure Vessel Code, 1992, Sections II, IV, V, VI, VIII, IX, and X. Boilers must be Institute of Boilers and Radiation Manufacturers (IBR) equipment.
Clean heat exchanger, adjust burner air shutter(s), check smoke no. on oil-fueled equipment. Check operation of pump(s) and replacement filters.	Per manufacturers' instructions.
Repair combustion chambers	Refractory linings may be required for conversions.
Replace heat exchangers, tubes	Protection from flame contact with conversion burners by refractory shield.
Install/replace thermostatic radiator valves	Commercially available. One pipe steam systems require air vents on each radiator; see manufacturers' requirements.
Install boiler duty cycle control system	Commercially available. NFPA 70, National Electrical Code (NEC) 1993 and local electrical codes provisions for wiring.

¹ ANSI indicates American National Standards Institute.

² AGA indicates American Gas Association.

³ UL indicates Underwriters Laboratories.

⁴ NFPA indicates National Fire Prevention Association.

⁵ ANSI/ASME indicates American National Standards Institute/American Society of Mechanical Engineers.

HEATING AND COOLING SYSTEM REPAIRS AND TUNE-UPS/EFFICIENCY IMPROVEMENTS
[Standards for conformance]

Install duct insulation	FS ¹ HH-I–558C, January 7, 1992 (see insulation sections of this appendix).
Reduce input of burner; derate gas-fueled equipment	Local utility company and procedures if applicable for gas-fueled furnaces and ANSI ² Z223.1–1988 (NFPA ³ 54–1988) including Appendix H.
Repair/replace oil-fired equipment	NFPA 31–1987.
Replace combustion chamber in oil-fired furnaces or boilers ...	NFPA 31–1987.
Clean heat exchanger and adjust burner: adjust air shutter and check CO2 and stack temperature. Clean or replace air filter on forced air furnace.	ANSI Z223.1–1988 (NFPA 54–1988) including Appendix H.

HEATING AND COOLING SYSTEM REPAIRS AND TUNE-UPS/EFFICIENCY IMPROVEMENTS--Continued
 [Standards for conformance]

Install vent dampers for gas-fueled heating systems	Applicable sections of ANSI Z223.1-1988 (NFPA 54-1988) including Appendices H, I, J, and K. ANSI Z21.66-1988 and Exhibits A & B for electrically operated dampers.
Install vent dampers for oil-fueled heating systems.....	Applicable sections of NFPA 31-1987 for installation and in conformance with UL ⁴ 17, November 28, 1988.
Reduce excess combustion air: A: Reduce vent connector size of gas-fueled appliances.	ANSI Z223.1-1988 (NFPA 54-1988) Part 9 and Appendices G & H.
B: Adjust barometric draft regulator for oil fuels	NFPA 31-1987 and per manufacturers' (furnace or boiler) instructions.
Replace constant burning pilot with electric ignition device on gas-fueled furnaces or boilers.	ANSI Z21.71-1981, Z21.71a-1985, and Z21.71b-1989.
Readjust fan switch on forced air gas or oil-fueled furnaces.....	Applicable sections and Appendix H of ANSI Z223.1-1988 (NFPA 54-1988) for gas furnaces and NFPA 31-1987 for oil furnaces.
Replace burners.....	See power burners (oil/gas).
Install/replace duct furnaces (gas).....	ANSI Z223.1-1988 (NFPA 54-1988).
Install/replace heat pumps.....	Listed by UL.
Replace air diffusers, intakes, registers, and grilles.....	Commercially available.
Install/replace warm air heating metal ducts.....	Commercially available.
Filter alarm units.....	Commercially available.

¹ FS indicates Federal Specifications.
² ANSI indicates American National Standards Institute.
³ NFPA indicates National Fire Prevention Association.
⁴ UL indicates Underwriters Laboratories.

REPLACEMENT FURNACES, BOILERS, AND WOOD STOVES
 [Standards for conformance]

Chimneys, fireplaces, vents and solid fuel burning appliances...	NFPA ¹ 211-1988.
Gas-fired furnaces.....	ANSI ² Z21.47-1987, Z21.47a-1988, and Z21.47b-1989. ANSI Z223.1-1988 (NFPA 54-1988).
Oil-fired furnaces.....	UL ³ 727, August 27, 1991 Revision and NFPA 31-1987.
Liquified petroleum gas storage.....	NFPA 58-1989.
Ventilation fans: Including electric attic, ceiling, and whole house fans.....	UL 507, August 23, 1990 Revision.

¹ NFPA indicates National Fire Prevention Association.
² ANSI indicates American National Standards Institute.
³ UL indicates Underwriters Laboratories.

AIR CONDITIONERS AND COOLING EQUIPMENT
 [Standards for conformance]

Air conditioners: Central air conditioners.....	ARI ¹ 210/240-1989.
Room size units.....	ANSI/AHAM ² RAC-1-1982.
Other cooling equipment: Including evaporative coolers, heat pumps and other equipment.....	UL ³ 1995, November 30, 1990. ⁴

¹ ARI indicates Air Conditioning and Refrigeration Institute.
² AHAM/ANSI indicates American Home Appliance Manufacturers/American National Standards Institute.
³ UL indicates Underwriters Laboratories.
⁴ This standard is a general standard covering many different types of heating and cooling equipment.

SCREENS, WINDOW FILMS, AND REFLECTIVE MATERIALS
 [Standards for conformance]

Insect screens	Commercially available.
Window films.....	Commercially available.
Shade screens:	
Fiberglass shade screens	Commercially available.
Polyester shade screens.....	Commercially available.
Rigid awnings:	
Wood rigid awnings	Commercially available.
Metal rigid awnings	Commercially available.
Louver systems:	
Wood louver systems.....	Commercially available.
Metal louver systems	Commercially available.
Industrial-grade white paint used as a heat-reflective measure on awnings, window louvers, doors, and exterior duct work (exposed).	Commercially available.

APPENDIX C: ON-SITE DATA COLLECTION SHEET

CONTRACTOR SIMPLIFIED AUDIT INPUT REPORT

(Rev. 08/25/11)

Instructions

1. Contractor's auditor must complete a thorough review of each dwelling and note the specifics of the review in the Audit Input Report.
2. The auditor is required to sign and date the form to certify that the audit data collection was completed. A copy must be retained in the client file.
3. When filling in the form electronically, Project Name or ID will auto-populate throughout the form.
4. In the Audit Input Report, make sure to check all appropriate boxes. Where a line is left blank, the auditor must input (write-in) the appropriate information.
5. Each section of the form shall be completed with all available dwelling information, in order to input complete data into the REM/Design audit tool. Auditors are encouraged to make additional notes as necessary in available space or on the reverse of the appropriate pages.

“There is no contractor’s equivalent allowed for this form”

State of California DEPARTMENT OF COMMUNITY SERVICES AND DEVELOPMENT CSD 544 (Rev. 08/25/11)	Auditor Name: _____													
REM ENERGY AUDIT ENTRY FORM														
AGENCY NAME: _____ Audit Date: _____														
PROJECT NAME OR ID _____														
PROPERTY INFORMATION														
<input type="checkbox"/> Comments on reverse														
Building Name _____ Occupant's Name _____ Property Address _____ Unit # _____ City, State, Zip _____ CA _____ Phone Number(s) _____														
BUILDING INFORMATION														
<input type="checkbox"/> Comments on reverse														
Owner's Name _____ Owner's Address _____ Phone Number(s) _____														
GENERAL BUILDING CHARACTERISTICS														
<input type="checkbox"/> Comments on reverse														
No. of Stories <input type="checkbox"/> 1 <input type="checkbox"/> 1-1/2 <input type="checkbox"/> 2 <input type="checkbox"/> 2-2/1 <input type="checkbox"/> 3 <input type="checkbox"/> Bi-Level <input type="checkbox"/> Tri-Level	Foundation Type(s) <input type="checkbox"/> Slab <input type="checkbox"/> Open Crawl Space <input type="checkbox"/> Enclosed Crawl Space <input type="checkbox"/> Conditioned Crawl Space <input type="checkbox"/> Unconditioned Basement <input type="checkbox"/> Conditioned Basement <input type="checkbox"/> More than One Type <input type="checkbox"/> Apartment over Cond. Space <input type="checkbox"/> None	Conditioned Floor Area _____ Sq. Ft. No. of Bedrooms _____ Mobile Home _____ Length (ft.) _____ Width (ft.) _____ Height (ft.)												
Heated <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th>Basement</th> <th>1st Level</th> <th>Mid Level</th> <th>2nd Level</th> <th>3rd Level</th> </tr> </thead> <tbody> <tr> <td>Distribution of Cond. Floor Area:</td> <td>_____ %</td> <td>_____ %</td> <td>_____ %</td> <td>_____ %</td> <td>_____ %</td> </tr> </tbody> </table>				Basement	1st Level	Mid Level	2nd Level	3rd Level	Distribution of Cond. Floor Area:	_____ %	_____ %	_____ %	_____ %	_____ %
	Basement	1st Level	Mid Level	2nd Level	3rd Level									
Distribution of Cond. Floor Area:	_____ %	_____ %	_____ %	_____ %	_____ %									
Characteristics of Each Floor Level:														
Number of Corners	_____	_____	_____	_____	_____									
Percent Open to Level Above	_____ %	_____ %	_____ %	_____ %	_____ %									
Nominal Flat Ceiling Height	_____	_____	_____	_____	_____									
Percent Vaulted Ceiling	_____ %	_____ %	_____ %	_____ %	_____ %									
Conditioned Floor Area Over Garage: _____ % of Total Floor Area														

PROJECT NAME OR ID 0 _____							
GENERAL BUILDING CHARACTERISTICS (con't.)							<input type="checkbox"/> Comments on reverse
Ceiling(s):		Attic -1	Attic -2	Attic -3	Attic -4		Vaulted 1 Vaulted 2
Continuous Insulation R-Value							
Cavity Insulation R-Value							
Cavity Insulation Thickness (in.)							
Gypsum Thickness (in.)							
Ceiling Joist/Bottom Chord Size (w x h, in.)							
Ceiling Joist/Bottom Chord Spacing (in o.c.)							
Framing Factor (use default or calculate)							
Square Feet of Attic							
Above-Grade Wall(s):		Wall-1	Wall-2	Wall-3	Wall-4	Wall-5	Wall-6
Continuous Insulation R-Value							
Frame Cavity Insulation R-Value							
Cavity Insulation Thickness (in.)							
Stud Size (w x d, in.)							
Stud Spacing (in o.c.)							
Gypsum Thickness (in.)							
Framing Factor							
Use Default Framing Factor		<input type="checkbox"/>	<input type="checkbox"/>				
Gross Sq. Ft.							
Wall Construction: Standard Stud Frame		<input type="checkbox"/>	<input type="checkbox"/>				
Double Stud Frame		<input type="checkbox"/>	<input type="checkbox"/>				
Std Frame w/ Brick Veneer		<input type="checkbox"/>	<input type="checkbox"/>				
Standard Metal Frame		<input type="checkbox"/>	<input type="checkbox"/>				
Solid Concrete or Stone		<input type="checkbox"/>	<input type="checkbox"/>				
Double Brick		<input type="checkbox"/>	<input type="checkbox"/>				
Hollow-core Concrete Block		<input type="checkbox"/>	<input type="checkbox"/>				
Floors							
		Floor 1	Floor 2	Floor 3	Floor 4		
Slab Floor Perimeter Insulation (R-value)							
Perimeter Insulation Depth (ft.)							
Area (sq.ft.)							
Depth Below Grade (ft.) (0 if on-grade)							
Full Perimeter (ft.)							
Exposed Perimeter (ft.)							
Frame Floor:							
Continuous Insulation R-Value							
Cavity Insulation R-Value							
Cavity Insulation Thickness (in.)							
Joist Size (w x h, in.)							
Joist Spacing (in o.c.)							
Location:						Location:	
Floor Covering						Between conditioned space and	
Carpet		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A. - ambient conditions	
Tile		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	B. - garage	
Hardwood		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	C. - open crawl space	
Vinyl		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	D. - unconditioned basement	
None		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	C. - enclosed crawl space	
Framing Factor							
Use Default Framing Factor:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

WINDOW & GLASS DOOR PROPERTIES								<input type="checkbox"/> Comments on reverse
PROJECT NAME OR ID _____								
Window #	1	2	3	4	5	6	7	8
Wall Assignment:								
Window Name (wall - #):								
Type of Window:								
Single - Metal	<input type="checkbox"/>							
Single - Wood	<input type="checkbox"/>							
Double - Metal	<input type="checkbox"/>							
Double - Metal w/ brk	<input type="checkbox"/>							
Double - Wood	<input type="checkbox"/>							
Double - Vinyl	<input type="checkbox"/>							
Triple - Metal w/ break	<input type="checkbox"/>							
Triple - Wood	<input type="checkbox"/>							
Triple - Vinyl	<input type="checkbox"/>							
Sliding Glass Door	<input type="checkbox"/>							
French Door	<input type="checkbox"/>							
Other (list on back)								
Window Area (sq.ft.):								
Interior Shading								
Winter	Yes	No	Yes	No	Yes	No	Yes	No
Summer	Yes	No	Yes	No	Yes	No	Yes	No
Adjacent Shading:								
None	<input type="checkbox"/>							
Some	<input type="checkbox"/>							
Most	<input type="checkbox"/>							
Complete	<input type="checkbox"/>							
Overhang:								
Depth (ft.):								
To Top of Window (ft.):								
To Bottom of Window (ft.):								
Orientation:								
Northwest	<input type="checkbox"/>							
North	<input type="checkbox"/>							
Northeast	<input type="checkbox"/>							
East	<input type="checkbox"/>							
Southeast	<input type="checkbox"/>							
South	<input type="checkbox"/>							
Southwest	<input type="checkbox"/>							
West	<input type="checkbox"/>							
DOORS								
Name:	Door #1	Door #2	Door #3	Door #4				
Wall:								
Type								
Wood hollow core	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
1-3/8 Wd solid core	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
1-3/8 Wd panel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
1-3/4 Wd panel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
1-3/4 Wd solid core	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
2-1/4 Wd solid core	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Steel-polystyrene	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Steel-fiberboard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Steel-urethane foam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Steel-polyurethane	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Door Area (sq.ft.)								
Storm Door Present:	Yes	No	Yes	No	Yes	No	Yes	No

WINDOW & GLASS DOOR PROPERTIES								<input type="checkbox"/> Comments on reverse
PROJECT NAME OR ID _____								
Window #	9	10	11	12	13	14	15	16
Wall Assignment:								
Window Name (wall - #):								
Type of Window:								
Single - Metal	<input type="checkbox"/>							
Single - Wood	<input type="checkbox"/>							
Double - Metal	<input type="checkbox"/>							
Double - Metal w/ brk	<input type="checkbox"/>							
Double - Wood	<input type="checkbox"/>							
Double - Vinyl	<input type="checkbox"/>							
Triple - Metal w/ break	<input type="checkbox"/>							
Triple - Wood	<input type="checkbox"/>							
Triple - Vinyl	<input type="checkbox"/>							
Sliding Glass Door	<input type="checkbox"/>							
French Door	<input type="checkbox"/>							
Other (list on back)								
Window Area (sq.ft.):								
Interior Shading								
Winter	Yes No							
Summer	Yes No							
Adjacent Shading:								
None	<input type="checkbox"/>							
Some	<input type="checkbox"/>							
Most	<input type="checkbox"/>							
Complete	<input type="checkbox"/>							
Overhang:								
Depth (ft.):								
To Top of Window (ft.):								
To Bottom of Window (ft.):								
Orientation:								
Northwest	<input type="checkbox"/>							
North	<input type="checkbox"/>							
Northeast	<input type="checkbox"/>							
East	<input type="checkbox"/>							
Southeast	<input type="checkbox"/>							
South	<input type="checkbox"/>							
Southwest	<input type="checkbox"/>							
West	<input type="checkbox"/>							

SPACE HEATING ONLY Comments on reverse

PROJECT NAME OR ID 0 _____

Heating System Name:	HS-1	HS-2	HS-3	HS-4
Primary Heating System:				
Secondary Heating System:				
Thermostat Present:	Yes No	Yes No	Yes No	Yes No
T-stat Setting:				
Programmable T-stat:	Yes No	Yes No	Yes No	Yes No

System Type:

Fuel-fired air distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fuel-fired hydronic distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fuel-fired unit heater	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electric baseboard or radiant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electric air distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electric hydronic distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air-source heat pump	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ground-source heat pump	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Fuel Type:

Nat. gas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Propane	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fuel Oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electric	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kerosene	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Boilerplate:

Rated Output Capacity (kBtuh)				
Number of Units:				
Seasonal Equipment Efficiency:				
AFUE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HSPF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
% Efficiency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Auxiliary Electric Use:				
Eae	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
kWh/year	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Watts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Performance Adjustment (%):				
Load Served (%)-If not capacity weighted:				

Location of heating system:

Conditioned area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Uncond. basement/enclosed crawlspace	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Garage or open crawlspace	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ambient	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SPACE COOLING ONLY Comments on reverse

PROJECT NAME OR ID 0 _____

Cooling System Name:	CS-1	CS-2	CS-3	CS-4
Primary Cooling System:				
Secondary Cooling System:				
Thermostat Present:	Yes No	Yes No	Yes No	Yes No
T-stat Setting:				
Programmable T-stat:	Yes No	Yes No	Yes No	Yes No

System Type:

Air conditioner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Central AC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Window/Wall AC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air-source heat pump	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ground-source heat pump	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Evaporative Cooler	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Fuel Type:

Electric	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Number of Same Units:				
Seasonal Equipment Efficiency Rating (SEER):				
Rated Output Capacity (kBtuh)				
Tonnage (optional):				
Sensible Heat Fraction (SHF):				
Desuperheater:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Performance Adjustment (%):				
Load Served (%)-If not capacity weighted:				

Location:

Conditioned area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Uncond. basement/enclosed crawlspace	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Garage or open crawlspace	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ambient	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DUCT SYSTEM Comments on reverse

PROJECT NAME OR ID 0 _____

Location:

- | | |
|---|--|
| <input type="checkbox"/> Open crawlspace | <input type="checkbox"/> Attic, under insulation |
| <input type="checkbox"/> Enclosed crawlspace | <input type="checkbox"/> Attic, exposed |
| <input type="checkbox"/> Conditioned crawlspace | <input type="checkbox"/> Conditioned space |
| <input type="checkbox"/> Unconditioned basement | <input type="checkbox"/> Wall with no top plate |
| <input type="checkbox"/> Conditioned basement | <input type="checkbox"/> Garage |

Duct Insulation R-Value: _____

Duct Leakage for Entire System:

Supply vs. Total Supply Area (%): _____

- Observable leakage pathways
- No observable leakage
- Proposed leak free

Return vs. Total Return Area (%): _____

AIR-SOURCE HEAT PUMP	<input type="checkbox"/> Comments on reverse
PROJECT NAME OR ID 0 _____	
<p>Heating: HSPF: _____</p> <p>Capacity at 47°F _____ kBtuh</p>	<p>Cooling: SEER: _____</p> <p>Capacity: _____ kBtuh</p>
Sensible Heat Fraction (SHF): _____	
Performance Adjustment (%): _____	
<p>Heating: _____ Cooling: _____</p>	
Load Served (%)-If not capacity weighted: _____	
Location:	
<input type="checkbox"/> Conditioned area <input type="checkbox"/> Uncond. basement/enclosed crawlspace <input type="checkbox"/> Garage or open crawlspace	<input type="checkbox"/> Attic <input type="checkbox"/> Ambient
Number of Units: _____	

WATER HEATING ONLY	<input type="checkbox"/> Comments on reverse						
PROJECT NAME OR ID 0 _____							
Water Heater Type: <ul style="list-style-type: none"> <input type="checkbox"/> Conventional <input type="checkbox"/> Instant Water Heater <input type="checkbox"/> Heat Pump <input type="checkbox"/> Ground-source heat pump <input type="checkbox"/> Integrated <input type="checkbox"/> None 	Fuel Type: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;"><input type="checkbox"/> Nat. gas</td> <td style="width: 50%;"><input type="checkbox"/> Electric</td> </tr> <tr> <td><input type="checkbox"/> Propane</td> <td><input type="checkbox"/> Kerosene</td> </tr> <tr> <td><input type="checkbox"/> Fuel Oil</td> <td><input type="checkbox"/> Wood</td> </tr> </table>	<input type="checkbox"/> Nat. gas	<input type="checkbox"/> Electric	<input type="checkbox"/> Propane	<input type="checkbox"/> Kerosene	<input type="checkbox"/> Fuel Oil	<input type="checkbox"/> Wood
<input type="checkbox"/> Nat. gas	<input type="checkbox"/> Electric						
<input type="checkbox"/> Propane	<input type="checkbox"/> Kerosene						
<input type="checkbox"/> Fuel Oil	<input type="checkbox"/> Wood						
Water Tank Size (gallons): <input style="width: 80px;" type="text"/>	Number of Units: <input style="width: 60px;" type="text"/>						
kBTU/h Input: <input style="width: 80px;" type="text"/>	Extra Tank Insulation (R-Value): <input style="width: 80px;" type="text"/>						
Recovery Efficiency: <input style="width: 80px;" type="text"/>	Performance Adjustment (%): <input style="width: 80px;" type="text"/>						
Energy Factor (EF): <input style="width: 80px;" type="text"/>							
Location: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;"><input type="checkbox"/> Conditioned area</td> <td style="width: 50%;"><input type="checkbox"/> Attic</td> </tr> <tr> <td><input type="checkbox"/> Uncond. basement/enclosed crawlspace</td> <td><input type="checkbox"/> Ambient</td> </tr> <tr> <td><input type="checkbox"/> Garage or open crawlspace</td> <td></td> </tr> </table>	<input type="checkbox"/> Conditioned area	<input type="checkbox"/> Attic	<input type="checkbox"/> Uncond. basement/enclosed crawlspace	<input type="checkbox"/> Ambient	<input type="checkbox"/> Garage or open crawlspace		
<input type="checkbox"/> Conditioned area	<input type="checkbox"/> Attic						
<input type="checkbox"/> Uncond. basement/enclosed crawlspace	<input type="checkbox"/> Ambient						
<input type="checkbox"/> Garage or open crawlspace							

APPENDIX D: BLENDED RATE SCHEDULE

CSD has established a prescriptive Utility Rate Schedule for use in single-family and small-multi-family energy audits using REM/Design. Benefits of using a blended rate schedule include:

- Single, utility-wide, blended rate simplifies analysis.
- Blended rates are based on statewide and utility-wide averages. These blended rates are 20% - %50 higher than the low income rate schedules commonly encountered in weatherization. This will allow more measures to meet SIR requirements when an energy audit is performed.

Choosing Electric and Natural Gas Rates

Table 1 below shows the blended electric rate to be used for the major electric utilities in California.

Table 1: Blended Electric Rate by Utility

UTILITY	BLENDED RATE (\$/KWH)
PG&E	\$ 0.152
SCE	\$ 0.148
SDG&E	\$ 0.157
LADWP	\$ 0.129
SMUD	\$ 0.115
BURBANK MUD	\$ 0.143
GLENDALE WATER AND POWER	\$ 0.143
PASADENA WATER AND POWER	\$ 0.143
ALL OTHER UTILITIES	\$ 0.147

Table 2 below shows the blended gas rate to be used for the major gas utilities in California.

Table 2: Blended Natural Gas Rate by Utility

UTILITY	BLENDED RATE (\$/THERM)
PG&E	\$ 1.08
SCG	\$ 1.00
SDGE	\$ 1.19
ALL OTHER UTILITIES	\$ 1.01

As shown in Tables 1 and 2, specific blended rates are defined for the larger utilities in California. For the many smaller utilities not specifically listed in the tables, a statewide average rate is used. The blended rate factors in applicable monthly service charges.

To determine which electric rate should be used for a weatherization customer, look at the customer's bill to determine the utility company. Look up the rate defined for the company in Table 2. If the company is not explicitly identified in Table 2, use the "All Other Utilities" value.

To determine which natural gas rate should be used for a weatherization customer, look at the customer's bill to determine the natural gas utility company. Look up the rate defined for the company in Table 3. If the company is not explicitly identified in Table 3, use the "All Other Utilities" value.

For all other fuel types such as wood, propane, fuel oil and others, continue to estimate the fuel cost based on available billing data on a case-by-case basis.

APPENDIX E: MAXIMUM ALLOWABLE ESTIMATED USEFUL LIFE OF OPTIONAL MEASURES

The Estimated Useful Life values (EULs) in this section are suggested maximum useful lives of some common measures listed in the DOE Standard and DOE ARRA contract agreements, the DOE approved priority list, and “Appendix B: DOE Approved Measures (10CFR440, Appendix A)” of this document. If these values are exceeded justification should be provided and is subject to review. In the event a product is used with a shorter useful life than published below the actual useful life should be reported and used in SIR calculations.

SCOPE	APPLICATION	MEASURE	EUL
RESIDENTIAL	BUILDING ENVELOPE	COOL ROOF	15
RESIDENTIAL	BUILDING ENVELOPE	HIGH PERFORMANCE WINDOWS	20
RESIDENTIAL	BUILDING ENVELOPE	SUNSCREENS/SHADE SCREENS	10
RESIDENTIAL	BUILDING ENVELOPE	WINDOW FILM	10
RESIDENTIAL	BUILDING ENVELOPE	INSULATION (ATTIC/CEILING, WALL, FLOOR)	30
RESIDENTIAL	HVAC	CLEAN CONDENSER COILS	3
RESIDENTIAL	HVAC	EVAPORATIVE COOLER	15
RESIDENTIAL	HVAC	HIGH EFFICIENCY AIR CONDITIONER (PACKAGE AND SPLIT SYSTEMS)	19
RESIDENTIAL	HVAC	HIGH EFFICIENCY FURNACE	19
RESIDENTIAL	HVAC	HIGH EFFICIENCY HEAT PUMP	19
RESIDENTIAL	HVAC	PROGRAMMABLE THERMOSTAT	15
RESIDENTIAL	HVAC	REFRIGERANT CHARGE	10
RESIDENTIAL	HVAC	ROOM AC - ENERGY STAR	14
RESIDENTIAL	HVAC	WALL HEATERS	15
RESIDENTIAL	INDOOR LIGHTING	CFL FIXTURES	16
RESIDENTIAL	INDOOR LIGHTING	CFL LAMPS - 10,000 HOUR	6
RESIDENTIAL	WATER HEATING	FAUCET AERATORS	9
RESIDENTIAL	WATER HEATING	HEAT PUMP WATER HEATER	10
RESIDENTIAL	WATER HEATING	HIGH EFFICIENCY ELECTRIC WATER HEATER	15
RESIDENTIAL	WATER HEATING	HIGH EFFICIENCY GAS WATER HEATER	13
RESIDENTIAL	WATER HEATING	INSTANTANEOUS WATER HEATER	20
RESIDENTIAL	WATER HEATING	LOW-FLOW SHOWERHEAD	10
RESIDENTIAL	WATER HEATING	PIPE INSULATION - ELECTRIC WATER HEATER	13
RESIDENTIAL	WATER HEATING	PIPE INSULATION - GAS WATER HEATER	13
RESIDENTIAL	WATER HEATING	SOLAR WATER HEATING	15

APPENDIX F: MANUAL CALCULATION OF MEASURE AND PACKAGE SIR

Measure SIR shall be calculated as the ratio of present value of the measure energy savings⁹ compounded annually over the life of the measure divided by the total installed cost of the measure given by equation 1. When calculating measure SIR, all interactive effects of other measures in the improvement package shall be accounted for.

$$\text{EQUATION 1: } SIR_{\text{MEASURE}} = S * ((1+I)^N - 1) / (I(1+I)^N) / C$$

WHERE:

<i>S</i>	= 1 ST YEAR SAVINGS OF MEASURE (\$)
<i>I</i>	= DISCOUNT RATE (%)
<i>N</i>	= ESTIMATED USEFUL LIFE OF MEASURE (YEARS)
<i>C</i>	= INSTALLED COST OF MEASURE (\$)

1. PACKAGE SIR

Package SIR shall be calculated as the ratio of present value of the package energy savings¹⁰ compounded annually over the life of the package divided by the total installed cost of the package. Present value of package savings shall be calculated as the sum of the present value of individual measures divided by the cost of the package (the sum of the cost of all measures). The present value of an individual measure is shown in equation 2.

$$\text{EQUATION 2: } PV_{\text{MEASURE}} = S * ((1+I)^N - 1) / (I(1+I)^N)$$

WHERE:

<i>S</i>	= 1 ST YEAR SAVINGS OF MEASURE
<i>I</i>	= DISCOUNT RATE (%)
<i>N</i>	= ESTIMATED USEFUL LIFE OF MEASURE

Discount rate shall be the lesser of 3% or the percentage increase in the Consumer Price Index (all items, United States city average) for the most recent calendar year completed¹¹. Note: Energy escalation and inflation are not included in this calculation.

First-year savings of a single measure shall be calculated based on the energy usage profile of a building after all measures with higher SIR have been implemented. All savings calculations should be adjusted for "interaction between architectural and mechanical weatherization materials by using generally accepted engineering methods to decrease the estimated fuel cost savings for a lower priority weatherization material in light of fuel cost savings for a related higher priority weatherization material."¹²

Maximum Estimated Useful Life (EUL) of measure shall be determined using values published in Appendix E. In the event that a proposed EUL is greater than those listed in Appendix E justification must be provided in writing for review by CSD.

⁹ Water savings or other non-energy savings shall not be included in the SIR Calculation

¹⁰ Water savings or other non-energy savings shall not be included in the package SIR Calculation

¹¹ 10 CFR 440.18 Paragraph C.2.i

¹² 10 CFR 440.21, Paragraph E.1

Installed cost of measure should reflect the cost to install a measure as closely as possible. In cases where the cost to install a measure changes after approval of the scope of work due to extenuating circumstances, the updated cost must be reported and the measure will be reimbursed as follows:

- 1) If the updated cost is less than the reported cost, CSD will reimburse for the actual cost of the measures.
- 2) If the updated cost is greater than the reported cost, CSD will reimburse for the reported cost of measure.
 - a. The full amount of the installed cost of the measure may be reimbursed if an updated SIR calculation reveals that the measure and package SIR remain greater than 1.0 based on the updated cost, and the package has not exhausted the available funds for the property.
- 3) If the updated cost is greater than the reported cost and the increased cost reduces the measure SIR < 1.0, the additional funding source must be identified and must not be federal funds.

2. MEASURE BUY-DOWN

In some situations the owner of a rental property may contribute funds to “buy-down” the cost of a measure under the program. In the event that non-federal financial resources are leveraged to buy down a particular measure, the following criteria must be met¹³:

- 1) The SIR of the discounted measure must be 1.0 or greater when SIR is calculated as the ratio of present value of the measure savings compounded annually over the life of the measure divided by the WAP funds applied to the measure.
- 2) The package SIR shall be calculated as the ratio of present value of the package savings compounded annually over the life of the package divided by the total installed cost of the package including all WAP funds and all non-WAP funds. (Note: Point of Sale and other direct rebates may be used to lower the total cost of the measure, and this discount may be applied to the cost of the total package of measures.)

Discounted measures may not be installed before non-discounted measures and are only to be installed when all other available cost effective measures not requiring buy-down have been installed. In no case shall measures with higher SIRs be skipped or “leapfrogged” for measures with lower SIRs.

¹³ Weatherization Program Notice 10-17; Effective Date: July, 26, 2010

APPENDIX G: JUSTIFICATION IMAGES

In order to better serve the agencies and gain full knowledge of the dwelling being reviewed, justification images are seen fit. These images are to portray the characteristics of the dwelling under review. This will help CSD better understand the REM inputs, check for accuracy and aid in answering questions which arise during the review process either internally or with the agency/auditor submitting the files.

NOTE: Justification Images must be submitted by agencies/auditors in TIER 1. All photos must be kept on file for any audited dwelling and at any time CSD may request justification images during the review process of a TIER 2 REM submittal.

Minimum Required Justification Images:

1. Front View of Dwelling: Must include view of all walls, windows and any shading including but not limited to trees, other buildings, etc.
2. Back View of Dwelling: Must include view of all walls, windows and any shading including but not limited to trees, other buildings, etc.
3. Right Side View of Dwelling: Must include view of all walls, windows and any shading including but not limited to trees, other buildings, etc.
4. Left Side View of Dwelling: Must include view of all walls, windows and any shading including but not limited to trees, other buildings, etc.
5. Close-up of window to determine window type, one picture required for each window type
6. Whole Attic View: Must include as much attic space as possible
7. Up-close view of attic insulation showing thickness of insulation or a visible R-value
8. Primary Heating Source: Should include nameplate if possible, must photograph the primary heating source for all units in a multi-family dwelling
9. Primary Cooling Source: Should include condenser coil and nameplate if possible, must photograph the primary cooling source for all units in a multi-family dwelling
10. Any unusual circumstance of the dwelling which may cause questions or concerns

APPENDIX H: MULTI-FAMILY INPUT COST SHEET

Since only one Improvement Analysis Report (IAR) is generated to reflect the entire building, individual units need to be tracked and costs allocated using another mechanism. Rather than submitting a separate IAR and building (.blg) file to CSD for each unit in the building, only a single whole building IAR and building (.blg) file will be submitted. In place of individual unit IARs, the service provider needs to include in the submittal a REM/Design Multi-Family Input Cost Sheet that includes the appropriate information allocated by unit.

The Multi-Family Input Cost Sheet is completed by the energy auditor/verifier concurrently with performing the audit. The sheet contains common measures associated with a REM/Design energy audit and includes areas for additional input for unique (to a building or unit) measures.¹⁴

¹⁴ EP 11-06 REM/Design; Multi-Family

CALIFORNIA DEPARTMENT OF COMMUNITY SERVICES & DEVELOPMENT

MULTIFAMILY ENERGY AUDIT PROTOCOL



**California Department of Community
Services & Development**

Attn: Energy & Environmental Services Division

PO Box 1947

Sacramento, CA 95812-1947

PREPARED BY:



April 18, 2011

Table of Contents

I. OVERVIEW	1
II. ON-SITE PROCESS	2
1. Auditor Conduct Standards and Minimum Credentials.....	2
2. Scheduling the Site Visit and Tenant Notification	2
3. Site Visit Preparation.....	2
4. Site Visit	3
4.1 Project Interview(s)	3
4.2 Safety and Code Observations at the Site Visit	3
4.3 Visual Inspection and Diagnostic Testing Protocols	3
4.4 On-Site Unit Inspection Sampling Protocols	4
4.5 Renewable Energy.....	4
4.5.1 Solar Thermal Systems	4
4.5.2 Photovoltaic Solar Systems	4
III. ENERGY MODELING AND ANALYSIS PROCESS.....	5
1. Energy Modeling Software Requirements:	5
1.1 Treat Dwelling Criteria	5
1.2 Treat Policy.....	5
1.3 REM/Design Dwelling Criteria	5
2. Utility Rates:	6
3. Model Calibration:	6
4. Exceptional Calculations:.....	6
4.1 Solar Thermal Performance Calculation.....	6
4.2 Photovoltaic Performance Calculation.....	7
5. Savings Investment Ratio (SIR) Calculations:	7
5.1 Measure SIR	7
5.2 Package SIR.....	7
5.3 Measure Buy Down	8
APPENDIX A: ENERGY AUDIT REPORT FORMAT	9
Section 1: Executive Summary	9
Section 2: Existing Conditions	10
Section 3: Evaluated Measures	11
Section 4: Cost Benefit Analysis	12

Section 5: Analysis 12

Section 6: Qualifications and Certifications 13

Section 7: Representation 13

APPENDIX B: MAX ALLOWABLE ESTIMATED USEFUL LIFE OF COMMON MEASURES14

APPENDIX C: ENERGY AUDIT REVIEW16

APPENDIX D: DOE APPROVED MEASURES (10CFR440, APPENDIX A)19

I. OVERVIEW

The **CSD Weatherization Assistance Program (WAP) Audit Protocol** is a guidance document that defines the required criteria for the development of an energy audit designed to justify the cost effectiveness of energy efficient building retrofits under CSD's DOE WAP. This document specifically addresses the audit protocol for multifamily buildings, as defined by the CSD energy audit policy.

Underlying this protocol are the principles of transparency, consistency, and accountability: data contained in the audit must be transparent in terms of methodology of collection and calculation; report format and content must be presented in a consistent manner; and persons completing the audit must be accountable for their work by adhering to protocol requirements, maintaining professional certifications, and providing quality assurance measures.

A key objective of an energy audit is to identify feasible and relevant energy conservation measures (measures) that qualify for funding under CSD's DOE WAP program. In addition to identifying ways to reduce the energy burden, the audit process must also conduct evaluation of the integrity of the building to identify any deficiencies that could result in health and safety violations as defined by CSD's DOE WAP.

The outcome of the audit process is an assessment that clearly reports on:

- Building profile, configuration, and existing energy systems.
- Relevant health and safety checks and conditions.
- Current energy and hot water consumption profile.
- The proposed scope of work that clearly defines the measures and related costs being applied for funding.
- Any relevant supplemental funding sources and owners contributions.
- The calculated savings investment ratio of each measure including interactive effects of higher SIR measures.
- The total calculated reduction in energy or water usage for the recommended measures.
- The total package of measures SIR calculation.
- The energy modeling software file and assumptions used to make the projections.
- The methodology of data collection and relevant calculations.
- A representation that the Audit meets CSD's DOE WAP criteria, and audit protocol as defined herein.

The three main processes that constitute the CSD Weatherization Assistance Program Multifamily Audit Protocol standards include: 1) the on-site visit, 2) the energy modeling and energy/water savings analysis, and 3) report submittal. For energy audit purposes, DOE considers multi-family buildings to be those containing five dwelling units or more. Approved single-family energy audits can be used in buildings with up to four dwelling units. As approved by DOE on a case-by-case basis, certain single-family energy audits may be used in multi-family buildings containing up to 25 individually heated and cooled dwelling units.¹

¹ Weatherization Program Notice 11-1; Effective Date: December 28, 2010

II. ON-SITE PROCESS

The purpose of the on-site visit is to collect all necessary information to conduct an appropriate energy, water, and health and safety analysis, including sufficient information to inform an energy model. The intent is to evaluate building envelope, assess building airflow, inventory HVAC and other energy systems equipment, identify ventilation systems, and perform diagnostic testing.

1. Auditor Conduct Standards and Minimum Credentials

- All sub-grantees and their consultants shall conform to the CSD contracts, policies, and referenced standards. In addition the Auditor shall comply with applicable professional standards for ethics as defined by the Building Performance Institute Code of Ethics.
- Auditors conducting audits shall have the minimum skills, credentials and experience required to effectively perform the audits. In the event that a single Auditor lacks all of the required skills, a qualified team may be assembled to complete the audit. At a minimum, Auditors shall be capable of effectively performing the following tasks:
 - Energy modeling (utilizing approved software).
 - Building assessment (identifying safety, code, durability and energy systems issues).
 - Diagnostic testing (see Attachment C).
 - Combustion appliance safety testing.
 - Feasibility analysis for the installation of energy efficient building improvements.
 - Construction cost estimating.
 - Financial analysis that generates investment grade level information/data.

2. Scheduling the Site Visit and Tenant Notification

- Notification of tenants whose units will be inspected as part of the audit site visit will be the responsibility of sub-grantee, the property owner, or their representative.
- The Auditor shall schedule the site visit(s) with the designated person(s) at a time that is convenient for the project contact person(s). The site visit should seek to cause minimal disruption to the tenants and neighbors at the project.

3. Site Visit Preparation

To facilitate the on-site portion of the energy audit, it is recommended that the following items be addressed prior to arrival.

- Review the Initial Building Assessment or similar screening report which establishes the building's eligibility to participate in the program, and verify that the accrual of benefits is sufficiently justified per Weatherization Program Notice 10-15A.²
- Review 12-24 months of prior utility bills (including gas, electric, and water) to know annual utility cost by fuel type and seasonal variations.
- Identify sampling of units representative of unit types, conditions, sizes and location.
- Arrange access to units to be reviewed with occupant and provide necessary formal notification of inspection.
- Verify availability of as-built drawings.

² Weatherization Program Notice 10-15A, Effective Date: April 8, 2010

- Review any historical improvement data available.
- Review O&M records, logs and protocols.
- Review existing mechanical equipment information as available.
- Verify availability of property representative with access to all portions of the property.
- Verify availability of O&M staff familiar with the building facilities and history.

4. Site Visit

The on-site energy audit shall be comprised of an in-person visit to the project by a qualified Auditor to complete the following tasks:

4.1 Project Interview(s)

The Auditor shall interview at least one of the following designated person(s) prior to or at the time of the site visit:

- Property Manager
- Maintenance Director or Maintenance Staff
- Owner or Owner Representative

The purpose of the interview(s) is to:

- Discuss project energy performance.
- Discuss tenant comfort, health and safety, and agree on a tenant synopsis for the site visit.
- Discuss any behavioral or other factors affecting energy performance (occupancy rates, tenant behavior patterns etc).
- Discuss operations and maintenance procedures.
- Address any other stakeholder questions or concerns.

The interview shall include questioning on operations and maintenance issues and will address the issues including but not limited to those in Attachment B. If any project team member wishes their responses to remain confidential, the Auditor shall respect those requests.

4.2 Safety and Code Observations at the Site Visit

Each site visit must address specific minimum health and safety checks. CSD Policies and Procedures and Health and Safety Plan, as well as other documents referenced in DOE contracts, apply to this policy. Where not referenced specifically, the following minimum health and safety checks shall be conducted and recorded in the Energy Audit Report or supporting documentation.

- Note likelihood of lead presence based on age of building and applicable prior inspections as relevant to EPA RRP Rule Asbestos Hazard Visual Inspection and testing (if necessary per CAL OSHA Title 8 Standards).
- Mold and Mildew Assessment per WPN 05-13
- Structural, electrical and mechanical systems visual inspections
- Combustion Appliance Safety Testing

4.3 Visual Inspection and Diagnostic Testing Protocols

³ Weatherization Program Notice 05-1; Effective Date: November 12, 2004

The site visit shall involve visual inspections and diagnostic testing of the building envelope, HVAC, combustion appliances, and lighting systems. Minimum visual and diagnostic testing criteria are provided in the CSD Weatherization installation Standards (2010). These standards provide the minimum required testing procedures for Combustion Appliance Safety, Blower Door and Duct Leakage Testing.

Blower Door Sampling: Blower door testing shall be conducted on a representative sample number of units in accordance with CSD contracts, standards and policy documents.

Where the CSD standards do not address specific diagnostic tests applicable to the commercial systems, BPI standards for Multifamily Building Analyst, and CEC HERS II standards shall apply. Where conflicts exist between these two standards, the most conservative standard shall apply. BPI Multifamily Building Analyst Standards are available for download at BPI's website (www.bpi.org). The California Title 24 Energy Efficiency Standards are available for download at the Energy Commission's website at (<http://www.energy.ca.gov/title24>).

The Auditor shall identify any building information required to complete the energy and cost analysis. At a minimum, all relevant data listed in Appendix A shall be documented. This information will be used in the energy modeling and analysis phase of the audit.

4.4 On-Site Unit Inspection Sampling Protocols

At least one in seven of every unit type (defined as having same/similar floor plan), with representation from differing building floors and including all four building orientations, shall be inspected. In no case shall the inspection of units be less than 10% of total units. In accordance with Attachment A, Auditor will ensure that a discussion of unit sampling addresses special building circumstances that may result in an increased level of unit inspections and testing.

4.5 Renewable Energy

The on-site inspection may also examine, evaluate and propose recommendations for the incorporation of renewable energy opportunities including, but not limited to, solar hot water. In addition, any existing renewable energy systems (wind, solar thermal, solar PV, Fuel Cell, etc.) shall be included in the audit analysis.

4.5.1 Solar Thermal Systems

Proposed solar thermal systems shall be specified in accordance with the California Solar Initiative Thermal Program Handbook⁴ if a CSI Thermal Rebate is included in the Analysis. In all cases, proposed systems shall comply with SRCC OG-300⁵ and 2009 Uniform Solar Energy Code⁶.

4.5.2 Photovoltaic Solar Systems

Existing photovoltaic systems shall be fully documented in EAR. NOTE: Currently Solar PV systems are not eligible for funding under the CA Weatherization Assistance Program.

⁴ California Solar Initiative Thermal Program Handbook Rev 4.0

⁵ Solar Rating and Certification Corporation Standard OG-300

⁶ Uniform Solar Energy Code, 2009

III. ENERGY MODELING AND ANALYSIS PROCESS⁷

An energy model of the building's pre- and post-retrofit performance shall be completed using building plans, initial inspection data, and diagnostic data collected during the on-site visits. TREAT energy modeling is used to estimate annual energy consumption and energy cost savings of most potential energy conservation measures for multifamily dwellings as defined in Section III, 1.1. All energy and cost savings results from the TREAT model must be verified against known conditions and usage profiles existing at the residence and against industry standard values. If results are not as generally expected and are not defensible based on information from the site visit, the TREAT model should be modified until expected results are obtained. All major assumptions used to develop the energy model and analysis must be clearly stated in the final report. Reporting emphasis should be placed on the assumptions that have the most impact on estimated energy savings. Occasionally, some building features may be inaccessible, such as crawl space insulation values. When certain building features can not be physically verified, values from Table R3-50, Default Assumptions for Existing Buildings in the 2008 Title 24 Alternative Calculation Method manual shall be used as default conditions in the energy model and analysis.

1. Energy Modeling Software Requirements:

Two energy modeling software platforms have been approved by DOE for use in the CA WAP program. REM/Design (Architectural Energy Corporation) is approved for single family homes and small multifamily dwellings, and TREAT (PSD Consulting) is approved for use in larger multifamily dwellings. The energy audit software policy is provided below.

1.1 Treat Dwelling Criteria

As defined in the policy, a TREAT audit is to be used for the following building types:

- Multi-Family residential buildings 4 stories and above.
- Multi-Family residential buildings 3 stories or fewer with shared HVAC systems and/or water heating systems.
- Multi-Family residential buildings containing 25 or more units.
- Multi-Family residential buildings not meeting the REM/Design criteria in section 1.3.

1.2 Treat Policy

For residential buildings meeting the above criteria, a "whole-building" energy audit and TREAT software based energy simulation must be conducted to determine the feasibility and cost effectiveness of all available measures.

For high-rise projects wishing to apply a priority list-only approach to individual unit weatherization measures, justification must be submitted in writing to CSD describing the reason a TREAT-based energy audit is not feasible.

1.3 REM/Design Dwelling Criteria

As defined in the policy, REM/Design audit is to be used for the following building types:

- Single-family dwellings up to 4-plexes,
- Mobile homes, and
- Low-rise multifamily buildings:

⁷ An addendum to the energy audit report may be prepared to fulfill the programmatic requirements of CSD's DOE WAP if necessary.

- Containing five to 25 dwelling units,
- Having 3 stories or fewer,
- Individually metered,
- Where the unit is heated and cooled independently, and
- Where the unit has its own hot water heater.

The REM/Design energy audit process requires a physical inspection of the home, specific diagnostic tests, and proper data input into the software program. An energy profile of the existing home is compared to a set of improvements recommended for installation. Each measure is then evaluated and a report is generated with the cost-effectiveness of each measure listed by SIR (Savings to Investment Ratio).

2. Utility Rates:

The energy consultant shall model the building using the current local utility rate schedules as verified during review of utility bills. When possible, tiered rate structures, demand charges, time of use charges and usage fees shall be included in the utility rate determination. At a minimum, energy cost shall be calculated as the total average cost of energy for the prior year based on billing data. Energy cost savings calculated outside of the modeling software shall be based on average utility and demand rates based on provided utility bills.

3. Model Calibration:

The energy model for all buildings shall be calibrated to actual utility billing data based on mastered metered data or aggregation of individual unit energy bills. When individual unit energy bills are used billing data should be collected from as many units as possible. Modeled baseline energy consumption shall be calibrated to monthly utility bills for a minimum of twelve months. The intent is to qualify the energy model by demonstrating similarity to the metered energy usage over a 12 month time frame.

- The energy model estimates of electricity and natural gas should calibrate to actual monthly consumption to $\pm 10\%$.
- TMY 30 year average weather data can be used in lieu of actual year weather, which may be difficult to obtain.
- Any adjustments made to the building description inputs used to calibrate the simulated building to actual energy usage shall be justified with explicit, transparent information and documented in this section of the audit report.
- In the event that the building is served by more than one meter, the bills for those meters shall be aggregated against the building calculated consumption as a whole.

4. Exceptional Calculations:

Energy conservation measures not directly modeled with TREAT or REM/Design energy modeling software can be calculated outside of the program provided that generally accepted engineering calculations and methodologies are used. Interactive effects must be accounted for in exceptional calculations. The methodologies, assumptions, and constants used in the exceptional calculations must be clearly documented in the final report. Sources of deemed savings must be referenced.

4.1 Solar Thermal Performance Calculation

Solar thermal calculations may be performed using the CSI-Thermal Program Multifamily/Commercial calculator available at

<https://www.csithermal.com/calculator/commercial/> using the methods outlined herein. If the CSI Thermal calculator is not available, Auditors shall present an alternative calculation methodology to CSD for review.

4.2 Photovoltaic Performance Calculation

Actual metered performance data shall be used to account for offset of photovoltaic production of existing solar systems during analysis. If measured data is not available, grid tied photovoltaic performance calculations may be performed using PV Watts V.2⁶ which can be initiated at this website. http://mapserve3.nrel.gov/PVWatts_Viewer/index.html.

NOTE: Currently Solar PV systems are not eligible for funding under the CA Weatherization Assistance Program.

5. Savings Investment Ratio (SIR) Calculations:

When using TREAT or REM/Design, the measure and package SIR may be calculated automatically by the software. In the event that a proposed measure requires exceptional calculations, the measure and package SIRs shall be calculated using the methods outlined below.

5.1 Measure SIR

Measure SIR shall be calculated as the ratio of present value of the measure energy savings⁸ compounded annually over the life of the measure divided by the total installed cost of the measure given by equation 1. When calculating measure SIR, all interactive effects of other measures in the improvement package shall be accounted for.

$$SIR_{measure} = S * ((1+i)^n - 1) / (i(1+i)^n) / C \quad eq. 1$$

Where:

- S = 1st year savings of measure (\$)
- i = discount rate (%)
- n = estimated useful life of measure (years)
- C = installed cost of measure (\$)

5.2 Package SIR

Package SIR shall be calculated as the ratio of present value of the package energy savings⁹ compounded annually over the life of the package divided by the total installed cost of the package. Present value of package savings shall be calculated as the sum of the present value of individual measures divided by the cost of the package (the sum of the cost of all measures). The present value of an individual measure is shown in equation 2.

$$PV_{measure} = S * ((1+i)^n - 1) / (i(1+i)^n) \quad eq. 2$$

Where:

- S = 1st year savings of measure
- i = discount rate (%)
- n = estimated useful life of measure

Discount rate used for present value calculations shall be the lesser of 3% or the percentage increase in the Consumer Price Index (all items, United States city average) for the most recent calendar year completed before the beginning of the year for which the determination is being made¹⁰. *Note: Energy escalation and inflation are not included in this calculation.*

First year savings of a single measure shall be calculated based on the energy usage profile of a building after all measures with higher SIR have been implemented. All savings

⁸ Water savings or other non energy savings shall not be included in the SIR Calculation.

⁹ Water savings or other non energy savings shall not be included in the package SIR Calculation.

¹⁰ 10 CFR 440.18 Paragraph C.2.i

calculations should be adjusted for “interaction between architectural and mechanical weatherization materials by using generally accepted engineering methods to decrease the estimated fuel cost savings for a lower priority weatherization material in light of fuel cost savings for a related higher priority weatherization material.”¹¹

Maximum Estimated Useful Life of measure shall be determined using values published in Appendix B. In the event that a proposed EUL is greater than those listed in Appendix B justification must be provided for review by CSD.

Installed cost of measure should reflect the cost to install a measure as closely as possible. In cases where the cost to install a measure changes after approval of the scope of work due to extenuating circumstances, the updated cost must be reported and the measure will be reimbursed as follows:

- 1) If the updated cost is less than the reported cost, CSD will reimburse for the actual cost of the measures.
- 2) If the updated cost is greater than the reported cost, CSD will reimburse for the reported cost of measure. The full amount of the installed cost of the measure may be reimbursed if an updated SIR calculation reveals that the measure and package SIR remain greater than 1.0 based on the updated cost, and the package has not exhausted the available funds for the property.¹²
- 3) If the updated cost is greater than the reported cost and the increased cost reduces the measure SIR<1.0, the additional funding source must be identified and must not be federal funds.

5.3 Measure Buy Down

In the event that non-federal financial resources are leveraged to buy down a particular measure, the following criteria must be met¹³:

- 1) The SIR of the discounted measure must be 1.0 or greater when SIR is calculated as the ratio of present value of the measure savings compounded annually over the life of the measure divided by the WAP funds applied to the measure.
- 2) The package SIR shall be calculated as the ratio of present value of the package savings compounded annually over the life of the package divided by the total installed cost of the package including all WAP funds and all non-WAP funds¹⁴.
- 3) Discounted measures may not be installed before non-discounted measures and are only to be installed when all other available cost effective measures not requiring buy-down have been installed. In no case shall measures with higher SIRs be skipped or “leapfrogged” for measures with lower SIRs.

¹¹ 10 CFR 440.21, Paragraph E.1

¹² Note: Point of Sale and other direct rebates may be used to lower the total cost of the measure, and this discount may be applied to the cost of the total package of measures.

¹³ Weatherization Program Notice 10-17; Effective Date: July, 26, 2010

APPENDIX A: ENERGY AUDIT REPORT REQUIREMENTS

This format is provided as a suggested template to aid in Energy Audit Report Generation and identifies the scope and level of detail that should be included in all reports. In many cases an energy audit will have applications in other programs with different requirements than those of CSD's DOE WAP. It is not CSD's intention to create extra work by requiring that an energy audit omit information pertinent to other programs. Programmatic concerns not addressed in the energy audit may be addressed in an addendum to the report that summarizes the relevant results of the energy audit with regard to the programmatic conditions of CSD's DOE WAP. Sections of the Audit Report Format below that are deemed programmatic in nature have been italicized. This information must be submitted to CSD as part of the submittal package, but is not necessarily part of an energy audit report prepared by an energy consultant.

ENERGY AUDIT REPORT FORMAT

Section 1: Executive Summary

The purpose of the executive summary is to summarize the main points of the project. When possible, labeled tables and graphs should be used to present data.

- 1) General Overview
 - a) Project Description
 - i) Location, building configurations
 - ii) Building sizes, # units and common areas description, utilities, energy cost summaries
 - iii) *Statement of eligibility to verify eligibility of the property*
 - (1) *Income Eligibility Criteria*
 - a. *Property appears on HUD/DOE or USDA/DOE eligibility list² or;*
 - b. *at least 66% of the units in the building are income qualified*
 - (2) *Accrual of benefits*
 - a. *Measures will result in reduction of tenants' energy costs or;*
 - b. *Demonstrated benefit to tenant as outlined in "Weatherization Program Notice 10-15A"² if tenant energy cost not directly paid by tenant*
 - (3) *Maximum Allowable Benefit for Property*
 - a. *Identification of maximum allowable benefit for property based on number of eligible units per-unit funding limit*
 - iv) Summary of site visit (dates, interviews, project team)
 - b) Description of any special analysis or conditions
 - c) Historical energy use summary
 - d) *Recommended measures summary*
 - i) *Name of measure*
 - ii) *Cost of measure*
 - iii) *Recommended improvement package documentation arranged in descending order of SIR*
 - (1) *Total Cost*
 - (2) *Total SIR*
 - (3) *Total DOE Contribution*

- (4) *Total Owner Contribution*
- (5) *Total Contribution of non-federal funds used to raise SIR*
- e) Measures evaluated but not recommended
 - i) Description
 - ii) Cost
 - iii) SIR
 - iv) Documentation of non-feasibility (already installed, not feasible, etc.)
- f) *Total and measure specific projected energy use summary after proposed measure package implementation*

Section 2: Existing Conditions

The narrative section of the report should guide the reviewer through the steps taken to conduct the energy audit and analysis. When applicable, labeled photos should be included in the appropriate sections.

- 1) Existing Building Conditions
 - a) Site layout
 - b) Number of units
 - c) Occupancy
 - d) Building construction types
 - e) Number of stories
 - f) Year built
 - g) Total building area identified by use (residential community/common, commercial)
 - h) History of previous retrofits or rehabs
 - i) Other significant building features
 - j) Photos as needed to document existing building conditions.
- 2) Existing Building Components and Energy Systems
 - a) Building Envelope
 - i) Wall construction and insulation
 - ii) Roof construction and insulation
 - iii) Types of windows found on each face of building
 - iv) Photos as relevant
 - b) Common Area Lighting
 - i) Fixture type
 - ii) Lamp and ballast type
 - iii) # of lamps/fixture
 - iv) Fixture wattage
 - v) # of fixtures
 - vi) Spaces served
 - vii) Lighting control
 - viii) Annual/daily hours used
 - ix) Photos as relevant
 - c) Common Area Lighting
 - i) Fixture type
 - ii) Lamp and ballast type
 - iii) # of lamps/fixture
 - iv) Fixture wattage
 - v) # of fixtures
 - vi) Spaces served

- vii) Lighting control
- viii) Annual/daily hours used
- ix) Photos as relevant
- d) Water Fixtures
 - i) Common Area Fixtures
 - (1) List all fixtures using hot water (common lavatories, laundry, kitchen, etc.)
 - (2) Water usage for each fixtures as relevant
 - (3) Code requirements for each fixture
 - (4) Photos as relevant
 - ii) Unit Fixtures
 - (1) List all fixtures using hot water (lavatory, laundry, kitchen)
 - (2) Water usage for each fixtures as relevant
 - (3) Code requirements for each fixture
 - (4) Photos as relevant
- e) HVAC Systems
 - i) Heating System Description
 - (1) Make, model, age, capacity and measured characteristics of all heating equipment
 - (2) Characterization of distribution system
 - (3) Photos of relevant equipment
 - ii) Cooling System Description
 - (1) Make, model, age, capacity and measured characteristics of all cooling equipment
 - (2) Characterization of distribution system
 - (3) Photos of relevant equipment
 - iii) Water Heating Description
 - (1) Make, model, age, capacity and measured characteristics of all water heating equipment
 - (2) Characterization of distribution system
 - (3) Photos of relevant equipment
- f) Forced ventilation Systems
 - (1) Make, model, age, capacity and measured characteristics of all heating equipment
 - (2) Ability of ventilation system to provide adequate ventilation
 - (3) Photos of relevant equipment
- g) Annual Utility Bill Breakdown
 - (1) Monthly utilities breakdown for all applicable fuels

Section 3: Evaluated Measures

- 1) Recommended Energy Efficiency Measures
 - a) Short narrative of each recommended energy efficiency measure should include all replacement measure parameters.
 - b) Recommended replacement specifications
 - c) Installed Cost summary of measure
 - d) Projected annual monetary savings
 - e) SIR
- 2) Energy Efficiency Measures Not Recommended
 - a) Short narrative of each measured investigated and reasons why it is not recommended.

- 3) Recommended Health and Safety Measures
 - a) Short narrative of recommended health and safety measures including description, frequency, and cost.

Section 4: Cost Benefit Analysis

- 1) Table of all reviewed measures in order of decreasing SIR.
 - a) Baseline measure description
 - b) Improvement measure description
 - c) Total cost of measure
 - d) Portion of non-federal buy down funds for each measure
 - e) Baseline measure fuel usage
 - f) Fuel usage of proposed measure
 - g) Measure savings
 - h) Measure EUL
 - i) Measure SIR
- 2) Package Cost Analysis
 - a) Total cost of Package
 - b) Portion of non-federal buy down funds for each measure
 - c) Baseline Package fuel usage
 - d) Fuel usage of proposed Package
 - e) Package SIR

Section 5: Analysis

- 1) Analysis Overview
 - a) Overview of energy simulation tool(s) used and order of operations.
 - b) Summary of the approach, and detailed calculations, used in any exceptional calculations.
 - c) True up of base model energy consumption to measured usage.
- 2) Utility Analysis and End Use Breakdown
 - a) Describe the applicable end uses for each type of fuel at the project and show a breakdown of the annual energy usage and energy cost by fuel type. The Auditor shall:
 - i) Graph energy usage for each fuel type for a minimum of 12 months.
 - ii) Review the utility rate structure to determine if it seems appropriate for the project.
 - iii) Make a recommendation for further investigation if the Auditor finds that the rate structure does not match the utility data.
- 3) Source of Information
 - a) Briefly describe all sources of information used to inform the analysis, including:
 - i) Source and scope of utility billing data supplied to the Auditor including the data source, the duration in months that the data covers, and whether the Auditor received copies of the actual utility bills or electronic interval data.
 - ii) Construction cost information used in economic analysis.
 - iii) Whether building plans or site verified data were used in the analysis.
 - iv) Any discrepancies between plans and verified conditions.
 - v) Utility rate and schedules.
 - vi) Source of deemed energy savings.
- 4) Energy Model Inputs and Assumptions
 - a) State any assumptions used when analyzing energy and water utility data. Reference the Building Data Form as well as the building simulation program input file.

- 5) Full Documentation Energy Model Inputs and Outputs
 - a) TREAT Reports
 - i) Actual Model to Billing Report
 - ii) Base Building Data Report
 - iii) Model Energy Comparison Report
 - iv) Base Load Reports
 - (1) Base Building
 - (2) Recommended Package
 - v) Improvement Package Report

Section 6: Qualifications and Certifications

- 1) Names and qualifications (as applicable) of parties responsible for following:
 - a. Project Management
 - b. Energy Auditing and Analysis
 - c. Building Assessment (if different from Auditing team)
 - d. Construction Cost Estimating (if different from above)

Section 7: Representation

Include a representation from an officer or owner of the firm conducting the Audit that the Audit meets the [Program Name] Audit Specifications without exception and that the final Audit Report has been reviewed for quality assurance purposes by a principal or officer of the firm.

**APPENDIX B: MAX ALLOWABLE ESTIMATED USEFUL LIFE
OF COMMON MEASURES**

The EULs in this section are suggested maximum useful lives of measures. If these values are exceeded, justification should be provided and is subject to review. In the event a product is used with a shorter useful life than published below the actual useful life should be reported and used in SIR calculations.

SCOPE	APPLICATION	MEASURE	EUL
Non-Residential	Building Envelope	Cool Roof	15
Non-Residential	Building Envelope	Roof/Ceiling Insulation	30
Non-Residential	HVAC - Boilers	High Efficiency Boiler	20
Non-Residential	HVAC - Chillers	High Efficiency Chillers	20
Non-Residential	HVAC - Miscellaneous	Clean Condenser Coils	3
Non-Residential	HVAC - Miscellaneous	Duct Insulation Material	30
Non-Residential	HVAC - Miscellaneous	Duct Sealing - Single Zone Package System	15
Non-Residential	HVAC - Miscellaneous	High Efficiency Furnace	19
Non-Residential	HVAC - Miscellaneous	High Efficiency Water Source Heat Pump	15
Non-Residential	HVAC - Miscellaneous	Hydronic Heat Pump Variable Flow Valve	10
Non-Residential	HVAC - Miscellaneous	Refrigerant Charge	8
Non-Residential	HVAC - Miscellaneous	Setback Programmable Thermostats	15
Non-Residential	HVAC - Miscellaneous	Time Clocks (heating/cooling)	11
Non-Residential	HVAC - Miscellaneous	VSD Supply Fan Motors	12
Non-Residential	HVAC - Other Central Plant	Cooling Tower for Packaged System	15
Non-Residential	HVAC - Split/Package	Air Conditioners / Heat Pumps (split and unitary)	15
Non-Residential	Motors	HVAC Fan Motors	13
Non-Residential	Motors	Premium-Efficiency Motors	15
Non-Residential	Motors	Water Loop Pumps	13
Non-Residential	Outdoor Lighting	HID Lighting - High Pressure Sodium	16
Non-Residential	Outdoor Lighting	HID Lighting - Metal Halide	16
Non-Residential	Outdoor Lighting	HID Lighting (T-5)	11
Non-Residential	Refrigeration	Insulation for Bare Suction Lines	11
Non-Residential	Refrigeration	Retro-commissioning	10
Non-Residential	Water Heating	Circulation Pump Time clock Retrofit	15
Non-Residential	Water Heating	High Efficiency Central Water Heater	15
Non-Residential	Water Heating	High Efficiency Commercial Storage Water Heater	15
Non-Residential	Water Heating	Instantaneous Water Heater	19
Non-Residential	Water Heating	Pipe Insulation - Electric Water Heater	11
Non-Residential	Water Heating	Pipe Insulation - Gas Water Heater	11
Non-Residential	Water Heating	Water Heater Tank Wrap	7
Residential	Appliances	High Efficiency Refrigerator	15
Residential	Building Envelope	Cool Roof	15
Residential	Building Envelope	Duct Sealing	18
Residential	Building Envelope	Floor Insulation	30

SCOPE	APPLICATION	MEASURE	EUL
Residential	Building Envelope	High Performance Windows	20
Residential	Building Envelope	Weather-stripping	11
Residential	Building Envelope	Sunscreens	10
Residential	Building Envelope	Roof/Ceiling Insulation	30
Residential	Building Envelope	Wall Insulation	30
Residential	HVAC	Thermostatic Radiator Valve (TRV)	8
Residential	HVAC	Constant Airflow Regulator	10
Residential	HVAC	Clean Condenser Coils	3
Residential	HVAC	Evaporative Cooler	15
Residential	HVAC	High Efficiency Air Conditioner (package and split systems)	15
Residential	HVAC	High Efficiency Furnace	19
Residential	HVAC	High Efficiency Heat Pump	15
Residential	HVAC	Programmable Thermostat	15
Residential	HVAC	Refrigerant Charge	10
Residential	HVAC	Room AC - Energy Star	14
Residential	Indoor Lighting	CFL Fixtures	16
Residential	Indoor Lighting	CFL Lamps - 10,000 Hour	7
Residential	Indoor Lighting	CFL Lamps - 12,000 Hour	8
Residential	Indoor Lighting	CFL Lamps - 6,000 Hour	4
Residential	Indoor Lighting	CFL Lamps - 8,000 Hour	5
Residential	Indoor Lighting	Linear Fluorescents - MF Common Area	10
Residential	Miscellaneous	0.3 W LED Night Light	11
Residential	Outdoor Lighting	CFL Fixtures	16
Residential	Outdoor Lighting	CFL Lamps - 10,000 Hour	4
Residential	Outdoor Lighting	CFL Lamps - 12,000 Hour	5
Residential	Outdoor Lighting	CFL Lamps - 6,000 Hour	3
Residential	Outdoor Lighting	CFL Lamps - 8,000 Hour	4
Residential	Outdoor Lighting	HID Lighting	16
Residential	Water Heating	Faucet Aerators	9
Residential	Water Heating	Heat Pump Water Heater	10
Residential	Water Heating	High Efficiency Electric Water Heater	15
Residential	Water Heating	High Efficiency Gas Water Heater	13
Residential	Water Heating	Instantaneous Water Heater	20
Residential	Water Heating	Low-Flow Showerhead	10
Residential	Water Heating	Pipe Insulation - Electric Water Heater	13
Residential	Water Heating	Pipe Insulation - Gas Water Heater	13
Residential	Water Heating	Solar Water Heating	15

APPENDIX C: ENERGY AUDIT REVIEW

I. Overview

A key objective of an energy audit under CSD's DOE WAP program is to identify feasible and relevant energy conservation measures (measures) that qualify for funding under the program. In addition to identifying ways to reduce the energy burden, the audit process must also conduct evaluation of the integrity of the building to identify any deficiencies that could result in health and safety violations as defined by CSD's DOE WAP.

A portion of the audits submitted by agencies to CSD will be reviewed by a third party to ensure that the audit process, analysis and report meet the requirements of the Multifamily Audit Protocol. This document describes the review process used evaluate the submitted reports.

II. Sampling Rate

100% of energy audits shall be submitted and reviewed by CSD for accuracy and completeness. In addition a sample of energy audits shall be reviewed by a technical reviewer under the following criteria:

- 1) 100% audits submitted by new agencies or performed by new consultants to an agency shall be reviewed by a technical reviewer until a minimum of three consecutive audits are approved as submitted (without need for modification and resubmission).
- 2) 25% of audits submitted by every agency shall be reviewed. If agency uses multiple consultants to perform audits, 25% of audits submitted by every consultant for that agency shall be reviewed.
- 3) At the discretion of CSD, agencies and/or consultants providing consistent and accurate audits may apply in writing for a lower sampling rate of one in seven audits.
- 4) CSD may, at its sole discretion, make specific requirements or changes to the number and percentage of quality assurance reviews conducted for any agency or consultant.

III. Review Process

The following table below shall be used by the reviewer to document satisfactory completion of the requirements. In the event that a section is not satisfactory, notes will be made describing the nature of the delinquency, and submitted to the sub-grantee for review and follow up.

Submittal Package	Compliant?	
	Yes	No
Includes completed EAR report		
Includes TREAT files		
General Overview		
Report is complete and organized		
Executive summary includes recommended measure package organized in descending SIR		
Measure package cost and SIR clearly identified		
Health and safety measures clearly identified		
Consistent information used throughout report		
Report demonstrates property eligibility and WAP funding available based on number of qualified units		
Site Evaluation		
Includes names of Auditors and names of site representatives interviewed		
Building size and occupancy reported		
Sufficient description building envelope including windows, walls, roof, etc.		
At least 1/7 of each unit type inspected		
At least 10% of total units inspected		
Comprehensive inventory of existing lighting, water heating, space heating and space cooling equipment, etc		
Comprehensive inventory of existing hot water fixtures (lavatories, showers, sinks, bathtubs, water closets)		
Sufficient detail of existing heating equipment		
Sufficient detail of existing cooling equipment		
Sufficient detail of existing water heating equipment		
Sufficient detail of existing ventilation equipment		
CAS testing performed per CSD general policy		
Environmental Hazard testing performed per CSD general health and safety policy		
12-24 months of utility bills included to verify fuel usage and cost		

Analysis		
TREAT analysis used for calculations		
TREAT input values consistent with data collected during site visit		
Sample calculations provided for analysis performed outside of TREAT		
Projected energy usage true-up to utility bills performed		
Projected energy usage is reasonable with respect to industry standards		
All savings calculations are reasonable and within industry standard ranges (<i>Note: When savings calculations are outside of expected ranges, TREAT input files may be reviewed or other means used to verify accuracy and to verify reasonable assumptions resulting in reasonable saving</i>)		
All measure EULs are within industry standard ranges		
All SIR calculations executed properly		
Recommended Measures		
All measures listed in measure package allowed measures		
Total requested funds does not exceed average maximum per unit		
Total package SIR>1.0 regardless of funding source		
Verifiable source of any non-federal funds used to implement package		
All measures described with enough detail to justify measure feasibility		

IV. Feedback and Resubmission

Customer feedback will be provided by way of an Energy Audit Review and Approval Form that will indicate whether an audit was accepted as is or needs further improvements. In the event that an audit is not approved, a copy of the review form and a detailed explanation of the section(s) needing improvement will be provided to the agency for correction and re-submittal. All audits returned for correction will be reviewed upon re-submittal to the extent deemed necessary by the reviewer.

APPENDIX D: DOE APPROVED MEASURES (10CFR440, APPENDIX A)

APPENDIX A—STANDARDS FOR WEATHERIZATION MATERIALS

If the standards listed in this appendix conflict with those required by current local codes, the local code shall have precedence and a copy of the applicable section will be retained with procurement records.

The following Government standards are produced by the Consumer Product Safety Commission and are published in title 16, Code of Federal Regulations:

Thermal Insulating Materials for Building Elements Including Walls, Floors, Ceilings, Attics, and Roofs Insulation—organic fiber—conformance to Interim Safety Standard in 16 CFR part 1209;

Fire Safety Requirements for Thermal Insulating Materials According to Insulation Use—Attic Floor—insulation materials intended for exposed use in attic floors shall be capable of meeting the same flammability requirements given for cellulose insulation in 16 CFR part 1209;

Enclosed spaces—insulation materials intended for use within enclosed stud or joist spaces shall be capable of meeting smoldering combustion requirements in 16 CFR part 1209.

The following standards which are not otherwise set forth in part 440 are incorporated by reference and made part of part 440. The following standards have been approved for incorporation by reference by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. These materials are incorporated as they exist on January 3, 2002 and a notice of any change in these materials will be published in the FEDERAL REGISTER. The standards incorporated by reference are available for inspection at the Office of the Federal Register Information Center, 800 North Capitol Street, Suite 700, Washington, DC 20001.

The standards incorporated by reference in part 440 can be obtained from the following sources:

Air Conditioning and Refrigeration Institute, 4301 N. Fairfax Drive, Suite 425, Arlington, VA 22203; (703) 524-8800.

American Architectural Manufacturers Association, 1827 Walden Office Square, Suite 104, Schaumburg, Illinois 60173-4268; (847) 303-5664.

American Gas Association, 400 N. Capitol Street, NW, Washington, DC 20001; (202) 824-7000.

American National Standards Institute, Inc., 11 West 42nd Street, New York, NY 10036; (212) 642-4900.

American Society of Mechanical Engineers, Three Park Avenue, New York, NY 10016-5990; (212) 591-7722.

American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959; (610) 832-9585.

Association of Home Appliance Manufacturers, 1111 19th Street, NW, Suite 402, Washington DC, 20036; (202) 872-5955.

Federal Specifications, General Services Administration, General Services Administration, Federal Supply Service, Office of the CIO and Marketing Division, Room 800, 1941 Jefferson Davis Hwy., Arlington, VA 22202; (703) 305-6288.

Gas Appliance Manufacturers Association, 2107 Wilson Boulevard, Suite 600, Arlington, Virginia 22201; (703) 525-7060.

National Electrical Manufacturers Association, 1300 North 17th Street, Suite 1847, Rosslyn, VA 22209; (703) 841-3200.

National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101; (617) 770-3000.

Sheet Metal and Air Conditioning Contractors Association, 4201 Lafayette Center Drive, Chantilly, Virginia 20151-1209; (703) 803-2980.

Solar Rating and Certification Corporation, c/o FSEC, 1679 Clearlake Road, Cocoa, FL 32922-5703; (321) 638-1537.

Steel Door Institute, 30200 Detroit Road, Cleveland, OH 44145-1967; (440) 899-0010.

Steel Window Institute, 1300 Sumner Avenue, Cleveland, OH 44115-2851; (216) 241-7333.

Tubular Exchanger Manufacturers Association, 25 North Broadway, Tarrytown, NY 10591; (914) 322-0040.

Underwriters Laboratories, Inc., 333 Pfingsten Road, Northbrook, IL 60062-2096; (847) 272-8800.

Window & Door Manufacturers Association, 1400 East Touhy Avenue, Suite 470, Des Plaines, IL 60018; (800) 223-2301.

More information regarding the standards in this reference can be obtained from the following sources:

Environmental Protection Agency, 401 M Street, NW, Washington, DC 20006; (202) 554-1080.

National Institute of Standards and Technology, U.S. Department of Commerce, Gaithersburg, MD 20899; (301) 975-2000.

Weatherization Assistance Program, Office of Building Technology Assistance, Energy Efficiency and Renewable Energy, 1000 Independence Avenue, SW, EE-42, Washington, DC 20585-0121; (202) 586-4074.

**THERMAL INSULATING MATERIALS FOR
BUILDING ELEMENTS INCLUDING WALLS,
FLOORS, CEILINGS, ATTICS, AND ROOFS**
[Standards for conformance]

Insulation—mineral fiber: Blanket insulation	ASTM ¹ C665-98.
Roof insulation board	ASTM C726-00a.
Loose-fill insulation	ASTM C764-99.
Insulation—mineral cellular: Vermiculite loose-fill insulation	ASTM C516-80 (1996)e1.
Perlite loose-fill insulation	ASTM C549-81 (1995)e1.
Cellular glass insulation block	ASTM C552-00.
Perlite insulation board	ASTM C728-97.
Insulation—organic fiber: Cellulosic fiber insulating board	ASTM C208-95.
Cellulose loose-fill insulation	ASTM C739-00.
Cellulose wet-spray insulation	ASTM C1149-97.
Insulation—organic cellular: Preformed block-type polystyrene insulation	ASTM C578-95.
Rigid preformed poly- urethane insulation board	ASTM C591-00.
Polyurethane or polyiso- cyanurate insulation board face with aluminum foil on both sides	FS ² HH-I-1972/1 (1981).
Polyurethane or polyiso- cyanurate insulation board face with felt on both sides	FS HH-I-1972/2 (1981) and Amendment 1, October 3, 1985).
Insulation—composite boards: Mineral fiber insulation board	ASTM C726-00a.
Perlite board	ASTM C728-97.
Gypsum board and poly- urethane or polyiso- cyanurate composite board	FS HH-I-1972/4 (1981).

¹ ASTM indicates American Society for Testing and Materials.

² FS indicates Federal Specifications.

**THERMAL INSULATING MATERIALS FOR
BUILDING ELEMENTS INCLUDING WALLS,
FLOORS, CEILINGS, ATTICS, AND
ROOFS—Continued**
[Standards for conformance]

Materials used as a patch to reduce infiltration through the building envelope	Commercially available.
--	----------------------------

**THERMAL INSULATING MATERIALS FOR PIPES,
DUCTS, AND EQUIPMENT SUCH AS BOILERS
AND FURNACES**
[Standards for conformance]

Insulation—mineral fiber: Preformed pipe insulation	ASTM ¹ C547-00.
Blanket and felt insulation (industrial type)	ASTM C553-00.
Blanket insulation and blanket type pipe insulation (metal-mesh covered, industrial type)	ASTM C592-00.
Block and board insulation	ASTM C612-00.
Spray applied mineral fiber thermal and sound absorbing insulation	ASTM C1014- 99ae1.
High-temperature fiber blanket insulation	ASTM C892-00.
Duct work insulation	ASTM C1290-00.
Insulation—mineral cellular: Calcium silicate block and pipe insulation	ASTM C533-95.
Cellular glass insulation	ASTM C552-00.
Expanded perlite block and pipe insulation	ASTM C610-99.
Insulation—organic cellular: Preformed flexible elastomeric cellular insulation in sheet and tubular form	ASTM C534-99.
Unfaced preformed rigid cellular polyurethane insulation	ASTM C591-00.
Insulation skirting	Commercially available.

¹ ASTM indicates American Society for Testing and Materials.

FIRE SAFETY REQUIREMENTS FOR INSULATING MATERIALS ACCORDING TO INSULATION USE

[Standards for conformance]

Attic floor	Insulation materials intended for exposed use in attic floors shall be capable of meeting the same smoldering combustion requirements given for cellulose insulation in ASTM ¹ C739-00.
Enclosed space	Insulation materials intended for use within enclosed stud or joist spaces shall be capable of meeting the same smoldering combustion requirements given for cellulose insulation in ASTM C739-00.
Exposed interior walls and ceilings	Insulation materials, including those with combustible facings, which remain exposed and serve as wall or ceiling interior finish, shall have a flame spread classification not to exceed 150 (per ASTM E84-00a).
Exterior envelope walls and roofs	Exterior envelope walls and roofs containing thermal insulation shall meet applicable local government building code requirements for the complete wall or roof assembly.
Pipes, ducts, and equipment	Insulation materials intended for use on pipes, ducts, and equipment shall be capable of meeting a flame spread classification not to exceed 150 (per ASTM E84-00a).

¹ ASTM indicates American Society for Testing and Materials.

STORM WINDOWS

[Standards for conformance]

Storm windows:	
All storm windows . . .	AAMA/NWWDA ¹ 101/I.S. 2-97.
Aluminum frame storm windows	AAMA ² 1002.10-93.
Rigid vinyl frame storm windows	ASTM ³ D4726-00.
Frameless plastic glazing storm	Required minimum thickness for windows is 6 mil (0.006 inches). Commercially available.
Movable insulation systems for windows	

¹ AAMA/NWWDA indicates American Architectural Manufacturers Association/National Wood Window & Door Association (now the Window & Door Manufacturers Association).

² AAMA indicates American Architectural Manufacturers Association.

³ ASTM indicates American Society for Testing and Materials.

REPLACEMENT WINDOWS

[Standards for conformance]

Replacement windows:	
All windows	AAMA/NWWDA ¹ 101/I.S. 2-97.
Steel frame windows	Steel Window Institute recommended specifications for steel windows, 1990.
Rigid vinyl frame windows	ASTM ² D4726-00.

¹ AAMA/NWWDA indicates American Architectural Manufacturers Association/National Wood Window & Door Association (now the Window & Door Manufacturers Association).

² ASTM indicates American Society for Testing and Materials.

STORM DOORS
[Standards for conformance]

Weather Vapor re	Storm doors:	
	All storm (glass) doors	AAMA/NWWDA ¹ 101/I.S. 2-97.
	Aluminum frame storm doors	AAMA ² 1102.7-89.
	Sliding glass storm doors	AAMA 1002.10-93.
	Rigid vinyl storm doors	ASTM ³ D3678-97 and D4726-00..
	Vestibules:	
	Materials to construct vestibules	Commercially available.
Items to ventil	¹ AAMA/NWWDA indicates American Architectural Manufacturers Association/National Wood Window & Door Association (now the Window & Door Manufacturers Association).	
¹ ASTM Materials.	² AAMA indicates American Architectural Manufacturers Association.	
	³ ASTM indicates American Society for Testing and Materials.	

REPLACEMENT DOORS
[Standards for conformance]

Heat exc to-water water	Replacement doors:	
	All replacement doors	AAMA/NWWDA ¹ 101/I.S. 2-97.
	Steel doors	ANSI ² A250.8-98.
	Wood doors:	
	Flush doors	ANSI/NWWDA ³ I.S. 1-97 (Amendment, exterior door provisions).
Heat exc gas-f	Stile and rail doors	NWWDA ⁴ I.S. 6-97.
	¹ AAMA/NWWDA indicates American Architectural Manufacturers Association/National Wood Window & Door Association (now the Window & Door Manufacturers Association).	
¹ ASME Engineers.	² ANSI indicates American National Standards Institute.	
² The h	³ ANSI/NWWDA indicates American National Standards Institute/National Wood Window & Door Association (now the Window & Door Manufacturers Association).	
vent connec appliances and not eq	⁴ NWWDA indicates National Wood Window & Door Association (now the Window & Door Manufacturers Association).	
³ ANSI/Institute/Un		

CAULKS AND SEALANTS
[Standards for conformance]

Caulks and sealants:	
Glazing compounds for metal sash	ASTM ¹ C669-00.
Oil and resin base caulks	ASTM C570-00.
Acrylic (solvent types) sealants	ASTM C920-98e1.
Butyl rubber sealants	FS ² Commercial Item Description A-A-272 (6/7/95).
Chlorosulfonated polyethylene sealants	ASTM C920-98e1..
Latex sealing compounds	ASTM C834-00e1..
Elastomeric joint sealants (normally considered to include polysulfide, polyurethane, and silicone)	ASTM C920-98e1.
Preformed gaskets and sealing materials	ASTM C509-00.
Duct sealing mastic	UL ³ 181A-M, Second Edition, 1994 and UL 181B-M, First Edition, 1995.

¹ ASTM indicates American Society for Testing and Materials.
² FS indicates Federal Specifications.
³ UL indicates Underwriters Laboratories.

WATER HEATER MODIFICATIONS

[Standards for conformance]

Insulate tank and distribution piping	(See insulation section of this appendix)
Install heat traps on inlet and outlet piping	Applicable local plumbing code.
Install/replace water heater heating elements	Listed by UL ¹ .
Electric, freeze-prevention tape for pipes	Listed by UL.
Install stack damper, gas-fueled	ANSI ² Z21.66-1996, including Exhibits A & B, and ANSI Z223.1-1999 (same as NFPA ³ 54-1999).
Install stack damper, oil-fueled	UL 17, Third Edition, 1994, NFPA 31-2001, NFPA 211-2000 (same as ANSI A52.1), and ANSI/NFPA 70-1999 (same as IEEE ⁴ National Electrical Code).
Install water flow modifiers	Commercially available.

¹ UL indicates Underwriters Laboratories.

² ANSI indicates American National Standards Institute.

³ NFPA indicates National Fire Prevention Association.

⁴ IEEE indicates Institute of Electrical and Electronics Engineers.

REPLACEMENT WATER HEATERS

[Standards for conformance]

Electric (resistance) water heaters	10 CFR ¹ 430 and UL ² 174.
Heat pump water heaters	UL 1995, Second Edition, 1995. Electrical components to be listed by UL.
Gas water heaters: Rated <75 kBtu/hr . . .	10 CFR 430 and ANSI ³ Z21.10.1-1998.
Rated >75 kBtu/hr . . .	ANSI Z21.10.3-1998.
Oil water heaters	UL 732, Fifth Edition, 1995.

¹ CFR indicates Code of Federal Regulations.

² UL indicates Underwriters Laboratories.

³ ANSI indicates American National Standards Institute.

SOLAR WATER HEATING SYSTEMS

[Standards for conformance]

Solar water heating systems including forced circulation, integral collector storage, thermo-syphon, and self-pumping systems	System must be certified per SRCC ¹ OG 300, July 16, 1998.
---	---

¹ SRCC indicates Solar Rating and Certification Corporation.

WASTE HEAT RECOVERY DEVICES

[Standards for conformance]

Desuperheater/water heaters	ARI ¹ 470-1995 and UL 1995, Second Edition, 1995.
Condensing heat exchangers	Commercially available components installed per manufacturers' specifications. NFPA ² 211-2000 (same as ANSI A52.1) may apply in certain instances. See also the Heat Exchangers section of this appendix.
Heat pump water heating heat recovery systems	UL 1995, Second Edition, 1995. Electrical components to be listed by UL.
Energy recovery equipment	Energy Systems Analysis and Management, 1997 (SMACNA ³).

¹ ARI indicates Air Conditioning and Refrigeration Institute.

² NFPA indicates National Fire Prevention Association.

³ SMACNA denotes Sheet Metal and Air Conditioning Contractors' National Association.

**BOILER REPAIR AND
MODIFICATIONS/EFFICIENCY
IMPROVEMENTS—Continued**

[Standards for conformance]

Install gas conversion burners	ANSI ¹ Z21.8-1994 (for gas- or oil-fired systems), ANSI Z21.17-1998, and ANSI Z223.1-1999 (same as NFPA 54-1999). AGA ² Laboratories Certification Seal.	Replace heat exchangers, tubes	Protection from flame contact with conversion burners by refractory shield. Commercially available.
Replace oil burner	UL ³ 296, Ninth Edition, 1994 and NFPA 31-2001.	Install/replace thermostatic radiator valves	One-pipe steam systems require air vents on each radiator; see manufacturers' requirements.
Install burners (oil/gas)	ANSI Z223.1-1999 for gas equipment and NFPA ⁴ 31-2001 for oil equipment.	Install boiler duty cycle control system	Commercially available. ANSI/NFPA 70-1999 (same as IEEE National Electrical Code) and local electrical code provisions for wiring.
Re-adjust boiler water temperature or install automatic boiler temperature reset control	ASME ⁵ CSD-1-1998, ANSI Z223.1-1999, and NFPA 31-2001.		
Replace/modify boilers	ASME Boiler and Pressure Vessel Code, 1998, Section II, IV, V, VI, VIII, IX, and X. Boilers must be Hydronics Institute Division of GAMA equipment.		
Clean heat exchanger, adjust burner air shutter(s), check smoke no. on oil-fueled equipment. Check operation of pump(s) and replacement filters.	Per manufacturers' instructions.		
Replace combustion chambers	Refractory linings may be required for conversions.		

¹ ANSI indicates American National Standards Institute.
² AGA indicates American Gas Association.
³ UL indicates Underwriters Laboratories.
⁴ NFPA indicates National Fire Prevention Association.
⁵ ASME indicates American Society for Mechanical Engineers.

HEATING AND COOLING SYSTEM REPAIRS AND
TUNE-UPS/EFFICIENCY IMPROVEMENTS
[Standards for conformance]

Install duct insulation . . .	ASTM ¹ C612-00 (see insulation sections of this appendix).
Reduce input of burner; derate gas-fueled equipment	Local utility company and procedures if applicable for gas-fueled furnaces and ANSI ² Z223.1-1999 (same as NFPA ³ 54-1999) including Appendix H.
Repair/replace oil-fired equipment	NFPA 31-2001.
Replace combustion chamber in oil-fired furnaces or boilers	NFPA 31-2001.
Clean heat exchanger and adjust burner; adjust air shutter and check CO ₂ and stack temperature. Clean or replace air filter on forced air furnace	ANSI Z223.1-1999 (same as NFPA 54-1999) including Appendix H.
Install vent dampers for gas-fueled heating systems	Applicable sections of ANSI Z223.1-1999 (same as NFPA 54-1999) including Appendix H, I, J, and K. ANSI Z21.66-1996 and Exhibits A&B for electrically operated dampers.
Install vent dampers for oil-fueled heating systems	Applicable sections of NFPA 31-2001 for installation and in conformance with UL ⁴ 17, Third Edition, 1994.

HEATING AND COOLING SYSTEM REPAIRS AND
TUNE-UPS/EFFICIENCY IMPROVEMENTS—Continued
[Standards for conformance]

Reduce excess combustion air: A: Reduce vent connector size of gas-fueled appliances B: Adjust barometric draft regulator for oil fuels	ANSI Z223.1-1999 (same as NFPA 54-1999) part 9 and Appendices G & H. NFPA 31-2001 and per furnace and boiler manufacturers' instructions. ANSI Z21.71-1993.
Replace constant burning pilot with electric ignition device on gas-fueled furnaces or boilers	Applicable sections and Appendix H of ANSI Z223.1-1999 (same as NFPA 54-1999) for gas furnaces and NFPA 31-2001 for oil furnaces.
Readjust fan switch on forced air gas-or oil-fueled furnaces	See install burners (oil/gas). ANSI Z223.1-1999 (same as NFPA 54-1999).
Replace burners	ARI ⁵ 210/240-1994. UL 1995, Second Edition, 1995. Commercially available.
Install/replace duct furnaces (gas)	UL 181, Ninth Edition 1996, including UL 181A, Second Edition 1994 and 181B, First Edition, 1995.
Install/replace heat pumps	Commercially available.
Replace air diffusers, intakes, registers, and grilles	Commercially available.
Install/replace warm air heating metal ducts	Commercially available.
Filter alarm units	Commercially available.

¹ ASTM indicates American Society for Testing and Materials.

² ANSI indicates American National Standards Institute.

³ NFPA indicates National Fire Prevention Association.

⁴ UL indicates Underwriters Laboratories.

⁵ ARI indicates Air Conditioning and Refrigeration Institute.

**REPLACEMENT FURNACES, BOILERS, AND
WOOD STOVES**

[Standards for conformance]

Chimneys, fireplaces, vents and solid fuel burning appliances	NFPA ¹ 211-2000 (same as ANSI ² A52.1).
Gas-fired furnaces	ANSI Z21.47-1998 and ANSI Z223.1-1999 (same as NFPA 54- 1999).
Oil-fired furnaces	UL ³ 727, Eighth Edition, 1994 and NFPA 31- 2001.
Liquefied petroleum gas storage	NFPA 58-2001.
Ventilation fans: Including electric attic, ceiling, and whole-house fans	UL 507, Ninth Edition, 1999.

¹ NFPA indicates National Fire Prevention Association.
² ANSI indicates American National Standards Institute.
³ UL indicates Underwriters Laboratories.

**SCREENS, WINDOW FILMS, AND REFLECTIVE
MATERIALS**

[Standards for conformance]

Insect screens	Commercially available.
Window films	Commercially available.
Shade screens:	
Fiberglass shade screens	Commercially available.
Polyester shade screens	Commercially available.
Rigid awnings:	
Wood rigid awnings	Commercially available.
Metal rigid awnings .	Commercially available.
Louver systems:	
Wood louver awnings	Commercially available.
Metal louver awnings	Commercially available.
Industrial-grade white paint used as a heat- reflective measure on roofs, awnings, window louvers, doors, and exterior duct work (exposed)	Commercially available.

AIR CONDITIONERS AND COOLING EQUIPMENT

[Standards for conformance]

Air conditioners: Central air conditioners Room size units	ARI ¹ 210/240-1994. ANSI/AHAM ² RAC 1- 1992.
Other cooling equipment: Including evaporative coolers, heat pumps, and other equipment	UL ³ 1995, Second Edition, 1995.

¹ ARI indicates Air Conditioning and Refrigeration
Institute.
² ANSI/AHAM indicates American National Standards
Institute/Association of Home Appliance Manufacturers.
³ UL indicates Underwriters Laboratories.

REFRIGERATORS

[Standards for conformance]

Refrigerator/freezers (does not include freezer-only units)	UL ¹ 250. Replaced units must be disposed of properly per Clean Air Act 1990, Section 608, as amended by 40 CFR ² 82, May 14, 1993.
---	--

¹ UL indicates Underwriters Laboratories.
² CFR indicates Code of Federal Regulations.

FLUORESCENT LAMPS AND FIXTURES

[Standards for conformance]

Compact fluorescent lamps	ANSI/UL ¹ 542, Seventh Edition, February 6, 1997 and UL 1993, First Edition, 1993.
Fluorescent lighting fixtures	UL 1570, Fourth Edition, 1995.

¹ ANSI/UL indicates American National Standards
Institute/Underwriters Laboratories.

California Energy Commission Climate Zones

by County and City

City	Zone	City	Zone	City	Zone
Alameda County		Contra Costa County		Fresno County	
Altamont	12	Hercules	3	Big Creek	16
Calaveras Reservoir	12/4	Pinole	3	Cedar Grove	16
Dublin	12	Richmond	3	Courtright Reservoir	16
Lake Del Valley	12	Rodeo	3	Dinkey Creek	16
Livermore	12	San Pablo	3	Florence Lake	16
Midway	12	Tassajara	2	Hume	16
Corral Hollow	12	Vine Hill	3	Huntington Lake	16
Pleasanton	12	All remaining locations	12	Kaiser Peak	16
San Antonio Reservoir	12			Kings River (Middle Fork)	16
Sunol	12	Del Norte County		Kings River (North Fork)	16
All remaining locations	3	Crescent City	1	Kings River (South Fork)	16
		Elk Valley	16	Lakeshore	16
Alpine County		Fort Dick	1	Mammoth Pool Reservoir	16
All locations	16	Gasquet	16	Meadow Lakes	16
		Gordon Mountain	16	Mono Hot Springs	16
Amador County		Hiouchi	1	Mount Darwin	16
Bear River	16	Horse Flat	16	Mount Pinchot	16
Cooks Station	16	Idlewild	1	Pine Ridge	16
Pioneer	16	Klamath	1	Pinehurst	16
Plasse	16	Klamath Glen	1	Roaring River	16
Salt Springs Reservoir	16	Lake Earl	1	Shaver Lake	16
Silver Lake	16	Patrick Creek	16	Spanish Mountain	16
All remaining locations	12	Point Saint George	1	Thomas A. Edison Lake	16
		Red Mountain	16	Trimmer	16
Butte County		Requa	1	Vermilion Valley Dam	16
Big Bend	16	Siskiyou Mountains	16	Wishin Reservoir	16
Brush Creek	16	Smith River	1	All remaining locations	13
Butte Meadows	16	Smith River (Middle Fork)	16		
Clipper Mills	16	Smith River (North Fork)	16	Glenn County	
Feather Falls	16	Smith River (South Fork)	16	Black Butte	16
Feather River (Middle Fork)	16			All remaining locations	11
Feather River (North Fork)	16	El Dorado County			
Forbestown	16	Aukum	12	Humboldt County	
Inskip	16	Cameron Park	12	Alderpoint	2
Jonesville	16	Camino	12	Bear Buttes	2
Lomo	16	Clarksville	12	Benbow	2
Pulga	16	Coloma	12	Blocksburg	2
Stirling City	16	Cool	12	Briceland	2
All remaining locations	11	Diamond Springs	12	Bridgeville	2
		El Dorado	12	Dinsmores	2
Calaveras County		El Dorado Hills	12	Eel Rock	2
Arnold	16	Garden Valley	12	Fort Seward	2
Dorrington	16	Georgetown	12	Garberville	2
Ganns	16	Greenwood	12	Harris	2
Hathaway Pines	16	Kelsey	12	Hoopa	2
Salt Springs Reservoir	16	Latrobe	12	Mail Ridge	2
Stanislaus	16	Lotus	12	McCann	2
All remaining locations	12	Outingdale	12	Miranda	2
		Pilot Hill	12	Mount Lassic	2
Colusa County		Placerville	12	Myers Flat	2
All locations	11	Rescue	12	Orleans	2
		Shingle Springs	12	Phillipsville	2
Contra Costa County		Smithflat	12	Redway	2
El Cerrito	3	Somerset	12	Richardson Grove	2
El Sobrante	3	All remaining 23 locations	16	Salmon Mountain	16

California Energy Commission Climate Zones

by County and City

Los Angeles County		Los Angeles County		Mariposa County	
Littlerock	14	Valyermo	14	Midpines	16
Llano	14	Venice	6	Pilot Peak	16
Lomita	6	Vernon	8	Usona	13
Long Beach	6/8	Vincent	14	Wawona	16
Los Angeles	8/9	Walnut Park	8	Yosemite Valley	16
Lynwood	8	West Athens	8	Yosemite Village	16
Malibu	6	West Carson	6	All remaining 15 locations	12
Manhattan Beach	6	West Compton	8		
Maywood	8	Westmont	8		
Monte Nido	6	Willow Brook	8	Mendocino County	
Mount San Antonio	16	Willowbrook	8	Albion	1
Mount Wilson	16	Wilsona Gardens	14	Anchor Bay	1
Norwalk	8	Zuma Canyon	6	Black Butte River	16
Pacific Palisades	6	All remaining 99 locations	9	Branscomb	1
Pacoima	16			Bruhel Point	1
Pacoima Canyon	16	Madera County		Caspar	1
Palmdale AP	14	Bass Lake	16	Cleone	1
Palos Verdes Estates	6	Mammoth Pool Reservoir	16	Comptche	1
Paramount	8	Mount Lyell	16	Elk	1
Pearblossom	14	North Fork	16	Etsel Ridge	16
Pearland	14	San Joaquin River (E Fork)	16	Fort Bragg	1
Point Dume	6	San Joaquin River (M Fork)	16	Gualala	1
Point Fermin	6	San Joaquin River (N Fork)	16	Gualala River (South Fork)	1
Pyramid Lake	16	San Joaquin River (S Fork)	16	Hales Grove	1
Quartz Hill	14	San Joaquin River (W Fork)	16	Inglenook	1
Rancho Palos Verdes	6	Sierra Nevada	16	Leech Lake Mountain	16
Redman	14	Wishin	16	Leggett	1
Redondo Beach	6	All remaining locations	13	Little River	1
Rolling Hills	6			Manchester	1
Rolling Hills Estates	6	Marin County		Mendocino	1
Rosamond Lake	14	Black Point	2	Point Arena	1
San Antonio Canyon	16	Burdell	2	Ranch	1
San Clemente Island	6	Corte Madera	2	Rockport	1
San Gabriel Mountains	16	Fairfax	2	Westport	1
San Gabriel River (West For	16	Forest Knolls	2	All remaining 34 locations	2
San Pedro	6	Hamilton A.F.B.	2		
San Pedro Bay	6	Kentfield	2	Merced County	
Sandberg	16	Larkspur	2	All locations	12
Santa Catalina Island	6	Nicasio	2		
Santa Monica	6	Novato	2	Modoc County	
Santa Monica Bay	6	Petaluma River	2	All locations	16
Santa Monica Mountains	6	Ross	2		
Saugus	6	San Anselmo	2	Mono County	
Signal Hill	6	San Quentin	2	All locations	16
South Gate	8	San Rafael	2		
Tarzana	6	Santa Venetia	2	Monterey County	
Tejon Pass	16	Woodacre	2	Alisal	3
Tejon Rancho	16	All remaining 26 locations	3	Alisal Slough	3
Three Points	14			Aromas	3
Topanga	6	Mariposa County		Bolsa Knolls	3
Topanga Beach	6	Buck Meadows	16	Carmel Highlands	3
Topanga Canyon	6	El Portal	16	Carmel Valley	3
Torrance	6	Fish Camp	16	Carmel-by-the-Sea	3
U.S.N. Facility, San Clement	6	Half Dome	16	Castroville	3
U.S.N. Shipyard, Long Beac	6	Merced River (South Fork)	16	Chualar	3
				Del Rey Oaks	3

California Energy Commission Climate Zones

by County and City

Monterey County		Orange County		Riverside County	
Elkhorn Slough	3	Laguna Niguel	6	Desert Hot Springs	15
Fort Ord	3	Newport Bay	6	Durmid	15
Gonzales	3	Newport Beach	6	Eagle Mountain	14
Gorda	3	San Clemente	6	Eagle Mountains	14
Lucia	3	San Juan Capistrano	6	Ford Dry Lake	15
Marina	3	Seal Beach	6	Fried Liver Wash	14
Monterey	3	South Laguna	6	Hayfield	14
Monterey Bay	3	Sunset Beach	6	Hayfield Lake	14
Moss Landing	3	Surfside	6	Idyllwild	16
Notleys Landing	3	U.S.N. Weapons Station, Se	6	Inca	15
Pacific Grove	3	Westminster	6	Indian Wells	15
Pebble Beach	3	All remaining 32 locations	8	Indio	15
Point Lobos	3			La Quinta	15
Point Sur	3	Placer County		Martinez Canyon	15
Posts	3	Applegate	11	McCoy Wash	15
Prunedale	3	Auburn	11	Mecca	15
Salinas	3	Bowman	11	Mesaville	15
Sand City	3	Clipper Gap	11	Midland	15
Seaside	3	Colfax	11	Mount Center	16
Soledad	3	Elders Corner	11	Mount San Jacinto	16
Spence	3	Granite Bay	11	Nicholls Warm Springs	15
Spreckels	3	Hidden Valley	11	Nightingale	16
U.S.N. Facility, Point Sur	3	Lincoln	11	North Palm Springs	15
All remaining 35 locations	4	Loomis	11	Oasis	15
		Meadow Vista	11	Palen Lake	15
Napa County		Newcastle	11	Palen Mountains	15
Berryessa Peak	2/12	North Auburn	11	Palm Canyon	15
All remaining locations	2	Penryn	11	Palm Desert	15
		Rocklin	11	Palm Desert Country	15
Nevada County		Roseville	11	Palm Springs	15
Cedar Ridge remaining	11	Sheridan	11	Palo Verde Valley	15
Chicago Park remaining	11	Weimar	11	Pinkham Wash	15
French Corral remaining	11	Whitney	11	Pinto Mountains	14
Grass Valley remaining	11	All remaining 27 locations	16	Pinto Wash	14
Higgins Corner remaining	11			Porcupine Wash	14
La Barr remaining	11	Plumas County		Rancho Mirage	15
Nevada City remaining	11	All locations	16	Rice Valley	15
North Columbia remaining	11			Ripley	15
North San Juan remaining	11	Riverside County		Salton Sea	15
Penn Valley remaining	11	Anza	16	San Gorgonio Pass	15
Pilot Peak remaining	11	Banning	15	San Gorgonio River	15
Rough and Ready remaining	11	Big Maria Mountains	15	San Jacinto Mountains	15
All remaining 16 locations	16	Blythe	15	Santa Rosa Mountains	15
		Box Canyon	15	Smoke Tree Wash	14
Orange County		Cabazon	15	Thermal	15
Capistrano Beach	6	Cahuilla	16	Thomas Mountain	16
Corona Del Mar	6	Cathedral City	15	Thousand Palms	15
Costa Mesa	6	Chiriaco Summit	14	White Water	15
Dana Point	6	Chuckwalla Mountains	14	All remaining 48 locations	10
Emerald Bay	6	Chuckwalla Valley	15		
Fountain Valley	6	Coachella	15	Sacramento County	
Huntington Beach	6	Coachella Valley	15	All locations	12
John Wayne AP	6	Deep Canyon	15		
La Habra	9	Desert Beach	15	San Benito County	
Laguna Hills	6/8	Desert Center	15	All locations	4

California Energy Commission Climate Zones

by County and City

San Bernardino County		San Bernardino County		San Diego County	
Alta Loma	10	Rialto	10	Julian	14
Amboy	15	Rice	15	Lake Henshaw	14
Bagdad	15	Running Springs	16	Lakeside	10
Big Bear City	16	Saltmarsh	15	Live Oak Springs	14
Big Bear Lake	16	Saltus	15	Loert Otay Reservoir	10
Black Meadow Landing	15	San Bernardino	10	Lower Bear River Reservoir	16
Bloomington	10	San Bernardino Mountains	16	Margarita Peak	10
Bristol Lake	15	San Gorgonio Mountain	16	Mesa Grande	14
Cadiz	15	Seven Oaks	16	Monument Peak	14
Cadiz Lake	15	Silverwood Lake	16	Morena Village	14
Cadiz Valley	15	Upland	10	Mount Laguna	14
Cajon Junction	16	Vidal	15	Oak Grove	14
Cajon Summit	16	Vidal Junction	15	Ocotillo Wells	15
Camp Angelus	16	Vidal Valley	15	Pala	10
Chambless	15	Vidal Wash	15	Palomar Mountain	14
Chino	10	Whipple Mountains	15	Pauma Valley	10
Chino Hills	10	Whitewater River (North For)	16	Pine Valley	14
Chubbuck	15	Whitewater River (South For)	16	Potrero	14
Colorado River	15	Wrightwood	16	Poway Valley	10
Colton	10	Yucaipa	10	Rainbow	10
Crestline	16	All remaining 138 locations	14	Ramona	10
Cross Roads	15			Ranchita	14
Cucamonga	10	San Diego County		Rancho Bernardo	10
Danby Lake	15	Agua Caliente Springs	15	Rancho San Diego	10
Del Rosa	16	Alpine	10	San Diego	7/10
Devore	10	Barona	10	San Felipe	14
Earp	15	Barrett Dam	10	San Luis Rey River (West Fr)	14
East Highlands	10	Barrett Junction	10	San Marcos	10
Fawnskin	16	Bonsall	10	San Mateo Canyon	10
Fontana	10	Borrego	15	San Onofre Canyon	10
Forest Falls	16	Borrego Springs	15	San Pasqual	10
Grand Terrace	10	Bostonia	10	San Vicente Reservoir	10
Green Valley Lake	16	Boulevard	14	San Ysidro Mountains	10
Grommet	15	Camp Pendleton	10	Santa Ysabel	14
Havasu Lake	15	Campo	14	Santee	10
Highland	10	Casa de Oro, Mount Helix	10	Spring Valley	10
Java	15	Cuyamaca Peak	14	Suncrest	10
Lake Arrowhead	16	De Luz	10	Sweetwater Reservoir	10
Lake Havasu	15	Del Dios	10	Tecate	14
Loma Linda	10	Descanso	14	Tierra del Sol	14
Los Serranos	10	Dos Cabezas	15	Valley Center	10
Lytle Creek	16	Duguyños Canyon	15	Warner Springs	14
Mentone	10	Dulzura	10	Wynola	14
Milligan	15	El Cajon	10	All remaining 43 locations	7
Montclair	10	El Capitan Reservoir	14		
Mount Baldy	16	Encanto	10	San Francisco County	
Mount San Antonio	16	Escondido	10	Farallon Island	1
Muscoy	10	Fallbrook	10	All remaining locations	3
Needles	15	Fernbrook	10		
Norton AFB	10	Guatay	14	San Joaquin County	
Ontario	10	Harbinson Canyon	10	All locations	12
Parker Dam	15	Henshaw Dam	10		
Prado Flood Control Basin	10	Jacumba	14		
Rancho Cucamonga	10	Jacumba Mountains	15		
Redlands	10	Jamul	10		

California Energy Commission Climate Zones

by County and City

San Luis Obispo County		Santa Barbara County		Solano County	
Arroyo Grande	5	All remaining locations	5	All remaining locations	12
Avila Beach	5				
Baywood Park	5				
Cambria	5	Santa Clara County			
Cayucos	5	Calaveras Reservoir 12/4	12/4	Sonoma County	
Edna	5	All remaining locations	4	Annapolis	1
Estero Bay	5				
Grover Beach	5	Santa Cruz County			
Grover City	5	All locations	3	Bodega	1
Harmony	5				
Huasna	5	Shasta County			
Huasna River	5	Big Bend	16	Bodega Bay	1
Irish Hills	5	Big Lake	16	Bodega Head	1
Lopez Lake	5	Bollibokka Mountain	16	Cazadero	1
Los Berros Canyon	5	Burney	16	Duncans Mills	1
Los Osos	5	Burney Mountain	16	Fort Ross	1
Morro Bay	5	Cassel	16	Jenner	1
Nipomo	5	Castella	16	Ocean View	1
Oceano	5	Cayton	16	Plantation	1
Pismo Beach	5	Dana	16	Soda Springs	1
Point Buchon	5	Delta	16	Stewarts Point	1
Point Piedras Blancas	5	Fall River	16	All remaining locations	2
San Luis Obispo	5	Fall River Mills	16	Stanislaus County	
San Luis Obispo Bay	5	Glenburg	16	All locations	12
San Simeon	5	Hat Creek	16	Sutter County	
Santa Maria River	5	Knob	16	All locations	11
Whale Rock Reservoir	5	Lake Britton	16	Tehama County	
All remaining 34 locations	4	Lakehead	16	Barkley Mountain	16
San Mateo County		Lamoine	16	Lyonsville	16
All locations	3	Lassen Peak	16	Manton	16
Santa Barbara County		Manzanita Lake	16	Mill Creek	16
Cuyama	4	McArthur	16	Mineral	16
Cuyama Valley	4	McCloud River	16	North Yolla Bolly Mountains	16
New Cuyama	4	Montgomery Creek	16	Saint Bernard	16
Ventupopa	4	Obie	16	South Yolla Bolly Mountains	16
Capitan	6	O'Brien	16	All remaining locations	11
Carpinteria	6	Old Station	16	Trinity County	
Concepcion	6	Pittville	16	Island Mountain	2
Drake	6	Round Mountain	16	Kekawaka	2
Gaviota	6	Shasta Lake	16	Kettenpom	2
Gaviota Pass	6	Shingletown	16	Zenia	2
Goleta	6	Trinity Mountains	16	All remaining locations	16
Isla Vista	6	Viola	16	Tulare County	
Montecito	6	All remaining 34 locations	11	California Hot Springs	16
Naples	6				
Point Conception	6	Sierra County			
San Miguel Island	6	All locations	16	Camp Nelson	16
Santa Barbara	6				
Santa Barbara Island	6	Siskiyou County			
Santa Cruz Island	6	All locations	16	Fairview	16
Santa Rosa Islands	6				
Summerland	6	Solano County			
Tajiguas	6	Mare Island Naval Facility	3	Florence Peak	16
		Monticello Dam 2		Giant Forest	16
		U.S.N. Facility, Vallejo	3	Grant Grove	16
		Vallejo	3	Greenhorn Mountains	16
				Johnsondale	16
				Kaweah River (Middle fork)	16
				Little Kern River	16
				Mineral King	16
				Mount Whitney	16
				Olancha Peak	16

California Energy Commission Climate Zones

by County and City

Tulare County		Ventura County		Yolo County	
Pine Flat	16	Apache Canyon	16	Berryessa Peak	2/12
Sherman Peak	16	Bardsdale	9	All remaining locations	12
Silver City	16	Casitas Springs	9		
Tobias Peak	16	Cuddy Canyon	16		
Wilsonia	16	Dry Canyon	16	Yuba County	
Yucca Mountain	16	Fillmore	9	Camptonville	16
All remaining locations	13	Frazier Mountain	16	Challenge	16
		Lake Casitas	9	Middle Yuba River	16
Tuolumne County		Meiners Oaks	9	New Bullards Bar Reservoir	16
Big Oak Flat	12	Moorpark	9	North Yuba River	16
Chinese Camp	12	Mount Pinos	16	Oregon Peak	16
Columbia	12	Newbury Park	9	Strawberry Valley	16
Groveland	12	Oak Ridge	9	Woodleaf	16
Hetch Hetchy Junction	12	Oak View	9	All remaining locations	11
Jacksonville	12	Ojai	9		
Jamestown	12	Pine Mountain	16		
Melones Reservoir	12	Piru	9		
Mi-Wuk Village	12	Quatal Canyon	16		
Moccasin	12	Santa Clara River	6/9		
New Don Pedro Reservoir	12	Santa Paula	9		
Sonora	12	Santa Susana	9		
Soulsbyville	12	Sespe	9		
Standard	12	Simi Valley	9		
Stent	12	Sulphur Springs	9		
Tuolumne	12	Thousand Oaks	9		
Tuttletown	12	Wheeler Springs	16		
Twain Harte	12	All remaining locations	6		
All remaining locations	16				

CEC Climate Zones will be used with the new energy audit tool.

**FIRST AMENDED PROGRAMMATIC AGREEMENT
AMONG THE CALIFORNIA ENERGY COMMISSION,
THE DEPARTMENT OF COMMUNITY SERVICES AND DEVELOPMENT,
THE UNITED STATES DEPARTMENT OF ENERGY, AND
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING SECTION 106 COMPLIANCE FOR DEPARTMENT OF ENERGY
AMERICAN RECOVERY AND REINVESTMENT ACT PROGRAMS**

WHEREAS, the United States Department of Energy (DOE) administers the *Energy Efficiency and Conservation Block Grant Program* under the Energy Independence and Securities Act of 2007 (EECBG), administers the *State Energy Program* under the Energy Policy and Conservation Act of 1975 and the State Energy Efficiency Programs Improvement Act of 1990 (SEP), and administers the Weatherization Assistance Program (WAP) for low-income persons under Title IV of the Energy Conservation and Production Act, the Energy Policy Act of 2005, and the Energy Independence and Security Act of 2007, and provides financial assistance for the EECBG, SEP, and WAP under the American Recovery and Reinvestment Act of 2009 (ARRA); collectively referred to as the "DOE ARRA" programs; and

WHEREAS, the unprecedented levels of funding available to the DOE ARRA programs has created a large volume of projects requiring expedited historic preservation reviews to ensure the timely obligation of funds, that create new jobs, and improve local and state economies; and

WHEREAS, the California State Office of Historic Preservation (OHP) is experiencing unprecedented numbers of requests for historic preservation review of undertakings funded by all Federal Agencies, including undertakings funded by the DOE ARRA programs; and

WHEREAS, the California State Energy Resources Conservation and Development Commission (Energy Commission) and the California Department of Community Services and Development (CSD) are receiving financial assistance from DOE to carry out the DOE ARRA programs; and

WHEREAS, the projects funded by the DOE ARRA programs are undertakings subject to review under Section 106 of the National Historic Preservation Act, 16 USC 470f (NHPA) and its implementing regulations at 36 CFR Part 800 and include energy efficiency retrofits, renewables, and weatherization (undertakings); and

WHEREAS, the DOE's August 28, 2009 *Memorandum from Office of Energy Efficiency and Renewable Energy Regarding Delegation of Authority for Section 106 Review of Undertakings, Assisted by the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy* authorizes recipients of DOE ARRA program awards to initiate consultation with the California State Historic

Preservation Officer (SHPO) pursuant to Section 106 of the National Historic Preservation Act of 1966 (16 USC 470f), as amended, and implementing regulations in 36 CFR Part 800, and to carry out steps with the SHPO in that regulatory process; and

WHEREAS, the Energy Commission, CSD, and the DOE have determined that the administration of the DOE ARRA programs may have the potential to adversely affect properties included in or eligible for inclusion in the National Register of Historic Places (National Register), historic properties, and has consulted with the SHPO pursuant to 36 CFR § 800.14(b)(3) and DOE's aforementioned August 28, 2009 *Memorandum Regarding Delegation of Authority for Section 106 Review*; and

WHEREAS, the Energy Commission's consultation with the SHPO resulted in an interim agreement between the Energy Commission and the SHPO, dated December 29, 2009, that established an expedited review process for exempt undertakings not subject to the SHPO's direct review, and a subsequent programmatic agreement between the Energy Commission and SHPO, dated February 19, 2010, that clarified and more formally memorialized the review process for exempt undertakings not subject to the SHPO's direct review; and

WHEREAS, Section XI of the February 18, 2010, programmatic agreement between the Energy Commission and the SHPO contemplates amendments to the agreement from time to time to better clarify and identify exempt undertakings not subject to the SHPO's review; and

WHEREAS, the Energy Commission, CSD, the DOE, and the SHPO now desire to amend the February 18, 2010 programmatic agreement to add CSD and the DOE as parties and to further clarify the review process, identify additional exempt undertakings not subject to the SHPO review, and to conform the programmatic agreement to subsequent guidance by the DOE; and

WHEREAS, the Energy Commission, CSD, the DOE, and SHPO agree to amend the February 18, 2010 programmatic agreement.

NOW THEREFORE, the Energy Commission, CSD, the DOE, and SHPO agree that the DOE ARRA programs will be administered in accordance with the following stipulations in order to take into account the effects of the undertakings proposed under these programs on historic properties, and further agree that these stipulations shall govern the administration of these programs until this Agreement is amended, expires, or is terminated.

STIPULATIONS

The Energy Commission, CSD, and the DOE shall ensure that the following measures are carried out:

I. APPLICABILITY OF AGREEMENT

- A. The review process established by this Agreement will be completed prior to any property owner altering any property eligible for assistance under the subject DOE ARRA programs. The review process may take place after the Energy Commission, CSD, or the DOE have awarded DOE ARRA program funds for a particular program, project or undertaking, but must occur prior to the commencement of any work on the particular program, project or undertaking. Any program, project, or undertaking will be reviewed in accordance with the procedures outlined in 36 CFR Part 800.
- B. Attachment A establishes categories of individual undertakings under the DOE ARRA programs that are exempt from SHPO review. These individual undertakings are not expected to be on Tribal lands and are primarily smaller scale activities and routine projects, without the potential for adversely affecting historic properties, rather than complex undertakings with a greater potential to adversely affect historic properties. The Energy Commission, CSD and the DOE shall perform the following review to determine whether a particular undertaking qualifies for a review exemption under Attachment A.

1. Energy Commission Review.

The Energy Commission shall review documentation from applicants for DOE ARRA program funds to verify that individual undertakings qualify for review exemption under Attachment A, report such exemptions to the SHPO in accordance with stipulation VIII below, and retain that documentation for three (3) years. The applicant's documentation may include a certification by the applicant, a sub-grantee of the applicant, or the contractor conducting the project that the individual undertaking qualifies for a review exemption. It is understood by the SHPO that the Energy Commission review pursuant to this Agreement shall be performed by Energy Commission staff in the Cultural Resources Unit of the Environmental Protection Office of the Energy Commission's Siting, Transmission, and Environmental Protection Division, or by equivalent Energy Commission staff of similar qualifications, expertise, and experience in the Section 106 consultation process and that meet the Secretary of the Interior's Professional Qualifications Standards (36 CFR Part 61).

2. CSD Review.

The CSD shall review documentation from applicants for DOE ARRA program funds to verify that individual undertakings qualify for review exemption under Attachment A, report such exemptions to the SHPO in

accordance with stipulation VIII below, and retain that documentation for three (3) years. The applicant's documentation may include a certification by the applicant, a sub-grantee of the applicant, or the contractor conducting the project that the individual undertaking qualifies for a review exemption. It is understood by the SHPO that the CSD review pursuant to this Agreement shall be performed by CSD staff or consultant(s) having expertise in the Section 106 consultation process, and meeting the Secretary of the Interior's Professional Qualifications Standards (36 CFR Part 61), subject to SHPO approval.

3. DOE Review.

For other California recipients of DOE ARRA program funds (recipients other than the Energy Commission and CSD), recipients shall make documentation available to DOE to verify a recipient's individual undertakings qualify for review exemption under Attachment A. The recipient's documentation may include a certification by the recipient, a sub-grantee of the recipient, or the contractor conducting the project that the individual undertaking qualifies for a review exemption. DOE will provide the SHPO with an annual report in accordance with stipulation VIII below, and retain that documentation for three (3) years.

- C. Program-based undertakings that implement any of the individual undertakings identified in Attachment A are exempt from SHPO review. These program-based undertakings include retrofit projects in which the applicant does not know, at the commencement of the project, which buildings or structures will be retrofitted or which specific retrofit measures will be installed on such buildings or structures. The Energy Commission, CSD and the DOE shall perform the following review to determine whether a particular undertaking qualifies for a review exemption under Attachment A.

1. Energy Commission Review.

The Energy Commission shall review documentation from applicants that are awarded DOE ARRA program funds to verify that an individual undertaking under a program-based undertaking qualifies for a review exemption in accordance with Paragraph B. The applicant's documentation may include a certification by the applicant, a sub-grantee of the applicant, or the contractor conducting the retrofit project that the individual undertaking qualifies for a review exemption. The Energy Commission's review may take place after the applicant has been awarded DOE ARRA program funds, but must occur prior to the applicant's commencement of work on any undertakings. The applicant's award agreement from the Energy Commission shall be conditioned to preclude the applicant from commencing work on any proposed individual

undertaking until the Energy Commission has completed its review of the undertaking in accordance with Paragraph B.

2. CSD Review.

The CSD shall review documentation from applicants that are awarded DOE ARRA program funds to verify that an individual undertaking under a program-based undertaking qualifies for a review exemption in accordance with Paragraph B. The applicant's documentation may include a certification by the applicant, a sub-grantee of the applicant, or the contractor conducting the retrofit project that the individual undertaking qualifies for a review exemption. The CSD's review may take place after the applicant has been awarded DOE ARRA program funds, but must occur prior to the applicant's commencement of work on any undertakings. The applicant's award agreement from the CSD shall be conditioned to preclude the applicant from commencing work on any proposed individual undertaking until CSD has completed its review of the undertaking in accordance with Paragraph B.

3. DOE Review.

For other California recipients of DOE ARRA program funds (recipients other than the Energy Commission and CSD), recipients shall make documentation available to DOE to verify a recipient's individual undertakings qualify for review exemption under Attachment A. The recipient's documentation may include a certification by the recipient, a sub-grantee of the recipient, or the contractor conducting the retrofit project that the individual undertaking qualifies for a review exemption.

II. AREA OF POTENTIAL EFFECTS

For purposes of the Section 106 consultation of non-exempt undertakings, the Area of Potential Effects (APE) will be limited to the individual building when an undertaking is limited to the weatherization, rehabilitation, and/or improvement of the existing building. If construction of exterior additions or the expansion of an existing building is anticipated, the APE shall be expanded to include surrounding historic properties that may be visually impacted.

For DOE ARRA programs where undertaking implementation would include the construction or modification of ancillary facilities exterior to existing buildings or structures, the APE shall include the subject existing buildings and structures, the associated ancillary facilities, historic properties in the viewshed of the existing buildings and structures and the ancillary facilities, and any ground, the disturbance of which is requisite to the implementation of a proposed undertaking.

III. IDENTIFICATION OF HISTORIC PROPERTIES

When conducting their respective reviews of non-exempt undertakings, the Energy Commission, CSD and the DOE will initiate the Section 106 review process by studying all existing and pertinent information on all properties in an APE, including review of the National Register, local inventories, and records housed at the California Historical Resources Information System (CHRIS) regarding those properties which have been determined to be historic properties, either individually, as part of a historic district, or as part of a multiple property nomination. If an APE expands beyond an individual building and other properties in that APE have not been surveyed, the Energy Commission, CSD and the DOE will cause the applicant for DOE ARRA program funds to conduct an inventory effort consistent with 36 CFR § 800.4(b)(1). When considering the results of any such inventory effort,

- A. a property listed in the National Register is an historic property and subject to an assessment of the potential effects of an undertaking on it,
- B. if the agency official determines any of the National Register Criteria are met and the SHPO agrees, the property shall be considered eligible for the National Register for Section 106 purposes. If the agency official and the SHPO do not agree, or if the Council or the Secretary so request, the agency official shall obtain a determination of eligibility from the Secretary pursuant to 36 CFR Part 63.
- C. a property determined, pursuant to 36 CFR § 800.4(c)(2), to be ineligible for inclusion in the National Register in the last five (f) years is not historic and the property will not be subject to further review.

IV. ASSESSMENT OF EFFECTS

- A. When conducting their respective reviews, the Energy Commission, CSD and the DOE will assess, pursuant to 36 CFR §§ 800.4(d)(1) and 800.5(a) and (b), the potential effects of each nonexempt undertaking on historic properties, and will review the scope of work for each such undertaking to determine whether the undertaking would conform to the recommended approaches contained in the Secretary of the Interior's Standards for the Treatment of Historic Properties (Standards).
 - 1. If the Energy Commission, CSD, or the DOE find, pursuant to 36 CFR § 800.4(d)(1), that an undertaking would affect no historic properties, either because there are no historic properties present, or no historic properties will be impacted physically or visually, the Energy

Commission, CSD or the DOE will notify the applicant for that undertaking of that finding, and, upon receipt of the notification, the applicant will be able to proceed with the implementation of the subject undertaking, as submitted, without further review.

2. If the Energy Commission, CSD, or the DOE find, pursuant to 36 CFR § 800.5(b), that an undertaking would not adversely affect historic properties, because it will have only a minor impact and conforms to the Standards, the Energy Commission, CSD or the DOE will notify the applicant for that undertaking of that finding, and, upon receipt of the notification, the applicant will be able to proceed with the implementation of the subject undertaking, as submitted, without further review.
3. If the Energy Commission, CSD or the DOE is unable, pursuant to 36 CFR §§ 800.5(a) and (b), to find that an undertaking would not adversely affect historic properties, the Energy Commission, CSD or the DOE may recommend to the applicant for an undertaking modifications on the scope of work or conditions under which the project would be found to conform to the Standards, the Energy Commission, CSD or the DOE will subsequently forward all documentation on the subject undertaking to the SHPO for further review.
4. If the Energy Commission, CSD or the DOE believe, in accordance with 36 CFR § 800.5(d)(2), that an undertaking would adversely affect historic properties, because it will have a major impact to such properties and does not conform to the Standards, the Energy Commission, CSD and the DOE will subsequently forward all documentation on the subject undertaking to the SHPO for further review and consultation for purposes of addressing adverse effects.

V. ENERGY COMMISSION, CSD AND DOE RESPONSIBILITIES

A. Energy Commission Responsibilities.

1. The Energy Commission will require sub-grantees of DOE ARRA program funds to retain access to pre- and post-documentation of completed DOE ARRA program-funded work, including the work write-ups and photographs as part of its permanent project records.
2. The Energy Commission will monitor every program for compliance with this Agreement according to established guidelines.
3. The energy Commission will notify SHPO of any changes to an approved scope of work, other than exempted activities, and will

provide SHPO with the opportunity to review and approve such changes.

B. CSD Responsibilities.

1. The CSD will require sub-grantees of DOE ARRA program funds to retain access to pre- and post-documentation of completed DOE ARRA program-funded work, including the work write-ups and photographs as part of its permanent project records.
3. The CSD will monitor every program for compliance with this Agreement according to established guidelines.
4. The CSD will notify SHPO of any changes to an approved scope of work, other than exempted activities, and will provide SHPO with the opportunity to review and approve such changes.

C. DOE Responsibilities.

1. The DOE will require grantees of DOE ARRA program funds to retain access to pre- and post-documentation of completed DOE ARRA program-funded work, including the work write-ups and photographs as part of its permanent project records.
2. The DOE will monitor every program for compliance with this Agreement according to established guidelines.
3. The DOE or its recipients will notify SHPO of any changes to an approved scope of work, other than exempted activities, and will provide SHPO with the opportunity to review and approve such changes.

VI. SHPO RESPONSIBILITIES

- A. SHPO is permitted thirty (30) calendar days after the receipt of any submitted documentation to review and comment on such material. If the SHPO fails to respond within 30 days of receipt of request for review of a finding or determination, the agency official may either proceed to the next step in the process based on the finding or determination or consult with the Council in lieu of the SHPO in accordance with 36 CFR § 800.3(c)(4).

VII. DISCOVERIES AND UNFORESEEN EFFECTS

If, during the implementation of the DOE ARRA programs, a previous unidentified property that may be eligible for inclusion in the National Register is encountered, or is affected in an unanticipated manner, the

Energy Commission, CSD, or the DOE will consult with the SHPO pursuant to 36 CFR § 800.13(b).

VIII. REPORTING

A. Energy Commission and CSD Reporting.

In order to satisfy their respective responsibilities under this Agreement, the Energy Commission and CSD will forward to the SHPO, by the tenth calendar day following the last day of each calendar quarter, a report of all review exemptions verified and all reviews completed for undertakings covered by the terms of this Agreement. The exemptions and reviewed undertakings should be listed by the property address including city and/or county, and should include the original construction date of the property and the type of project.

B. DOE Reporting.

In order to satisfy their respective responsibilities under this Agreement, the DOE will forward to the SHPO within 30 calendar days following the last day of the calendar year, a report of all review exemptions verified and all reviews completed for undertakings covered by the terms of this Agreement. The exemptions and reviewed undertakings should be listed by the property address including city and/or county, and should include the original construction date of the property and the type of project.

IX. MONITORING

SHPO may monitor any activities carried out pursuant to this Agreement. The Energy Commission, CSD and the DOE will cooperate with SHPO in carrying out these monitoring and review responsibilities.

X. DISPUTE RESOLUTION

If the Energy Commission, CSD or the DOE are unable to resolve any disagreement with SHPO arising under the provisions of this Agreement, the Energy Commission, CSD or the SHPO will, unless the dispute relates to the National Register eligibility of any property, forward full documentation regarding the project, the basis for the dispute, and initiate consultation with the Advisory Council on Historic Preservation (Council) in accordance with 36 CFR § 800.2(b)(2).

XI. AMENDMENTS

Any signatory to this Agreement may request that it be amended, whereupon the parties will consult with each other. No amendment to this

Agreement will be come effective without the written concurrence of all signatories.

It is contemplated by the parties that Attachment A of the Agreement may be revised from time to time to better clarify and identify exempt undertakings not subject to the SHPO's direct review and consultation. The parties agree that Attachment A may be revised without having to formally amend the Agreement. All such revisions to Attachment A shall be approved in writing by the parties and shall take effect upon approval.

XII. TERMINATION

- A. Any party to this Agreement may terminate the Agreement by providing thirty (30) days notice to the other signatory, provided that the signatories consult during the period prior to the termination to seek agreement on amendments or other actions that would avoid termination.
- B. In the event of termination, the Energy Commission, CSD and the DOE will ensure compliance with 36 CFR §§ 800.4-6 with respect to individual undertakings covered by this Agreement that are subject to their respective reviews.

XIII. FAILURE TO COMPLY WITH TERMS OF AGREEMENT

In the event that the terms of this Agreement cannot be carried out by the Energy Commission, CSD or the DOE, no action will be taken or sanction of any action or any irreversible commitment by the Energy Commission, CSD or the DOE that would result in an adverse effect to historic properties or would foreclose the Council's consideration of modifications or alternatives to any DOE ARRA program undertaking.

XIV. LIABILITY LIMITATIONS

- A. Energy Commission and CSD Limitations.

In the event that the terms of this Agreement are not carried out by sub-grantees of the DOE ARRA program funds as indicated in work plans submitted to the Energy Commission or CSD, the sub-grantee will assume all responsibility for any undertaking as indicated in its respective agreement with the Energy Commission or CSD.

- B. DOE Limitations.

In the event that the terms of this Agreement are not carried out by grantees of the DOE ARRA program funds as indicated in work plans

submitted to the DOE, the grantee will assume all responsibility for any undertaking as indicated in its agreement with the DOE.

XV. DURATION OF THE AGREEMENT

- A. Unless terminated pursuant to stipulation XII, or an amended Agreement supersedes it, this Agreement will be in effect following execution by the signatory parties until the Energy Commission, CSD or the DOE, in consultation with the other signatories, determines that all of their respective stipulations have been satisfactorily fulfilled as concurred by the SHPO. This Agreement will terminate as to the Energy Commission, CSD or the DOE, and have no further force or effect with respect to this party, on the day that the party notifies the other signatory in writing of the party's determination that all stipulations of this Agreement have been satisfactorily fulfilled.
- B. The terms of this Agreement shall be satisfactorily fulfilled within five years following the date of execution by the signatory parties. If the Energy Commission, CSD or the DOE determine that this requirement cannot be met, the signatories to the Agreement will consult to reconsider its terms. Reconsideration may include continuation of the Agreement as originally executed, amendment of the Agreement, or termination. In the event of termination, the parties will comply with subpart B of stipulation XII if the parties determine that the administration of the DOE ARRA programs will proceed notwithstanding termination of the Agreement.
- C. If the administration of DOE ARRA programs is not complete five years following execution of this Agreement by the signatory parties, this Agreement shall automatically terminate and have no further force or effect. In such event, the Energy Commission, CSD and the DOE shall notify the SHPO in writing and, if it chooses to continue with the administration of DOE ARRA programs, shall reinstate the review of such programs in accordance with 36 CFR Part 800.

XVI. EFFECTIVE DATE

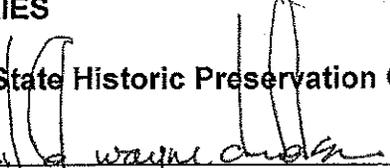
Amendment 1 of this Agreement will take effect on the date that it has been executed by the SHPO, the Energy Commission, CSD, and the DOE.

EXECUTION AND IMPLEMENTATION OF Amendment 1 of this Agreement, pursuant to 36 CFR § 800.14(b)(3), including its transmittal by the DOE to the Council in accordance with 36 CFR § 800.6 (b)(1)(iv), shall evidence that the DOE, the Energy Commission and the CSD, have taken into account the effects of the administration of DOE ARRA programs on historic properties in order to avoid, minimize, or mitigate any adverse effects on such properties and thereby

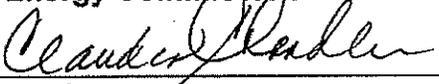
comply with Section 106 of the NHPA, and shall further evidence that the DOE has afforded the Council an opportunity to comment on the administration of DOE ARRA programs and their effects on historic properties.

SIGNATORIES

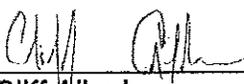
California State Historic Preservation Officer

By:  Date: 19 MAY 2010
Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

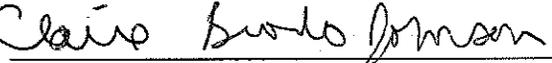
California Energy Commission

By:  Date: 5/19/2010
Melissa Jones
Executive Director

Department of Community Services and Development

By:  Date: 5-19-10
Cliff Allenby
Interim Director

**United States Department of Energy
Office of Energy Efficiency and Renewable Energy**

By:  Date: 5/24/10
Clair Broido Johnson
Acting Program Manager
Weatherization and Intergovernmental Program
Energy Efficiency and Renewable Energy

ATTACHMENT A

EXEMPT UNDERTAKINGS – UNDERTAKINGS NOT REQUIRING REVIEW BY SHPO

- A. ***Properties Less than Forty Five Years Old.*** Undertakings affecting only properties less than forty five (45) years old at the time the work takes place; provided it has not been determined to be eligible under National Register Criterion Consideration G for exceptional significance (36 CFR 60.4).
- B. ***Undertakings for Planning, Training and Educational Purposes***
1. Undertakings to fund regional workforce development programs focused on occupations in energy efficiency, water efficiency, renewable energy (distributed generation and utility-scale), and alternative and renewable transportation technologies.
 2. Undertakings to support existing clean energy job training for new hires and retraining programs for incumbent workers.
 3. Undertakings to fund energy efficiency, water efficiency, and renewable energy training for incumbent and new workers to add new skills to their professional toolbox.
 4. Undertakings to support state planning and energy assurance capabilities by improving state emergency preparedness plans and ensure quick recovery and restoration from any energy supply disruptions.
 5. Undertakings to fund training for energy infrastructure and supply systems, and conduct and participate in state and regional energy and emergency exercises.
 6. Undertakings to conduct residential and commercial building energy audits or assessments.
 7. Undertakings for the design and operation of programs to educate the public, identify the most effective methods for achieving the maximum participation and efficiency rates, establish measurement and verification protocols, and identify energy efficient technologies for possible implementation.
 8. Undertakings to develop and implement programs to conserve energy used in the transportation sector, including the use of flex time by employers, use of satellite work centers, development and promotion of zoning guidelines or requirements that promote energy efficient development, and synchronization of traffic signals.
 9. Undertakings to develop and implement building codes and inspection services, and associated training and enforcement of such codes in order to support code compliance and promote building energy efficiency.
- C. ***Building Interiors***

General Interior Work:

1. Undertakings limited to the interior spaces of properties not listed in the National Register where the work will not be visible from the exterior of the building.
2. Repairing or upgrading electrical or plumbing systems, installing fire, smoke or carbon dioxide detectors and alarms, and installing mechanical equipment, in a manner that does not affect the exterior of the building.
3. Conducting weatherization or energy conservation activities such as air sealing and insulating walls, ceilings, floors, attics, roofs, crawl spaces, ducts and foundations, provided repairs are made by a qualified contractor using current best practices.
 - a. Wall insulation – in terms of materials, blown in cellulose insulation, treated with fire-retardant salts is permitted. Spray foams should only be used in discrete locations for air-sealing and never for filling cavity walls. Urethane foams are not to be used. For moisture laden conditions and moisture vapor, more research should be conducted before in-wall insulation is used, refer to www.ohp.parks.ca.gov (go to sustainability).
4. Undertakings to replace existing residential appliances with new California-qualified residential ENERGY STAR® appliances, where the new appliances must replace appliances of the same type (AC for AC, clothes washer for clothes washer, etc.) and the replaced appliance must be properly recycled.
5. Undertakings to replace lighting in buildings with energy efficient technologies, where only the lighting equipment is replaced and there are no ground disturbances.
6. Undertakings to replace existing heating, ventilation, and air conditioning equipment, electric motors, lighting, and lighting controls with more energy efficiency equipment, where only the equipment is replaced and there are no changes to the building or structure or ground disturbance.
7. Undertakings to install dual technology occupancy sensors to control lighting for intermittently occupied spaces.
8. Undertakings to install variable frequency drives (VFDs) for electric motors, fans, and pumps.
9. Undertakings to install vending machine controls to conserve energy.
10. Undertakings to install programmable thermostats or integrated landscaping control systems to conserve energy.
11. Undertakings to install sensors and equipment controls for purposes of increasing energy efficiency.
12. Lead based paint abatement in accordance with the Standards and Preservation Brief #37.

Energy Efficiency Work with the Building Shell:

Special Note: Any work involving ground-disturbing activities requires SHPO review.

1. Performing plumbing work, including installation of water heaters, water heater tank and pipe insulation, and energy and water efficient distribution systems and controls.
2. Performing electrical work, including improving lamp efficiency, installing task/ambient lighting systems, installing lighting controls, and installing whole house fans and ceiling fans.
3. Sealing air leaks using weather stripping, doors sweeps, and caulk, and testing for and sealing of major air leaks within the building envelope and air delivery system.
4. Repair or replace water heaters, hot water distribution systems and controls.
5. Adding adjustable speed capability, such as on HVAC system distribution fans, cooling tower fans, and pumps.
6. Install insulation on water heater tanks and water distribution pipes and refrigerant lines.
7. Install solar water heating systems, provided the structure is not visible from the public right-of-way.
8. Install waste heat recovery devices, including desuperheater water heaters, condensing heat exchangers, heat pump and water heating heat recovery systems, and other energy recovery equipment.
9. Repair or replace electric motors and motor controls, such as variable speed drives.
10. Incorporate other lighting technologies, such as dimmable ballasts, day lighting controls, and occupant controlled dimming.
11. Lead based paint abatement in accordance with the Standards and Preservation Brief #37.
12. Building cleaning in accordance with the Standards and Preservation Briefs #1, #6, and #10.

Work on Heating and Cooling Systems:

Special Note: Any work involving ground-disturbing activities requires SHPO review.

1. Clean, tune, repair or replace heating systems, including furnaces, boilers, heat pumps, vented space heaters, and wood stoves.
2. Clean, tune, repair or replace cooling systems, including central air conditioners, window air conditioners, heat pumps, and evaporative coolers, and system components, to save energy and water.
3. Install insulation on ducts, heating system distribution pipes and air conditioner refrigerant lines.
4. Conduct other efficiency improvements on heating and cooling systems, including replacing standing pilot lights with electronic ignition devices and installing vent dampers, correcting improper refrigerant charge, and correcting improper airflow.

5. Modify duct and pipe systems so heating and cooling systems operate efficiently and effectively, including adding return ducts, replacing diffusers and registers, replacing air filters, installing thermostatic radiator controls on steam and hot water heating systems; provided interior of historic structures is not affected.
6. Install programmable thermostats, outdoor reset controls, UL listed energy management systems or building automation systems and other HVAC control systems.
7. Repairing or upgrading electrical or plumbing systems and installing mechanical equipment, in a manner that does not permanently change the appearance of the interior or exterior of the building.

Energy Efficiency Work Affecting the Electric Base Load of the Property:

1. Convert incandescent lighting to fluorescent or other high efficacy light source.
2. Add reflectors, LED exit signs, efficient HID fixtures, daylighting, occupancy (motion) sensors and other lighting controls that reduce lighting energy use.
3. Replace refrigerators and other appliances, replace or install controls or make other efficiency improvements to commercial refrigeration systems and to other equipment installed in nonresidential buildings.

Health and safety measures:

1. Installing fire, smoke or carbon dioxide detectors/alarms.
2. Repair or replace vent systems on fossil-fuel-fired heating systems and water heaters to ensure that combustion gasses draft safely to outside, including combustion safety testing.
3. Install mechanical ventilation, in a manner not visible from the public right-of-way, to ensure adequate indoor air quality.

D. Roofing

1. Repairing or replacing roofing with materials that closely match the historic materials and form, or with materials that restore the original feature based on historic evidence, and in a manner that does not alter the roofline.
2. Installing continuous ridge vents covered with ridge shingles or boards, or roof jacks/vents, bath and kitchen fan vents, gable vents, soffit and frieze board vents, and combustion appliance flues, if not located on a primary roof elevation or visible from the public right-of-way.
3. Installing reflective roof coating in a manner that closely resembles the historic materials and form, or with materials that restore the original feature based on historic evidence, and in a manner that does not alter the roofline, or where not on a primary roof elevation or visible from the public right-of-way.

4. Installation or replacement of downspout extensions, provided that the color of the extensions is historically appropriate for the period and style of the property.
5. Installing integrated shingle style or thin film solar systems on the rear roof of the structure, behind the parapet or not visible from the public right-of-way.
6. Repair of minor roof and wall leaks prior to insulating attics or walls, provided repairs closely resemble existing surface composite.

E. Exterior painting

1. Painting exterior surfaces unless the property is subject to review by SHPO under PRC 5024 and 5024.5 or by local landmark ordinance provisions, provided destructive surface preparation treatments, including, but not limited to, water-blasting, sandblasting and chemical removal, are not used.
2. Conducting Lead-based Paint Abatement of "Management in Place" activities carried out by a qualified contractor using current best practices and methods that are consistent with the preservation techniques in *Preservation Brief #37: Appropriate Methods for Reducing Lead-Paint Hazards in Historic Housing*.

F. Masonry

1. Power-washing exterior masonry performed by a qualified contractor at no more than 300 psi with mild detergent, using current best practices and methods that are consistent with the preservation techniques in *Preservation Brief #1: The Cleaning and Waterproof Coating of Masonry Buildings*.
2. Repairing masonry, including repointing, and rebuilding chimneys if the joints are done by hand and the mortar matches the original composition and color, and installing chimney flue liners, provided repairs are made by a qualified contractor using current best practices and methods that are consistent with the preservation techniques in *Preservation Brief #2: Repointing Mortar Joints in Historic Brick Buildings*.

G. Windows and Doors

1. Repairing or replacing caulking, weather-stripping, and other air infiltration control measures on windows and doors, and installing thresholds, in a manner that does not harm or obscure historic windows or trim.
2. Installing interior storm windows or doors, and wood screen doors in a manner that does not harm or obscure historic windows or trim.
3. Installing insulated exterior replacement doors where the openings are not altered and they cannot be viewed from the public right-of-way.
4. Installing removable film on windows (if the film is transparent), solar screens, or window louvers, in a manner that does not harm or obscure historic windows or trim.

H. Foundations

1. Underpinning and ventilating crawl spaces provided the underpinning materials are set at least two (2) inches behind the outer face of piers or foundations on the front façade.
2. Installing foundation vents, if painted or finished to match the existing foundation material.

I. General Efficiency Measures Not Affecting Exterior of Buildings

Special Note: Any work involving ground-disturbing activities requires SHPO review.

1. Installing thermal insulation, such as non-toxic fiberglass, cellulose, foam, and foil wrapped, in walls, floors, ceilings, attics, and foundations in a manner that does not harm or damage historic fabric.
2. Energy audits and feasibility studies.
3. Weatherization of mobile homes and trailers.
4. Caulking and weather-stripping around doors and windows in a manner that does not harm or obscure historic windows or trim.
5. Water conservation measures, such as low flow faucets, toilets, showerheads, urinals, and other efficient water using equipment.
6. Repairing in kind existing driveways, parking areas, and walkways with materials of similar appearance.
7. Ventilating crawl spaces.
8. Replacement of existing HVAC equipment including pumps, motors, boilers, chillers, cooling towers, air handling units, package units, condensers, compressors, heat exchangers that do not require a change to existing ducting, plumbing, electrical, controls or a new location, or if ducting, plumbing, electrical and controls are on the rear of the structure or not visible from any public right-of-way.
9. Adding or replacing existing building controls systems including HVAC control systems and the replacement of building-wide pneumatic controls with digital controls, thermostats, dampers, and other individual sensors like smoke detectors and carbon monoxide detectors (wired or non-wired).
10. Installing vents (such as continuous ridge vents covered with ridge shingles or boards, roof vents, bath and kitchen vents, soffit and frieze board vents or combustion appliance flues) if not visible from the public right-of-way.
11. New installation on non-hard wired devices including photo-controls, occupancy sensors, carbon dioxide, thermostats, humidity, light meters and other building control sensors, provided the work conforms with applicable state and local permitting requirements.
12. Adding variable speed capacity to electric motors, fans and pumps.
13. Insulation of water heater and boiler tanks and pipes.
14. Furnace or hot water tank replacement that does not require a visible new supply or venting.
15. Installing whole house fans or ceiling fans.

J. Insulation Measures Not Affecting the Exterior of the Building

1. Thermal insulation installation in walls, floors, attics and roof (excluding toxic spray foam insulation).
 - a. Wall insulation – in terms of materials, blown in cellulose insulation, treated with fire-retardant salts is permitted. Spray foams should only be used in discrete locations for air sealing and never for filling cavity walls. Urethane foams are not to be used. For moisture laden conditions and moisture vapor, more research should be conducted before in-wall insulation is used, refer to www.ohp.parks.ca.gov (go to sustainability).
2. Duct sealing, insulation, repair or replacement in unoccupied areas.
3. Attic insulation with proper ventilation.
4. Band joist insulation – R11 to R19 as applicable.
5. Water heater tank and pipe insulation, and heating system pipe insulation and air conditioner refrigerant line insulation.

K. Electric Base Load Measures Not Affecting the Exterior of the Building

1. Appliance replacement (upgrade to EnergyStar or higher efficiency appliances).
2. Compact fluorescent light bulbs or other high efficacy light source.
3. Energy efficient light fixtures, including ballasts (Replacement).
4. LED light fixtures and exit signs (Replacement).
5. Upgrade exterior lighting (replacement with metal halide bulbs, LEDs, or others) along with ballasts, sensors and energy storage devices not visible from any public right-of-way.
6. Refrigeration equipment and systems replacement, controls, tuning and repair.
7. Thermal energy storage devices and controls not visible from any public right-of-way.
8. Replacing lighting in parking lots, traffic signals and street lighting with energy efficient technologies, where only the lighting equipment is replaced and there are no ground disturbances.

L. Efficiency and Repair Measures

1. Installation or replacement of downspout extensions, provided that the color of the extensions is historically appropriate for the period and style of the property.
2. Repairing or upgrading electrical or plumbing systems and installing mechanical equipment, in a manner that does not permanently change the appearance of the interior or exterior of the building.
3. Installing integrated shingle style or thin film solar systems on the rear roof of the structure, behind the parapet or not visible from the public right-of-way.
4. Installing solar systems (including photovoltaic and solar thermal) not visible from the public right-of-way and if ground mounted can be installed

without ground disturbance and if roof mounted will not require new building reinforcement.

5. Lead based paint abatement in accordance with the Standards and Preservation Brief #37.
6. Building cleaning in accordance with the Standards and Preservation Briefs #1, #6, and #10.
7. Installing vents (such as continuous ridge vents covered with ridge shingles or boards, roof vents, bath and kitchen vents, soffit and frieze board vents or combustion appliance flues) if not visible from the public right-of-way.

Grantee Health and Safety Plan - Instructions

The grantee Health and Safety (H&S) Plan will be used by DOE to monitor the health and safety costs, activities, and implementation protocols by subgrantees as well as the enforcement of these practices by the grantee. Weatherization Program Notice (WPN) 11-6 entitled *Health and Safety Guidance*, issued on January 12, 2011, must be used as a guide for the development of policies, procedures, and field standards governing this important feature of the Weatherization Assistance Program (WAP) service delivery. The submission of the grantee's annual Health and Safety Plan must meet the following minimum requirements:

- The grantee must show how they will budget their health and safety costs. These costs can either be included in a separate health and safety budget category or as part of the regular program operations. The grantee is encouraged to budget health and safety costs as a separate category, thereby excluding these costs from the average cost per unit calculation. Creating a separate budget category also allows these costs to be isolated from energy efficiency costs during program evaluations. The grantee is also reminded that, if health and safety costs are budgeted and reported under the program operations category rather than a separate health and safety category, the costs must be included in the calculation of the average cost per unit and cost-justified through the energy audit.
- The grantee must identify in their Plan which measures will be installed under health and safety and which measures will be installed as incidental repairs. As a note, **Incidental Repairs** means “those repairs necessary for the effective performance or preservation of weatherization materials.” These repairs are usually different than those measures identified in the grantee's Health and Safety Plan. It is the Project Officer's responsibility to approve the delineation in the grantee's Plan between health and safety and incidental repair costs.
- The grantee will set health and safety expenditure limits, providing justification for the basis of these limits. These limits must be expressed as a percentage of the average cost per dwelling unit. For example, if the average cost per dwelling is \$5,000, then an average expenditure of \$500 per dwelling in Health and Safety costs would be acceptable in the Plan. While it has been a common practice to accept 10 percent as a benchmark in health and safety allowance, the grantee should establish a percentage that best reflects both the history of these applications and the complication of the H&S protocols in the Plan. The higher percentage identified for H&S requires more stringent documentation to support the costs. While required as a percentage of the average unit cost, if budgeted separately, the health and safety costs are not calculated into the per-house limitation.
- The grantee must create a deferral policy. Deferral may be necessary if health and safety issues cannot be adequately addressed according to WPN 11-6 guidance. The decision to defer work in a dwelling is difficult but necessary in some cases. This does not mean that assistance will never be available, but that work must be postponed until the problems can be resolved and/or alternative sources of help are found. In the judgment of the auditor, any conditions that exist, which may endanger the health and/or safety of the workers or occupants, should be deferred until the conditions are corrected. Deferral may also be necessary where occupants are uncooperative, abusive, or threatening. The grantee should be specific in their approach and provide the process for clients to be notified in writing of the deferral and what corrective actions are necessary for weatherization to continue. The grantee should also provide a process for the client to appeal to a higher level in the organization.
- The grantee must develop procedures on how information is solicited from clients to reveal known or suspected occupant health concerns as part of the initial application for Weatherization. During the energy audit, the auditor should perform additional screening to determine what steps will be taken to ensure that Weatherization work will not worsen the health concern.
- The grantee must develop documentation forms that should include the client's name and address, dates of the audit/assessment and when the client was informed of a potential health and safety issue, a clear description of the problem, a statement indicating if, or when conditions under which weatherization could continue, the responsibility of all parties involved, and the client(s) signature(s) indicating that they understand and have been informed of their rights and options.

- The grantee must identify the hazards to be remedied and anticipated approaches including testing, training, client education, and conditions that require referral to other agencies. The Health and Safety Plan should comply with WPN 11-6 and address each issue identified in the Guidance as well as any additional health and safety issues the grantee wishes to address. This should also include guidelines for determining and documenting if the potential health and safety issue should be remedied, referred to other agencies, result in partial weatherization, or lead to deferral. Subgrantees are expected to pursue reasonable options on behalf of the client, including referrals, and to use good judgment in dealing with difficult situations.
- The grantee must develop procedures that include a method used to determine when DOE monies will be used to remedy the health and safety issue, and how the grantee will treat problems that cannot be remedied with DOE monies after discovery.
- The grantee must specify how training will be provided for each of the health and safety issues included in the grantee's H&S Plan.
- The grantee must specify how testing will occur to determine the presence of any health and safety problem that requires action by the subgrantee, including, at a minimum, those tests required in WPN 11-6.
- The grantee must provide a detailed explanation on implementation of ASHRAE 62.2, which will be required for the 2012 program year. Grantees must provide justification if making changes to ASHRAE 62.2 specific to their housing stock and local considerations.
- The grantee must provide a detailed explanation on implementation of smoke and/or carbon monoxide detector installation parameters and procedures.
- The grantee must provide an explanation of protocols for the repair and replacement of both heating and cooling equipment, including justification for allowance within the scope of service delivery, climate justification with degree days and how the grantee defines "at-risk occupants" for cooling allowance.
- The grantee must provide an explanation of procedures to be followed when problems are discovered during testing of combustion gases.
- The grantee must provide an explanation on implementation of OSHA and MSDS requirements related to crew and worker safety, how the 10 and 30 hour training requirements will be met, and what the process is being used to determine if crews are using safe work practices according to all requirements.
- The grantee must provide an explanation on the protocols being used to identify any mold or moisture related issues in the client's home. The protocol should include how these issues are discovered during the initial audit or assessment, notification to the client, and crew training on how to alleviate limited mold and moisture conditions in the home.
- The grantee must provide an explanation on how it plans to implement and verify compliance with RRP and LSW. The explanation should clearly show an understanding that LSW and RRP are separate requirements and both protocols are required to be met.

Grantee Health and Safety Plan - Template

(Fill in the white boxes below the category heading.)

Budgeting (Check one):

The grantee is encouraged to budget health and safety costs as a separate category and, thereby, excludes such costs from the average per-unit cost calculation. This separate category also allows these costs to be isolated from energy efficiency costs in program evaluations. The grantee is reminded that, if health and safety costs are budgeted and reported under the program operations category rather than the health and safety category, the related health and safety costs must be included in the calculation of the average cost per home and cost-justified through the audit.

Separate Health & Safety Budget

Contained in Program Operations

Incidental Repairs (List repairs, if any, that will be removed as health and safety measures and implemented as incidental repairs.):

If the grantee chooses to identify any health and safety measures as incidental repairs, they must be implemented as such under the grantee's weatherization program in all cases – meaning, they can never be applied to the health and safety budget category. In order to be considered incidental repairs, the measure must fit the following definition and be cost justified along with the associated efficiency measure. Incidental Repairs means those repairs necessary for the effective performance or preservation of weatherization materials. Such repairs include, but are not limited to, framing or repairing windows and doors which could not otherwise be caulked or weather-stripped and providing protective materials, such as paint, used to seal materials installed under this program.

Per WPN 11-6, incidental (minor) repairs related to Building Structure and Roofing, Drainage—gutters, etc., and Window and Door Replacement as described in respective sections, below. Incidental repairs (minor envelope repair or MER) and infiltration reduction measures are separately billed from health and safety. The DOE-approved audit protocols make assumptions that all health and safety and infiltration reduction measures including MER are completed. Approved defaults within the audit include those assumptions and are included in the package SIR.

Health and Safety Expenditure Limits (Provide a per-unit average percentage and justification relative to the amount. Low percentages should include a statement of what other funding is being used to support health and safety costs, while larger percentages will require greater justification and relevant historical support.):

The grantee must set health and safety expenditure limits for their subgrantees, providing justification by explaining the basis for setting these limits and providing related historical experience. It is possible that these limits may vary depending upon conditions found in different geographical areas. These limits must be expressed as a percentage of the average cost per dwelling unit. For example, if the average cost per dwelling is \$5000, then an expenditure of \$500 per dwelling would equal 10 percent expenditures for health and safety. 10 percent is not a limit on H&S expenditures but exceeding this amount will require ample justification. These funds are to be expended by subgrantees in direct weatherization activities. While required as a percentage of the average unit cost, if budgeted separately, the health and safety costs are not calculated into the per-house limitation.

Per-Unit Average Percent: 25 %

California is a large state of diverse climate conditions, with most regions experiencing a relative temperate environment while other environs may exhibit a fairly hot, or alternatively cold, seasonal environment. In certain situations represented by the state's more populous (and temperate) locales, the necessity to install health and safety measures often outweighs the need for measures with energy efficient benefit.

Deferral Policy (Provide a detailed narrative of the grantees overall deferral policy):

Deferral may be necessary if health and safety issues cannot be adequately addressed according to WPN 11-6 guidance. The decision to defer work in a dwelling is difficult but necessary in some cases. This does not mean that assistance will never be available, but that work must be postponed until the problems can be resolved and/or alternative sources of help are found. In the judgment of the auditor, any conditions that exist, which may endanger the health and/or safety of the workers or occupants, should be deferred until the conditions are corrected. Deferral may also be necessary where occupants are uncooperative, abusive, or threatening. The grantee should be specific in their approach and provide the process for clients to be notified in writing of the deferral and what corrective actions are necessary for weatherization to continue. The grantee should also provide a process for the client to appeal to a higher level in the organization.

Deferral takes place upon discovery, or as soon as practicable, of circumstances giving rise to feasibility of a given measure or other issue causing the installation of weatherization measures to be deferred. The CSD Weatherization Deferral Form, signed by the client, provides an area for Subgrantee to refer client to other programs, agencies or outside assistance if the Subgrantee can identify an appropriate contractor or entity to assist client. If a condition is present that presents a hazard or unsafe condition affecting the health and safety of workers or clients/occupants, the hazard is resolved if feasible and within scope of WAP. Further detail is provided in the each section of this document for specific weatherization measures.

Procedure for Identifying Occupant Health Concerns:

Procedures must be developed and explained on how information is solicited from clients to reveal known or suspected occupant health concerns as part of the initial application for weatherization, additional screening of occupants again during the audit, and what steps will be

taken to ensure that weatherization work will not worsen the health concern.

Procedure described in section titled Occupant Preexisting or Potential Health Conditions, below.

Documentation Form(s) have been developed (Check Yes or No):

Documentation forms must be developed, include the client's name and address, dates of the audit/assessment and when the client was informed of a potential health and safety issue, a clear description of the problem, a statement indicating if, or when weatherization could continue, and the client(s) signature(s) indicating that they understand and have been informed of their rights and options

Yes

No

Completing the General Issue Tables below, or something similar, for each health and safety category will help explain to DOE how the WPN 11-6 requirements will be addressed.

Air Conditioning and Heating Systems

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. **Note:** Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concur with WPN11-6

Alternative Guidance

Central forced air furnaces (FAU), wall, floor and freestanding furnaces may be repaired, or replaced (if cost to repair is more than 30% of the cost to replace the unit). Central air conditioning system, and window/wall air conditioners may be repaired, or replaced (if cost to repair is more than 50% of the cost to replace the unit). Only existing window/wall air conditioner units may be replaced, and window/wall units require an energy audit indicating a SIR of 1.0 or greater. Other installation requirements apply for all listed systems and are described in detail in the CSD Weatherization Installation Standards (CSD WIS) manual (see, without limitation, Sections 24, 25, 26, 29, 31, 32.

Priority is given to the elderly, disabled, families with children and occupants with other medical conditions. Protocol is also based upon California Energy Commission climate zones and seasonal conditions.

Climate Zone	Description	Heating Season		Cooling Season	
		Beginning	Ending	Beginning	Ending
1	North coastal	Oct	Jun	n/a	n/a
2	Northern coastal valley	Oct	May	n/a	n/a
3	San Francisco bay area	Nov	Apr	n/a	n/a
4	Central coastal valley	Nov	Apr	n/a	n/a
5	Central coastal	Oct	Jun	n/a	n/a
6	South coastal - Los Angeles	Nov	Mar	n/a	n/a
7	South coastal - San Diego	Dec	Jan	n/a	n/a
8	Southern coastal valley - south	Nov	Mar	n/a	n/a
9	Southern coastal valley - north	Nov	Apr	n/a	n/a
10	Southern inland valley	Nov	Apr	Jul	Sep
11	Northern inland valley - hot	Nov	Apr	Jun	Sep

	12	Northern inland valley - moderate	Nov	Apr	Jul	Aug
	13	Central inland valley	Nov	Apr	Jun	Aug
	14	Southern high dessert	Nov	Apr	Jun	Sep
	15	Southern inland valley	Nov	Mar	May	Oct
	16	Mountain	Jan	Dec	n/a	n/a
<p>Heating season includes the months with 30-year average temperatures fall at or below 50 degrees.</p> <p>Cooling season includes the months with 30-year average temperatures that reach at or above 90 degrees.</p>						
Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.						
DOE funds are used for repair or replacement of air conditioning and heating systems, and their components, pursuant to applicable CSD WIS for the DOE WAP.						
Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.						
If measure is determined to fall within nonfeasibility criteria as described in the CSD WIS, the measure will not be installed.						
Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.						
FAU and air conditioner assessment, service, repair or replacement is conducted by a qualified technician or licensed HVAC contractor, with any such services carried out only in conjunction with weatherization services being performed in the dwelling. If any heating unit is gas fueled, combustion appliance safety testing is required. System ductwork made of or that contain asbestos-containing materials (ACM) are replaced, following state and federal safety regulations, including use of properly-licensed contractor to perform removal and disposal services. When ducts are insulated with ACM, work may not be performed that would cause asbestos to become unencapsulated or discharged into the air; partial or complete disconnections that cannot be safely repaired are replaced following state and federal safety regulations, including use of properly-licensed contractor to perform removal and disposal services.						
Standards for Deferral: Describe when deferral should take place for the specific health and safety category.						
Nonfeasibility criteria includes, without limitation, the unit not being primary heating (or cooling) source, not serving dwelling being weatherized, replacement is an HVAC alteration where California Code of Regulations Title 24 cannot be met, or location of unit is in a structurally unsound area that cannot be accessed or repaired without undue hazard to client or workers.						
Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.						
Not Applicable.						
Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.						
Online pre-training followed by classroom instruction for basic weatherization, duct blaster, blower door and combustion appliance safety is required of weatherization workers who analyze existing and modified dwelling heating and cooling systems. Measures related to HVAC systems are installed to degree deemed appropriate for the individual dwelling pursuant to and as described in CSD WIS, without limitation, Sections 24, 25, 26, 29, 31, 32.						
Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.						
Clients are given verbal and written instructions on operation of the system(s), including explanation of unit operation, review of the written instructions, routine maintenance requirements (if any) and is provided with applicable manufacturer warrant(ies). In the event a bulk fuel tank may require removal, the client is advised to contact the propane company responsible for past propane service.						
Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.						
All replaced equipment and parts are removed from the premises and properly disposed of, <i>unless</i> specified otherwise in the home improvement contract. Refrigerant is recovered and all hazardous waste materials are disposed of in conformance with federal and state regulations and local code.						
Air Conditioning Installation (as specific to installation as a health and safety measure): Provide a narrative on implementation protocols of air conditioning repair, replacement, and installation including justification for allowability that includes climate justification with degree days and how to define at-risk occupants						
Installation performed in accordance with CSD WIS Section 29 (Evaporative Cooling), CSD WIS Section 31 (Central units) or CSD WIS Section 32 (window/wall units).						
Heating System Installation (as specific to installation as a health and safety measure): Provide a narrative on implementation protocols of Heating System repair, replacement, and installation including justification for allowability that includes climate justification with degree days						
Installation performed in accordance with CSD WIS Section 24 (FAU) or CSD WIS Section 25 (wall/floor/freestanding units) or CSD WIS Section 26 (wood burning space heating).						

Appliances and Water Heaters

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. **Note:** Where an Action/Allowability or Testing is “required” or “not allowed” through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concur with WPN11-6

Alternative Guidance

Gas and electric storage water heater repair or replacement, and installation of necessary related items (e.g., gas flex lines) may be part of the weatherization measures for a dwelling. An existing defective water heater is replaced, regardless of age, when it has a water leak, or is non-operational or poses an electrical hazard, and repair cost exceeds 50% of replacement cost. Specific installation requirements apply given individual circumstances and are described in detail in the CSD Weatherization Installation Standards (CSD WIS) manual (see, without limitation, Sections 42 and 43).

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds are used for repair or replacement of storage or tankless (when pre-existing) water heaters and required related items to safely repair or install the water heater pursuant to applicable CSD WIS for the DOE WAP.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If measure is determined to fall within nonfeasibility criteria as described in the CSD Field Guide, the measure will not be installed.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Gas storage water heaters must comply with any local code, the efficiency requirements in California Code of Regulations Title 24 (Title 24), be manufactured to ANSI Z21.10.1 specs with a minimum R-12 internal insulation (unless external insulation). Venting must be in conformance with manufacturer’s instructions and local code and heaters must undergo combustion gas appliance safety testing. Electric storage water heaters must comply with local code, the efficiency requirements of Title 24, and comply with ASHRAE 90.1b and UL 174. All storage water heaters must be sized by number of bathrooms and bedrooms in the dwelling, have drain pans and temperature and pressure regulation, and include seismic bracing (when the water heater is replaced and when required by local code). Thermostats are set at 120° F (unless higher temperature requested by client or is required for medical reasons.). House water line pressure is checked, if area commonly known to experience high water pressure, to ascertain within acceptable limits, and a house line pressure regulator is installed if appropriate.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Nonfeasibility criteria for replacement includes, without limitation, the existing water heater is functioning properly, is inaccessible, can be repaired (cost to repair not exceeding 50% of cost to replace), a structure cannot support the water heater, or drain pan or T&P valve cannot be installed, or a drain line cannot be terminated at the outside.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Deferral takes place upon discovery, or as soon as practicable, of circumstances described in Standards for Deferral, this section, above. CSD Weatherization Deferral Form, signed by the client, provides an area for Subgrantee to refer client to other programs, agencies or outside assistance if the Subgrantee can identify an appropriate contractor or entity to assist client.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

Applicable codes require licensed plumber and/or electrician to install storage or tankless water heaters. Existing and replacement gas water heaters must be combustion appliance safety assessed for leakage, proper venting, and draft by individuals trained and certified to perform such assessments.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Operation of all user-accessible controls is explained to the client, including routine maintenance routine recommended by the manufacturer. Manufacturer’s written instructions and warranty documents are provided to the client in a plastic jacket attached to the side of the water heater tank. Information is provided on proper disposal of appliances, including water heaters.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

All replaced equipment and parts are removed from the premises and disposed of properly.

Asbestos - in siding, walls, ceilings, etc.

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. **Note:** Where an Action/Allowability or Testing is “required” or “not allowed” through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concur with WPN11-6

Removal of siding is allowed to perform energy conservation measures. All precautions must be taken not to damage siding. Asbestos siding should never be cut or drilled. Recommended,

Alternative Guidance <input type="checkbox"/>	where possible, to insulate through home interior.
Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.	
DOE funds are used to remove and reinstall siding that may contain asbestos in order to install insulation in walls, ceilings, under floors, etc.	
Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.	
Upon inspection siding is determined to likely be an asbestos containing material (ACM) and cannot be removed without damage that may cause breaking or otherwise release dust particles and it is nonfeasible to drill and fill from indoors (e.g., client refuses) insulation shall not be installed.	
Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.	
Not Applicable. CSD Asbestos Policy must be adhered to and testing allowed as noted in the Policy.	
Standards for Deferral: Describe when deferral should take place for the specific health and safety category.	
Not Applicable. Deferral shall be required as defined in the CSD Asbestos Policy.	
Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.	
Not Applicable. Clients shall be referred to local Asbestos abatement programs, when available and when the presence and level of asbestos prohibits weatherization work.	
Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.	
Assessors and inspectors trained in recognition of common ACM including, without limitation, siding, ceilings, pipe, duct work, and vermiculite. Weatherization personnel or appointed representatives shall not take any action that will disturb, expose, release, or discharge ACM.	
Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.	
Client is informed of potential ACM and potential hazard generation if siding, ceiling, etc., with ACM is disturbed to the extent that fiber dis-encapsulation occurs and dust or fragmentation occurs. Client is informed of precautions that will be taken if siding is to be removed/replaced to accomplish weatherization measure(s).	
Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.	
If siding has been removed and reinstalled, all debris shall be thoroughly cleaned up and work areas cleaned using a high efficiency particulate air (HEPA) vacuum.	

Asbestos - in vermiculite

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.	
Concur with WPN11-6 <input checked="" type="checkbox"/>	When vermiculite is present, unless testing determines otherwise, take precautionary measures as if it contains asbestos, such as not using blower door tests and using personal air monitoring while in attics. Where blower door tests are performed, it is a best practice to perform pressurization instead of depressurization. Encapsulation by an appropriate trained asbestos control professional is allowed. Removal is not allowed.
Alternative Guidance <input type="checkbox"/>	
Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.	
DOE funds are used to test vermiculite for presence of asbestos if vermiculite will be disturbed. DOE funds are used for encapsulation of vermiculite if such encapsulation work is deemed feasible; work performed by an Asbestos Hazard Emergency Response Act of 1986 (AHERA) certified asbestos control professional.	
Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.	
Upon attic assessment/inspection if vermiculite is discovered it is assumed that vermiculite is asbestos-containing material (ACM). If testing is not feasible attic air infiltration and insulation measures shall not be installed.	
Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.	
Weatherization crews are likely to encounter ACM sometime during the course of their field work. Precautions shall be taken to minimize exposure to asbestos fibers. Weatherization personnel or appointed representatives shall not take any action that will disturb, expose, release, or discharge any ACM. This includes (attempted) removal or disposal of asbestos. Due diligence shall be taken when working on building components which may contain ACM. All protocol relating to asbestos contained in the CSD Weatherization Policy and Procedures and CSD Weatherization Installation (CSD WIS) manual, and all applicable CalOSHA regulations pertaining to asbestos and ACM shall be followed including, without limitation, using personal air monitoring/samplers while in attics.	
CSD Asbestos Policy must be adhered to and testing allowed as noted in the Policy.	
Standards for Deferral: Describe when deferral should take place for the specific health and safety category.	
If encapsulation of ACM vermiculite is deemed feasible, attic air infiltration and insulation measures may be deferred. Any testing/prescriptive sampling must be performed pursuant to AHERA. Deferral shall be required as defined in the CSD Asbestos Policy.	
Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.	

Deferral takes place upon discovery, or as soon as practicable, of circumstances described in Standards for Deferral, this section, above. CSD Weatherization Deferral Form, signed by the client, provides an area for Subgrantee to refer client to other programs, agencies or outside assistance if the Subgrantee can identify an appropriate contractor or entity to assist client in remediation of potential ACM hazard related to vermiculite.
Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.
Assessors and inspectors trained in recognition of common ACM including, without limitation, siding, ceilings, pipe, duct work, and vermiculite. Weatherization personnel or appointed representatives shall not take any action that will disturb, expose, release, or discharge ACM.
Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.
Client/occupant notified of potential ACM vermiculite per CSD Weatherization Deferral Form and instructed not to disturb suspected ACM. Asbestos safety information is provided, and if testing is performed to confirm presence of asbestos, the client/occupant is notified of the results of such testing.
Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.
Removal of vermiculite ACM is <u>not</u> allowed.

Asbestos - on pipes, furnaces, other small covered surfaces

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is “required” or “not allowed” through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.	
Concur with WPN11-6 <input type="checkbox"/> Alternative Guidance <input checked="" type="checkbox"/>	<p>If asbestos-containing materials (ACM) are present, all duct-related activities shall be performed in strict conformance with the CSD Health and Safety Plan (CSD Weatherization Installation Standards [CSD WIS], Appendix J).</p> <p>When ducts are <u>made of or contain</u> ACM:</p> <ol style="list-style-type: none"> (1) Duct repair and sealing (and duct testing) shall not be performed on the duct system. (2) These duct systems are made of or contain questionable cardboard-like components that are constructed of ACM (typically a stiff, thin, fibrous gray material resembling corrugated cardboard). (3) When any such component is found to be damaged, deteriorated, or disconnected, the client is advised to have the ducts inspected by a qualified licensed contractor (Asbestos Hazard Emergency Response Act of 1986 [AHERA] certified asbestos control professional). <p>When any part of the duct system is <u>insulated</u> with ACM:</p> <ol style="list-style-type: none"> (1) No work shall be performed that would cause asbestos to become unencapsulated or discharged into the air. (2) Partial or complete disconnections present in those insulated ducts may <u>not</u> be repaired or sealed. (3) When leakage is large in the non-operable insulated portion of the duct system: <ol style="list-style-type: none"> (a) If duct sealing that is safe to perform elsewhere in the system is not likely to reduce leakage close to Target, then duct repair and sealing is <u>not feasible</u>. (b) <i>Exception:</i> If an unlined platform return (usually a source of large leakage) is present, it should be lined and sealed, if possible. (4) Sealing register boots in a duct system insulated with ACM is allowed, <u>if no ACM will be disturbed</u> during the sealing process (e.g., seal the boots on the inside where no ACM is present). <p>Duct repair and sealing shall <u>not</u> result in pressure imbalance that will cause:</p> <ol style="list-style-type: none"> (1) Depressurization of the living space to go more negative than the house depressurization limit (HDL), per CSD WIS Appendix C. (2) Natural draft combustion appliances to backdraft or spill. <p>Any testing or prescriptive sampling must be performed by a certified tester pursuant to the Asbestos Hazard Emergency Response Act of 1986 (AHERA).</p>
Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.	
DOE funds are used to perform/install weatherization measures consistent with guidance, above.	
Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.	
If measure is determined to fall within nonfeasibility criteria in the CSD WIS or per this guidance, the measure will not be installed.	
Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.	
Weatherization crews are likely to encounter ACM sometime during the course of their field work. Precautions shall be taken to minimize exposure to asbestos fibers. Weatherization personnel or appointed representatives shall not take any action that will disturb, expose, release, or discharge any ACM. This includes (attempted) removal or disposal of asbestos. Due diligence shall be	

<p>taken when working on building components which may contain ACM. All protocol relating to asbestos contained in the CSD Weatherization Policy and Procedures and CSD WIS, and all applicable CalOSHA regulations pertaining to asbestos and ACM shall be followed Inspection and installation consistent with the CSD WIS Section 6, and this guidance. If deemed feasible, removal of ACM from small covered surfaces may be allowed on a case by case basis following deferral and inspection (see Standards for Deferral and Standards for Referral, this section, below).</p>
<p>Standards for Deferral: Describe when deferral should take place for the specific health and safety category.</p>
<p>When any duct component affected by this guidance is found to be damaged, deteriorated, or disconnected, the client is advised to have the ducts inspected by a qualified licensed contractor (AHERA certified asbestos control professional). Any measure related to the duct system is deferred pending such qualified inspection.</p>
<p>Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.</p>
<p>Deferral takes place upon discovery, or as soon as practicable, of circumstances described in Standards for Deferral, this section, above. CSD Weatherization Deferral Form, signed by the client, provides an area for Subgrantee to refer client to other programs, agencies or outside assistance if the Subgrantee can identify an appropriate contractor or entity to assist client in remediation of potential hazard related to ACM duct systems.</p>
<p>Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.</p>
<p>Assessors and inspectors trained in recognition of common ACM including, without limitation, siding, ceilings, pipe, duct work, and vermiculite. Weatherization personnel or appointed representatives shall not take any action that will disturb, expose, release, or discharge ACM.</p>
<p>Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.</p>
<p>Client/occupant notified of potential ACM vermiculite per CSD Weatherization Deferral Form and instructed not to disturb suspected ACM. Asbestos safety information is provided, and in event testing is performed to confirm presence of asbestos, the client/occupant is notified of the results of such testing.</p>
<p>Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.</p>
<p>Any ACM removed from small covered surfaces by a certified AHERA asbestos professional is removed by such professional from the premises and disposed of properly.</p>

Biologicals and Unsanitary Conditions - odors, mustiness, bacteria, viruses, raw sewage, rotting wood, etc.

<p>Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is “required” or “not allowed” through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.</p>	
<p>Concur with WPN11-6 <input type="checkbox"/></p> <p>Alternative Guidance <input checked="" type="checkbox"/></p>	<p>Removal of mold, odors, viruses, bacteria, unsanitary (including raw sewage) conditions, and rotting wood is not a DOE WAP responsibility; however, weatherization workers frequently encounter these conditions. Caution should be taken when selecting air tightness limits for dwellings with these problems. If extensive, weatherization services may need to be deferred until the problem can be referred to another agency that can take remedial action.</p>
<p>Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.</p>	
<p>DOE funds are used for assessment of dwelling/property prior to installation of weatherization measures.</p>	
<p>Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.</p>	
<p>If any of the described conditions exist to the extent they are deemed to pose a health and safety risk to the client or workers, weatherization measures affected by such condition(s) are not feasible unless condition(s) are remedied.</p>	
<p>Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.</p>	
<p>Deferral and subsequent removal of condition(s) by qualified third party.</p>	
<p>Standards for Deferral: Describe when deferral should take place for the specific health and safety category.</p>	
<p>If any of the described conditions exist and pose a health and safety risk to the client or workers, weatherization measures are deferred.</p>	
<p>Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.</p>	
<p>Deferral takes place upon discovery, or as soon as practicable, of circumstances described in Standards for Deferral, this section, above. CSD Weatherization Deferral Form, signed by the client, provides an area for Subgrantee to refer client to other programs, agencies or outside assistance if the Subgrantee can identify an appropriate contractor or entity to assist client.</p>	
<p>Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.</p>	
<p>Assessors and weatherization crews use training, experience and reference to the CSD WIS including, without limitation, Appendix J (Health and Safety Plan) for guidance in determination if any described issue may be present and determination of what referral may be appropriate.</p>	
<p>Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.</p>	
<p>See Standards for Referral, this section, above.</p>	
<p>Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.</p>	

Not Applicable.

Building Structure and Roofing

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. **Note:** Where an Action/Allowability or Testing is “required” or “not allowed” through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concur with WPN11-6



Alternative Guidance



Building rehabilitation is beyond the scope of the Weatherization Assistance Program. Homes with conditions that require more than incidental repair should be deferred.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds are used for assessment of dwelling/property prior to installation of weatherization measures and for incidental repairs necessarily associated with installation of weatherization measures.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If measure is determined to fall within nonfeasibility criteria as described in the CSD Weatherization Installation Standards (CSD WIS) manual and this guidance, the measure will not be installed.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

During initial assessment, including visual inspection, if a structural or roof issue is observed and a determination made that Limited Home Repair will enable installation of weatherization measures, such repair will be performed and appropriate measures installed pursuant to the CSD WIS.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

In the event the building structure or roof is not safe or stable to ensure access to areas necessary for assessment, work or inspection of weatherization services and thus poses a health and safety risk to the client or workers, weatherization measures are deferred.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Deferral takes place upon discovery of circumstances described in Standards for Deferral, this section, above. Upon discovery or as soon as practicable, the client is informed in writing of the structurally compromised area(s) and is referred to appropriate local, state or federal agency that may assist in correction of the structural issue, e.g., local housing and community development department, local health department, local utility company, etc.. If a condition is present that presents a hazard or unsafe condition affecting the health and safety of workers or clients/occupants, the hazard is resolved if feasible and within scope of DOE WAP. Further, work conducted in such area (e.g., installation of measure or repair of an affected area) installer must document the hazard in the home assessment in the client file, including notification to the client.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

Assessors and weatherization crews use training, experience and reference to the CSD WIS including, without limitation, Appendix J (Health and Safety Plan) for guidance in determination of what structural issue may be present and determination of what referral may be appropriate.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

See Standards for Referral, this section, above.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

Any parts or debris related to minor envelope repair is removed from the premises and disposed of properly.

Code Compliance

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. **Note:** Where an Action/Allowability or Testing is “required” or “not allowed” through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concur with WPN11-6



Alternative Guidance



Correction of preexisting code compliance issues is not an allowable cost other than where weatherization measures are being conducted. State and local (or jurisdiction having authority) codes must be followed while installing weatherization measures. Condemned properties and properties where “red tagged” health and safety conditions exist that cannot be corrected under this guidance should be deferred.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds are used only for code compliance work directly associated with installation of weatherization measures.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

Preexisting code issues are beyond the scope of DOE WAP and are not brought into compliance unless directly associated with installation of weatherization measures.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when

partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.
Local and state codes are in full force and effect under the DOE WAP. Subgrantees must ensure weatherization-related work conforms with applicable codes in jurisdictions where the work is performed. Assessor and weatherization crew observe work site and, if feasible, weatherize dwelling to extent health and safety may be maintained for client and workers.
Standards for Deferral: Describe when deferral should take place for the specific health and safety category.
If installation of weatherization measure(s) require correction of preexisting code issues that are not directly associated with installation of weatherization measure(s), affected weatherization measure(s) are deferred.
Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.
Deferral takes place upon discovery, or as soon as practicable, of circumstances described in Standards for Deferral, this section, above. CSD 542 Weatherization Deferral Form, signed by the client, provides an area for Subgrantee to refer client to other programs, agencies or outside assistance if the Subgrantee can identify an appropriate contractor or entity to assist client in remediation of code compliance issue.
Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.
Weatherization crews use experience and reference to the CSD Weatherization Installation Standards (CSD WIS) manual including, without limitation, Appendix J (Health and Safety Plan) for guidance in determination what code compliance may be required.
Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.
See Standards for Referral, this section, above.
Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.
Not Applicable.

Combustion Gases

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is “required” or “not allowed” through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.	
Concur with WPN11-6 <input checked="" type="checkbox"/>	Proper venting to the outside for combustion appliances, including gas dryers is required.
Alternative Guidance <input type="checkbox"/>	Correction of venting is allowed when testing indicates a problem.
Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.	
DOE funds are used to perform combustion appliance safety (CAS) inspections, including draft and spill testing, and testing of correction or repair of faulty venting.	
Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.	
Pre-weatherization nonfeasibility occurs if a gas appliance is NOT properly abandoned (flex connector removed and gas valve capped, or valve is removed and gas line is capped), appliance is inaccessible, or client waives weatherization services. Post-weatherization nonfeasibility occurs if duct sealing was not performed and shell leakage was not reduced enough to justify post-weatherization CAS testing, as described in the CSD Weatherization Installation Standards (CSD WIS) manual, Section 3., Combustion Appliance Safety (CAS) Inspections.	
Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.	
CAS inspections are performed by experienced technicians for all dwelling units to be weatherized that are equipped with fuel-burning appliances in order to identify hazardous combustion issues. Testing each appliance and inspection of venting will dictate feasibility of installing infiltration measures. Test equipment (e. g., Monoxors and Fyrites) is maintained and calibrated in accordance with manufacturer’s recommendations. See also CSD WIS, Section 3.	
Standards for Deferral: Describe when deferral should take place for the specific health and safety category.	
If a CAS condition requiring immediate services (CAS Hazard) or other CAS Fail is present that cannot be repaired under the scope of the program, only non-infiltration measures may be installed. Clients are informed the appliance does not meet DOE WAP guidelines, and they are advised to not use the appliance until repaired or replaced. Offer to abandon or turn-off appliance may apply (see CSD WIS Section 3, Item 20 et seq.). Further, if measure is determined to fall within nonfeasibility criteria as described in the CSD WIS, the measure will not be installed (see also Beyond Scope of DOE WAP, above).	
Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.	
When a hazardous condition appears to be present, the client and owner/agent (if a rental) is notified, the CSD Weatherization Deferral Form is completed and signed by the client, and the Subgrantee may refer client to other programs, agencies or outside assistance if the Subgrantee can identify an appropriate contractor or entity to assist client with a <u>required</u> examination of the hazard or condition by a qualified professional. If extremely strong odors are present in the dwelling, a call to notify the utility company is made from outside the unit.	
Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.	
Online pre-training followed by classroom instruction for basic weatherization, duct blaster, blower door and combustion appliance safety is required of weatherization workers who analyze existing and modified dwelling systems. Measures related to CAS and gas venting are tested and installed to degree deemed appropriate for the specific dwelling pursuant to and as described in CSD WIS,	

without limitation, Sections 3, 24, 25 and 26.
Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.
Client/occupant is provided with combustion appliance safety and hazards information, including the importance of using exhaust ventilation when cooking and the importance of keeping burners clean to limit the production of carbon monoxide. See also, Standards for Referral, this section, above.
Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.
All replaced equipment or parts are removed from the premises and disposed of properly.
Combustion Gas Problem Discovery: Provide a narrative describing the process to be followed when combustion gas testing reveals health and safety concerns.
See Standards for Referral, this section, above.

Drainage - gutters, down spouts, extensions, flashing, sump pumps, landscape, etc.

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is “required” or “not allowed” through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.	
Concur with WPN11-6 <input checked="" type="checkbox"/>	Major drainage issues are beyond the scope of the Weatherization Assistance Program. Homes with conditions that may create a serious health concern that require more than incidental repair should be deferred. See also, Mold and Mildew guidance, below.
Alternative Guidance <input type="checkbox"/>	
Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.	
DOE funds are used for assessment of dwelling/property prior to installation of weatherization measures and for incidental (minor) drainage repairs necessary to ensure worker and client health and safety and when associated with installation of weatherization measures.	
Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.	
Drainage issues beyond the scope of DOE WAP are deferred.	
Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.	
Remedy addressed through Standards for Deferral and Standards for Referral, this section, below.	
Standards for Deferral: Describe when deferral should take place for the specific health and safety category.	
Observed (visual inspection) drainage issue(s) requires repair or correction that exceeds incidental (minor) scope necessarily associated with installation of weatherization measures.	
Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.	
Deferral takes place upon discovery, or as soon as practicable, of circumstances described in Standards for Deferral, this section, above. CSD Weatherization Deferral Form, signed by the client, provides an area for Subgrantee to refer client to other programs, agencies or outside assistance if the Subgrantee can identify an appropriate contractor or entity to assist client.	
Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.	
Assessors and weatherization crews use training, experience and reference to the CSD WIS including, without limitation, Appendix J (Health and Safety Plan) for guidance in determination of drainage issues and determination of what minor repairs or referral may be appropriate.	
Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.	
Client is informed on importance of cleaning and maintaining drainage systems, and provided information on proper landscape (drainage) design.	
Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.	
Not Applicable.	

Electrical, other than Knob-and-Tube Wiring

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is “required” or “not allowed” through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if
--

the issue or testing will be addressed and in what circumstances.	
<input type="checkbox"/> Concur with WPN11-6 <input checked="" type="checkbox"/> Alternative Guidance	Minor upgrades and repairs are allowed when necessary to safely perform installation of weatherization measures.
Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.	
DOE funds are used for minor upgrades and repairs to enable safe installation of weatherization measures.	
Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.	
If electrical upgrade or repair is determined nonfeasible (unsafe electrical hazard exists) a specific weatherization measure will not be installed.	
Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.	
Minor electrical upgrade (e.g., switch) or repair (e.g., receptacle) may be effected to safely install weatherization measures or appliances requiring electrical power. Voltage drop and voltage detection testing are allowed.	
Standards for Deferral: Describe when deferral should take place for the specific health and safety category.	
More than minor electrical upgrade or repair is required to install a weatherization measure but the work needed does not represent an unsafe electrical hazard.	
Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.	
Deferral takes place upon discovery of circumstances described in Standards for Deferral, this section, above. CSD Weatherization Deferral Form, signed by the client, provides an area for Subgrantee to refer client to other programs, agencies or outside assistance if the Subgrantee can identify an appropriate contractor or entity to assist client.	
Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.	
CSD Health and Safety Plan (CSD Weatherization Installation Standards [CSD WIS], Appendix J) describes common electrical issues that may be encountered in the field, and the CSD WIS specific safety precautions related to installation of specific measures involving electrical connections or appliances are followed. In addition to referencing the CSD WIS, assessors and weatherization crews use prior training and experience to determine if an electrical circumstance may present a hazard and if deferral/referral is appropriate.	
Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.	
If applicable to electrical upgrade or repair and as further described in the CSD WIS for a specific appliance, client is provided verbal and written instructions for operation and any manufacturer's or contractor's written warranties. Client is also provided information on dangers associated with overloading household circuits and basic electrical safety risks.	
Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.	
Any parts or debris related to minor upgrade or repair is removed from the premises and disposed of properly.	

Electrical, Knob-and-Tube Wiring

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.	
<input checked="" type="checkbox"/> Concur with WPN11-6 <input type="checkbox"/> Alternative Guidance	Minor upgrades and repairs necessary for weatherization measures and where the health or safety of the client/occupant is at risk are allowed. Must provide sufficient over-current protection prior to insulating over knob-and-tube wiring.
Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.	
DOE funds are used for an electrical contractor (California contractor specialty license type C-10) inspection, certification and reasonable repair of knob-and-tube (K&T) wiring prior to installation of insulation of ceiling, wall, or floor in a dwelling containing such wiring.	
Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.	
If K&T wiring is present and function but cannot be certified safe by a C-10 electrical contractor, or K&T wiring is present and abandoned but has not been disconnected or certified abandoned by a C-10 electrical contractor, or if prohibited by local code, insulation measures are deemed nonfeasible and deferred. Rewiring of dwelling is a major renovation and beyond scope of DOE WAP.	
Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.	
"Notice of Survey by Electrical Contractor" (Survey) by C-10 electrical contractor that (1) existing K&T wiring found to be in good condition, with no evidence of deterioration, improper connection or splices, or improper over-current protection, or (2) existing K&T wiring found to be in poor condition and was brought up to acceptable standards by installation of tamperproof over-current protection with fuses, or installation of new service panel with breakers. See also CSD Weatherization Installation Standards (CSD	

WIS) manual, Section 20 and Appendix O.
Standards for Deferral: Describe when deferral should take place for the specific health and safety category.
Insulation measures are deferred if any condition described in Beyond Scope of DOE WAP, this section, above, exists.
Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.
Deferral takes place upon discovery, or as soon as practicable, of circumstances described in Standards for Deferral, this section, above. CSD Weatherization Deferral Form, signed by the client, provides an area for Subgrantee to refer client to other programs, agencies or outside assistance if the Subgrantee can identify an appropriate contractor or entity to assist client in remediation of potential hazard related to K&T wiring.
Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.
Assessors and weatherization workers educated on potential hazards related to K&T wiring and requirements (CSD WIS Section 20 and Appendix O) that a Survey be conducted prior to insulating of area containing K&T wiring. In addition to referencing the CSD WIS, assessors and weatherization crews use prior training and experience to determine if an electrical circumstance may present a hazard.
Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.
Copy K&T of "Notice of Survey by Electrical Contractor" must be given to the client after it is signed, following the C-10 inspection. Warning placard(s) stating caution is required when entering insulated areas because of covered electrical wiring posted near any openable (currently used or not) entrance to attic (if ceiling insulation installed) or in crawlspace (if floor insulation installed). Client is also provided information on over-current protection, dangers associated with overloading household circuits and basic electrical safety risks.
Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.
Any parts or debris related to minor upgrade or repair is removed from the premises and disposed of properly.

Fire Hazards

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.	
Concur with WPN11-6 <input type="checkbox"/>	Correction of minor fire hazards is allowed when necessary to safely perform weatherization.
Alternative Guidance <input checked="" type="checkbox"/>	Correction of fire hazards beyond the scope of DOE WAP must be deferred.
Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.	
DOE funds are used for assessment of dwelling/property prior to installation of weatherization measures.	
Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.	
If a weatherization measure cannot be installed because a fire hazard exists which cannot easily be remedied by workers, the installation is beyond the scope of DOE WAP and is deferred. If removal of a minor fire hazard is not allowed by the client, the weatherization measure must be deferred.	
Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.	
If necessary to safely perform weatherization measures minor fire hazards may be remedied by weatherization workers, e.g., flammable materials stored around and above water heater or furnace, are removed and clients/occupants made aware that it is extremely important to keep combustibles away from appliances. Combustion and ventilation air (CVA) vents that are obstructed by household items are cleared, and clients/occupants shall be made aware that it is extremely important to keep all vents clear. Fire hazards beyond the scope of DOE WAP are deferred.	
Standards for Deferral: Describe when deferral should take place for the specific health and safety category.	
If a fire hazard is outside the scope of DOE WAP any weatherization measure is deferred pending remedy of the fire hazard by a third party.	
Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.	
Deferral takes place upon discovery, or as soon as practicable, of circumstances described in Standards for Deferral, this section, above. CSD Weatherization Deferral Form, signed by the client, provides an area for Subgrantee to refer client to other programs, agencies or outside assistance if the Subgrantee can identify an appropriate contractor or entity to assist client in remediation of potential fire hazard.	
Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.	
All Subgrantees are required to promote safe working conditions in the shop and in the field. Field personnel are required to participate in regular safety trainings and meetings. In the field, CalOSHA requirements, the CSD Health and Safety Plan (CSD Weatherization Installation Standards [CSD WIS], Appendix J), and the CSD WIS specific safety precautions shall be followed as they apply to weatherization activities. Workers must be aware of, and practice, all aspects of health and safety awareness	

including, without limitation, identification and safe removal of minor fire hazards.
Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.
Clients/occupants are informed of any fire hazards observed during the dwelling assessment or discovered during installation of weatherization measures. See also Standards for Remedy, this section, above.
Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.
Not Applicable.

Formaldehyde, Volatile Organic Compounds (VOCs), and other Air Pollutants

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is “required” or “not allowed” through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.	
Concur with WPN11-6 <input checked="" type="checkbox"/>	Removal of pollutants is allowed and is required if they pose a risk to workers. If pollutants pose a risk to workers and removal cannot be performed or is not allowed by the client, the unit must be deferred.
Alternative Guidance <input type="checkbox"/>	
Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.	
DOE funds are used for assessment of dwelling/property prior to installation of weatherization measures.	
Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.	
If a weatherization measure cannot be installed because a pollutant hazard poses a risk to workers and cannot easily be remedied by workers, the installation is beyond the scope of DOE WAP and is deferred. If removal of a pollutant hazard is not allowed by the client, the weatherization measure must be deferred.	
Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.	
If necessary to safely perform weatherization measures pollutant hazards may be remedied by weatherization workers. Removal of pollutant hazards beyond the scope of DOE WAP are deferred.	
Standards for Deferral: Describe when deferral should take place for the specific health and safety category.	
If a pollutant hazard is outside the scope of DOE WAP any weatherization measure is deferred pending remedy of the fire hazard by a third party.	
Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.	
Deferral takes place upon discovery, or as soon as practicable, of circumstances described in Standards for Deferral, this section, above. CSD Weatherization Deferral Form, signed by the client, provides an area for Subgrantee to refer client to other programs, agencies or outside assistance if the Subgrantee can identify an appropriate contractor or entity to assist client in remediation of the pollutant hazard.	
Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.	
All Subgrantees are required to promote safe working conditions in the shop and in the field. Field personnel are required to participate in regular safety trainings and meetings. In the field, CalOSHA requirements, the CSD Health and Safety Plan (CSD Weatherization Installation Standards [CSD WIS], Appendix J), and the CSD WIS specific safety precautions shall be followed as they apply to weatherization activities. Workers must be aware of, and practice, all aspects of health and safety awareness including, without limitation, identification and safe removal of common household pollutants.	
Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.	
Clients/occupants are informed of any pollutant hazards observed and associated risks. Client/occupant is provided written materials on safety and proper disposal of household pollutants.	
Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.	
Any household pollutant which poses a risk to workers is removed, if feasible, from the work area, or from the premises for proper disposal.	

Injury Prevention of Occupants and Weatherization Workers – Measures such as repairing stairs and replacing handrails.

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is “required” or “not allowed” through WPN 11-6, the grantee

must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.	
<input type="checkbox"/> Concur with WPN11-6 <input checked="" type="checkbox"/> Alternative Guidance	In addition to guidance referenced in Occupational Safety and Health Administration (OSHA) and Crew Safety section, below, Subgrantees perform inspection/assessment of each weatherization job site to identify existing potential health and safety concerns affecting worker and client safety, and follow the Weatherization Deferral Protocol specified in Appendix J, Section 6 of the CSD Health and Safety Plan contained in the CSD Weatherization Installation Standards [CSD WIS]. Correction of hazards and unsafe conditions affecting the health and safety of workers or clients/occupants shall be resolved when minor repairs are feasible, within the scope of the DOE WAP, and necessary to effectively weatherize a dwelling.
Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.	
DOE funds are used to repair physical hazards related to the health and safety of workers and clients if such minor repair is necessary to effectively install weatherization measures.	
Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.	
When correction of a safety-related problem or hazard cannot be accomplished because it exceeds the scope of the DOE WAP, the client/occupant is notified (see Client Education section, below) and weatherization measures affected by the problem or hazard are deferred	
Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.	
Health and safety-related expenditures are allowed when the elimination of observed hazards is necessary for the safe installation of weatherization measures and cost for such elimination fall within the scope of the DOE WAP.	
Standards for Deferral: Describe when deferral should take place for the specific health and safety category.	
Health and Safety issues requiring corrections that exceed the scope of the DOE WAP, i.e., are beyond minor repair or installation necessary to effectively weatherize the dwelling shall not be attempted. See also nonfeasibility for specific measures in the CSD WIS.	
Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.	
Deferral takes place upon discovery of circumstances described in Standards for Deferral, this section, above. Upon discovery or as soon as practicable, the client is informed of the issue and is referred to program, agency or outside assistance if the Subgrantee can identify an appropriate contactor or entity to assist client in remediation of the health and safety condition or hazard causing the deferral.	
Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.	
All Subgrantees are required to promote safe working conditions in the shop and in the field. Field personnel are required to participate in regular safety trainings and meetings. Workers must be aware of, and practice, all aspects of health and safety awareness.	
Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.	
When correction of a safety-related problem or hazard cannot be accomplished because it exceeds the scope of the DOE WAP, the client/occupant and owner/agent shall be notified as described in Standards for Deferral and Standards for Referral, this section, above. When the problem or hazard prevents installation of any weatherization measure, notification shall be in writing.	
Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.	
Any parts or debris related to minor repair is removed from the premises and disposed of properly.	

Lead Based Paint

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is “required” or “not allowed” through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.	
<input checked="" type="checkbox"/> Concur with WPN11-6 <input type="checkbox"/> Alternative Guidance	Follow EPA's Renovation, Repair and Painting (RRP) Rule. In addition to RRP, weatherization requires all weatherization crews working in pre-1978 housing to be trained in Lead Safe Weatherization (LSW). Deferral is required when the extent and condition of lead-based paint in the house would potentially create further health and safety hazards.
Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.	
DOE funds are used for lead safe weatherization (LSW) compliance related actions required by the RRP Rule during installation of weatherization measures in pre-1978 dwellings.	
Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.	
If weatherization measure considered for installation disturbs painted surfaces of a pre-1978 dwelling to extent containment is impractical or nonfeasible the measure will not be installed.	
Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.	
Deferral, or deferral and referral.	
Standards for Deferral: Describe when deferral should take place for the specific health and safety category.	
Deferral is required when the extent and condition of lead-based paint in the house would potentially create further health and safety hazards.	

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.
Deferral takes place upon discovery, or as soon as practicable, of circumstances described in Standards for Deferral, this section, above. CSD Weatherization Deferral Form, signed by the client, provides an area for Subgrantee to refer client to other programs, agencies or outside assistance if the Subgrantee can identify an appropriate contractor or entity to assist client.
Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.
All weatherization crews working on pre-1978 homes must receive LSW training and be accompanied by an EPA Certified Renovator. CSD monitors/inspectors must be Certified Renovators and receive LSW training.
Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.
All client/occupant notification and education requirements contained in the RRP Rule must be followed including, without limitation, providing client/occupant with the EPA pamphlet <i>The Lead Safe Certified Guide to Renovate Right</i> (April 2010).
Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.
All containment, clean up and disposal procedures described in the RRP Rule must be followed.
Lead Based Paint Compliance: Provide a narrative describing how RRP and LSW implementation will be conducted and how the grantee will verify compliance. The explanation should clearly show an understanding that LSW and RRP are separate requirements and both are required to be met.
All weatherization crews working on pre-1978 homes receive LSW training and must accompanied by an EPA Certified Renovator while performing weatherization measures disturbing lead-based painted surfaces. Lead safe weatherization practices are described in the CSD Weatherization Installation Standards (CSD WIS) manual, Appendix I. Further, weatherization measures likely to disturb surfaces containing lead-based paint describe precautionary measures in their respective CSD WIS sections.
Training compliance and certification (LSW, RRP Certified Renovator, and RRP Certified Firm) is tracked by CSD through training records submitted by individual Subgrantees or third-party training facilities. Subgrantee compliance with LSW and RRP Rule practices is monitored through the Subgrantee client files during regular periodic review.

Mold and Moisture

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is “required” or “not allowed” through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.	
Concur with WPN11-6 <input type="checkbox"/> Alternative Guidance <input checked="" type="checkbox"/>	Dwelling assessment includes a quick check for signs of mold; assessment is not a mold inspection. Testing and identification of specific molds is not a part of the DOE WAP, and the client is provided education on mold and moisture issues. Minor repair may be performed to moisture damaged area if repair will ensure long term stability and durability, of weatherization measures. If the mold or moisture problem is deemed severe enough to make installation of weatherization measures not feasible, weatherization is deferred, with reason for deferral acknowledged by client.
Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.	
DOE funds are used for minor moisture damage repair to enable installation and help ensure viability of weatherization measures.	
Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.	
Weatherization will be deferred if mold or moisture problems are so severe they cannot be resolved within the scope of DOE WAP Minor Envelope Repair provisions. Mold testing is not an allowable cost in the DOE WAP.	
Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.	
When repairs are feasible and possible, moisture problems shall be eliminated at the source. Visual assessment is required and diagnostics such as moisture meters are recommended prior to final inspection. If source of mold or moisture is eliminated, and repair is within scope of DOE WAP, repairs will be performed to enable effective performance or preservation of weatherization measures being installed.	
Standards for Deferral: Describe when deferral should take place for the specific health and safety category.	
Weatherization will be deferred if mold or moisture problems present a hazardous condition in relation to weatherization measures, those measures shall not be installed until the problems are resolved. If moisture related of repairs is beyond the scope of DOE WAP Minor Envelope Repair provisions, weatherization measures will be deferred.	
Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.	
CSD Weatherization Deferral Form, signed by the client, provides an area for Subgrantee to refer client to other programs, agencies or outside assistance if the Subgrantee can identify an appropriate contractor or entity to assist in remediation of the mold or moisture issue.	
Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.	
Assessors and weatherization crews use training and experience in determining feasibility of minor repair related to moisture damage prior to installation of weatherization measures. Assessors and inspectors trained in mold and moisture identification and management via national curriculum on mold and moisture or equivalent.	
Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not	

explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.
Client is provided copy of EPA pamphlet <i>A Brief Guide to Mold and Moisture In Your Home</i> (reprinted September 2010) and signs acknowledgment of receipt (CSD 321).
Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.
Any parts or debris related to minor repair is removed from the premises and disposed of properly.
Mold Protocols: Provide a narrative describing protocols for addressing mold found in the client's homes. The protocol should include a method of identifying the presence of mold during the initial audit or assessment, notification to the client, and crew training on how to alleviate mold and moisture conditions in homes.
Assessor may identify mold or moisture issues upon initial dwelling assessment and will note same on the Assessment Form (CSD 540A). The CSD 540A includes a Weatherization Mold Assessment and Release Form that describes the location of any discovered mold or moldy or musty odor, and includes a signed acknowledgment of receipt by the client.

Occupant Preexisting or Potential Health Conditions

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. **Note:** Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

<p>Concur with WPN11-6 <input type="checkbox"/></p> <p>Alternative Guidance <input checked="" type="checkbox"/></p>	<p>Subgrantee contractors and workers shall take all reasonable steps to prevent accidents and avoid hazardous conditions. Potential safety hazards must be reviewed by the Subgrantee, assessor, and crew before beginning each job, during, and after all weatherization work. Assessors and crew members must:</p> <ol style="list-style-type: none"> (1) Conduct an assessment of each weatherization job site to identify existing and potential health and safety concerns. If a person's health is fragile and/or the work activities would constitute a health or safety hazard, the occupants at risk will be required to leave the dwelling during these work activities. Assessment shall specifically include inquiry of client/occupant to reveal known or suspected health concerns. (2) Perform weatherization activities in a manner which: (a) ensures that client/occupants' and workers' health and safety is protected during all phases of the weatherization process; and (b) avoids subjecting the client/occupants to undue discomfort (e.g., blowing cold/damp air on frail or ill persons by pressurizing the home during winter). (3) Pay particular attention to elderly and disabled persons, and to young children who may be playing in areas where work is being done. (4) Thoroughly assess the condition of the dwelling, noting all potential hazards. (5) Post-inspection shall include screening of client/occupant to confirm and update known or suspected health concerns. <p>Failure or inability to take appropriate action(s) necessary of an at-risk client/occupant must result in deferral.</p>
---	--

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds are used to conduct initial screening of applicants and assessment for weatherization services.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

In the event a client's/occupant's health condition cannot be reasonably accommodated (e.g., client/occupant cannot or refuses to leave the dwelling during work activities) installation of weatherization measures are considered nonfeasible and will not be attempted.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Appropriate remedy depends on health condition disclosed by client/occupant as affecting client/occupant.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

If a client's/occupant's preexisting or potential health condition exists or is discovered prior to or during weatherization, installation of weatherization measures shall not proceed until appropriate action(s) are taken to ensure client's/occupant's health and safety.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Referral, if any, depends on declared health condition affecting client/occupant.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

Assessors ask client/occupant to reveal known or suspected health concerns that may affect installation of weatherization measures.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Based on initial assessment and disclosure by client/occupant related to preexisting or potential health condition, provide client/occupant information of any known risks, and provide contact information of a designated person for client/occupant to contact with any issues.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

Not Applicable.

Occupational Safety and Health Administration (OSHA) and Crew Safety

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. **Note:** Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concur with WPN11-6

Alternative Guidance

In general, agency employees and subcontractors performing services under the DOE WAP shall follow the requirements of the Construction Industry Occupational Safety and Health Act (OSHA) Standards (29 CFR 1926/1910), and CalOSHA regulations including, without limitation, Section 6401.7 of the California Labor Code. Each Subgrantee is responsible for the health and safety of its workers. Worker safety is regulated by CalOSHA under California Code of Regulations Title 8, the state Health & Safety Code by the California Department of Health Care Services, Division of Occupational Safety and Health, and the Department of Industrial Relations under state law. Assessments are performed to determine if workers are using safe work practices.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

Alternate funds, if needed, will be used to address this particular health and safety category.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

Not Applicable.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Not Applicable.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Not Applicable.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Not Applicable.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

In addition to specific health and safety component related to OSHA, CalOSHA, and listed in each weatherization measure described in the CSD Weatherization Installation Standards (CSD WIS) manual, all weatherization crews, assessors, and subcontractors are expected to work under conditions that do not jeopardize their health and safety. This includes the contractor's offices, shops, warehouses, and the job sites where weatherization activities take place.

Workers must be aware of, and practice, all aspects of health and safety awareness, including, without limitation:

- (A) Heat Stress and Stroke Prevention (awareness and prevention);
- (B) Tools and Equipment (safety, inspection, use and care);
- (C) Proper Clothing;
- (D) Dangerous Work Area (identification, ventilation, requirements, precautions, electrical hazards);
- (E) Shop/Work Area Hazards (obstacles, aisles and passageways, materials storage);
- (F) Ladders (OSHA approved, use, staging);
- (G) Electrical Cords (inspection, use, storage);
- (H) Carbon Monoxide Poisoning (awareness, locations found, signs of exposure/symptoms);
- (I) First Aid Kit and Emergency Aid Information;
- (J) Vehicles (safe operations, inspection, repairs);
- (K) Drinking Water (importance);
- (L) Cleanup (work sites, equipment, facilities, materials, garbage and debris, clean and orderly condition at the end of each day/completion of work);
- (M) Personal Protective Equipment (requirements, Subgrantee and worker responsibilities).

Training further described in the CSD Health and Safety Plan (CSD WIS, Appendix J).

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Not Applicable.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

Not Applicable.

OSHA and MSDS Compliance: Provide a narrative describing procedures for implementation of OSHA and MSDS requirements related to crew and worker safety, how the 10 and 30 hour training requirements will be met, and what the process is for determining if crews are utilizing good safe work practices according to all requirements (EPA, OSHA, etc.).

Subgrantees are required to have an effective Injury and Illness Prevention Program (IIPP) which meets the requirements of all applicable laws and OSHA and CalOSHA regulations, and to ensure any subcontractors hired have an effective IIPP in place. The Subgrantee person with the authority and responsibility for implementation and administration of the IIPP shall execute a

Compliance Certificate attesting to same.

At minimum, Subgrantees shall do the following to safeguard workers:

Workers must be aware of, and practice, all aspects of health and safety awareness, including, without limitation:

- (A) Comply with applicable provisions of OSHA and CalOSHA regulations, including but not limited to Section 6401.7 of the California Labor Code.
- (B) Have in place an Injury and Illness Prevention Program (IIPP), per CalOSHA Construction Safety Orders, Article 3, § 1509, which requires employers to:
 - (1) Establish, implement and maintain an effective Injury and Illness Prevention Program;
 - (2) Adopt a written Code of Safe Practices which relates to the employer's operations;
 - (3) Post the Code of Safe Practices at a conspicuous location at each job site office or be provided to each supervisory employee who shall have it readily available;
 - (4) Hold periodic meetings of supervisory employees under the direction of management for the discussion of safety problems and accidents that have occurred;
 - (5) Conduct "toolbox" or "tailgate" safety meetings, or equivalent, with crews at least every 10 working days to emphasize safety. These meetings are to be conducted by supervisory personnel.
- (C) Perform an inspection/assessment of each weatherization job site to identify existing and potential health and safety concerns affecting worker safety.
- (D) Follow the Weatherization Deferral Protocol specified in Section 6 of CSD Health and Safety Plan (CSD WIS, Appendix J) when worker health and safety is an issue due to the presence of one or more unsafe or hazardous conditions;

All Subgrantees, field personnel, and subcontractors shall comply with OSHA Hazcom (Hazardous Communication) requirement CalOSHA 5194. Storage containers of hazardous materials shall be clearly labeled to identify the contents and to show appropriate hazard warnings for employee protection.

Safety Data Sheets (SDS) for all materials used in the program shall be kept on file at the central office and in every vehicle used by personnel performing weatherization work for the contractor. The file shall remain at the job site for the duration of all work to ensure that all employees have immediate access to the safety information.

Field and supervisory workers are required to complete an approved OSHA Outreach Training Program on the recognition, avoidance, abatement, and prevention of safety and health hazards in workplaces:

- (1) 10-hour training class for all workers.
- (2) 30-hour training class for crew leaders.

Pests

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. **Note:** Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concur with WPN11-6

Alternative Guidance

Dangerous pest or insect infestation limits the ability to install weatherization measures. In general, mitigation of such infestation is beyond the scope of weatherization services in the DOE WAP. If during initial assessment of dwelling or during installation of weatherization measures a pest or insect infestation is discovered that cannot easily be remedied by workers, weatherization work is unfeasible and is deferred.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds are used for assessment of dwelling/property prior to installation of weatherization measures.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

Weatherization measures affected by pest or insect infestation are deferred.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Removal of pest or insect infestation and associated prevention measures to reduce likelihood of recurrence are performed by third party.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Dangerous pest or insect infestation that may cause a health and safety issue for workers or clients requires deferral.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Deferral takes place upon discovery, or as soon as practicable, of circumstances described in Standards for Deferral, this section, above. CSD Weatherization Deferral Form, signed by the client, provides an area for Subgrantee to refer client to other programs, agencies or outside assistance if the Subgrantee can identify an appropriate contractor or entity to assist client in remediation of potential hazard related to the infestation.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

Assessors and weatherization crews use training, experience and reference to the CSD WIS including, without limitation, Appendix J (Health and Safety Plan) for guidance in determination if a pest or insect infestation rises to level requiring deferral.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

See Standards for Referral, this section, above.
Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.
Not Applicable.

Radon

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is “required” or “not allowed” through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.	
Concur with WPN11-6 <input checked="" type="checkbox"/>	Whenever site conditions permit, exposed dirt (e.g., crawlspaces) must be covered with a vapor barrier <i>except</i> for mobile homes. Title 24 does not require this practice of vapor barrier installation for retrofit applications. In homes where radon may be present, precautions should be taken to reduce the likelihood of making radon issues worse. Testing may be allowed in locations with high radon potential.
Alternative Guidance <input type="checkbox"/>	
Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.	
DOE funds are used for installation of vapor barriers and for testing for presence of radon consistent with this guidance.	
Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.	
Except as described in this guidance, radon and other soil gas testing and remediation are beyond the scope of weatherization services in the DOE WAP.	
Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.	
Vapor barrier installed over exposed dirt if feasible. Testing allowed in locations with high radon potential (EPA currently determines the counties of Santa Barbara and Ventura exhibit highest potential for high average indoor radon levels).	
Standards for Deferral: Describe when deferral should take place for the specific health and safety category.	
A measure determined to fall within nonfeasibility criteria as described in the CSD WIS or this guidance will not be installed. Following any testing, dwellings determined to have high level of radon affecting indoor air quality shall be deferred.	
Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.	
Deferral takes place upon discovery, or as soon as practicable, of circumstances described in Standards for Deferral, this section, above. CSD Weatherization Deferral Form, signed by the client, provides an area for Subgrantee to refer client to other programs, agencies or outside assistance if the Subgrantee can identify an appropriate contractor or entity to assist client.	
Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.	
Assessors, inspectors and weatherization workers are provided online training overview of properties and hazards associated with radon and the proper installation of vapor barriers. Further, the EPA pamphlet <i>A Citizen's Guide to Radon</i> (January 2009) is made available.	
Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.	
Client/occupant is provided copy of EPA pamphlet <i>A Citizen's Guide to Radon</i> (January 2009) and signs acknowledgment of receipt (CSD 321).	
Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.	
Not applicable.	

Refrigerant

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is “required” or “not allowed” through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.	
Concur with WPN11-6 <input checked="" type="checkbox"/>	Reclaim refrigerant per Clean Air Act 1990, section 608, as amended by 40 CFR 82, 5/14/93.
Alternative Guidance <input type="checkbox"/>	
Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.	
Alternate funds, if needed, will be used to address this particular health and safety category.	
Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.	
Not Applicable.	
Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.	
The replacement of air conditioners and refrigerators requires that Subgrantees reclaim refrigerant per Clean Air Act 1990, section 608, as amended by 40 CFR 82, 5/14/93. The appliance vendor, de-manufacturing center, or other entity recovering the refrigerant used by the Subgrantee must possess EPA-approved section 608 Type I or universal certification. Additional local laws may also apply. Subgrantees shall ensure that they have appropriate protocols in place that comply with all standards relating to the disposal	

of the existing appliances. A written record/description of hazardous materials encountered which required special handling and/or disposal shall be kept in client's permanent file.
Standards for Deferral: Describe when deferral should take place for the specific health and safety category.
Not Applicable.
Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.
Not Applicable.
Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.
Subgrantee responsibilities described in the CSD Health and Safety Plan (CSD Weatherization Installation Standards [CSD WIS], Appendix J).
Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.
If a weatherization measure involves handling of refrigerant clients/occupants are advised not to disturb any refrigerant that may be encountered.
Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.
Appliances containing refrigerant are removed from the premises by the installer and disposed of per Standards for Remedy, this section, above.

Smoke, Carbon Monoxide Detectors, and Fire Extinguishers

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.	
<input type="checkbox"/> Concur with WPN11-6 <input type="checkbox"/> Alternative Guidance <input checked="" type="checkbox"/>	<p>Carbon Monoxide (CO) Alarms. Installation limited to battery-powered alarms and minimum number required to protect all sleeping areas in accordance with the CSD Weatherization Installation Standards (CSD WIS) manual, Section 4. Installation must be in conjunction with other weatherization services.</p> <p>Smoke Alarms. Installation may be battery-powered or hard-wired, as applicable, and minimum number required to protect all sleeping areas in accordance with the CSD WIS, Section 5. Installation must be in conjunction with other weatherization services.</p> <p>Replacement of operable CO alarms and smoke alarms is not an allowable cost under DOE WAP. Other criteria apply for both CO alarms and smoke alarms as described in the CSD WIS.</p>
Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.	
DOE funds are used for installation of CO alarms and smoke alarms in dwelling units consistent with this guidance and respective CSD WIS sections.	
Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.	
Not Applicable.	
Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.	
Existing or installed operable CO alarms and smoke alarms are required in any dwelling unit receiving installation of weatherization measures.	
Standards for Deferral: Describe when deferral should take place for the specific health and safety category.	
Not Applicable.	
Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.	
Not Applicable.	
Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.	
Installation performed in accordance with relevant CSD WIS Section.	
Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.	
<p>CO Alarms. Both verbal and written instructions provided regarding maintenance of alarm, testing of alarm, response to activated alarm, and response to failure signal. Both verbal and written information provided regarding carbon monoxide, the effects of CO on the human body, and the symptoms associated with CO poisoning.</p> <p>Smoke Alarms. Both verbal and written instructions provided regarding alarm maintenance, alarm testing, and response to an activated alarm.</p>	
[Has CSD been monitoring this written/verbal client education? If so, how so?]	
Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.	
All debris (including any replaced batteries) are removed from the premises and disposed of properly.	
Smoke/CO Detector Installation: Provide a narrative describing smoke/CO Detector installation parameters and procedures.	
Installation performed in accordance with CSD WIS Section 4 (CO alarms) or CSD WIS Section 5 (smoke alarms). Installation criteria and materials specifications shall be in compliance with the CSD WIS and the local jurisdiction.	

Solid Fuel Heating (Wood Stoves, etc.)

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. **Note:** Where an Action/Allowability or Testing is “required” or “not allowed” through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concur with WPN11-6 <input type="checkbox"/> Alternative Guidance <input checked="" type="checkbox"/>	Only wood burning space heaters within the appliance and installation parameters described in the CSD Weatherization Installation Standards (CSD WIS) manual, Section 26 may be installed, and then only when all safety clearances, for the appliance and chimney pipe, can be met in accordance with manufacturer’s instructions and applicable codes.
---	--

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds are used for repair or replacement of work burning space heaters pursuant to CSD WIS Section 26 for the DOE WAP.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If measure is determined to fall within nonfeasibility criteria as described in the CSD WIS, the measure will not be installed. Nonfeasibility criteria for replacement includes, without limitation, home too small for safe wood-burning stove operation, no practical central location for installation, natural gas service is already in place at the site, or client refusal.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

During assessment checks are made to determine that any existing wood-burning stove presents a health and safety hazard, i.e., a combustion appliance safety (CAS) hazard or fire hazard. If an existing primary heating wood-burning appliance is nonoperational, poses a hazard, and the repair cost exceeds 50% of replacement cost and absent a nonfeasibility condition, the appliance may be replaced with an appropriate unit and in such manner described in the CSD WIS Section 26.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

In the event a CAS hazard exists that cannot be remedied within scope of the DOE WAP, structural issues prevent safe operation, repair, or installation of a wood-burning space heating appliance cannot be accomplished safely, such repair or installation is deferred until any such issue is resolved.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Deferral takes place upon discovery, or as soon as practicable, of circumstances described in Standards for Deferral, this section, above. CSD Weatherization Deferral Form, signed by the client, provides an area for Subgrantee to refer client to other programs, agencies or outside assistance if the Subgrantee can identify an appropriate contractor or entity to assist client in remediation of potential hazard or condition causing deferral of any weatherization measure.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

Online pre-training followed by classroom instruction for basic weatherization, duct blaster, blower door and combustion appliance safety is required of weatherization workers who and analyze existing and modified dwelling systems. All installations of wood-burning space heaters are performed by licensed contractors.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Manufacturer’s operating instructions (owner’s manual) are left in dwelling after review with client. Client is instructed in safe operation and proper maintenance of the heating appliance.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

Any replaced equipment or parts are removed from the premises and disposed of properly.

Space Heaters, Stand Alone Electric

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. **Note:** Where an Action/Allowability or Testing is “required” or “not allowed” through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concur with WPN11-6 <input checked="" type="checkbox"/> Alternative Guidance <input type="checkbox"/>	Repair, replacement, or installation is not allowed. Removal is recommended.
---	--

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds are used for assessment of dwelling/property prior to installation of weatherization measures, for electrical safety check of space heaters, and may be used for removal and disposal of electric space heaters.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

Not applicable.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Required inspection of circuitry to ensure adequate power supply and that no visible electrical hazard is present.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Not applicable.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.
Not applicable.
Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.
All Subgrantees, including assessors, inspectors and weatherization workers are made aware of this guidance.
Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.
Client is informed of hazards associated with electric space heaters and encouraged to allow removal. If client does not allow removal Subgrantee must collect a signed waiver.
Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.
Any parts or debris related to installation of measures or removal of hazards is removed from the premises and disposed of properly.

Space Heaters, Unvented Combustion

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is “required” or “not allowed” through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.	
Concur with WPN11-6 <input checked="" type="checkbox"/>	Removal is required, <i>except</i> as secondary heat where the unit conforms to ANSI Z21.11.2. Units that do not meet ANSI Z21.11.2 must be removed prior to weatherization but may remain until a replacement heating system is in place.
Alternative Guidance <input type="checkbox"/>	Testing for air-free carbon monoxide (CO) is allowed.
Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.	
DOE funds are used for assessment of dwelling/property prior to installation of weatherization measures, for testing of air-free carbon monoxide (CO), and may be used for removal and disposal of electric space heaters.	
Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.	
Not applicable.	
Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.	
Check units for ANSI Z21.11.2 label. Testing for air-free carbon monoxide (CO) is allowed.	
Standards for Deferral: Describe when deferral should take place for the specific health and safety category.	
Installation of weatherization measures will be deferred if a replacement heating system is required before an unvented combustion space heater can be removed.	
Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.	
Deferral takes place upon discovery, or as soon as practicable, of circumstances described in Standards for Deferral, this section, above. CSD Weatherization Deferral Form, signed by the client, provides an area for Subgrantee to refer client to other programs, agencies or outside assistance if the Subgrantee can identify an appropriate contractor or entity to assist client.	
Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.	
Online pre-training followed by classroom instruction for basic weatherization, duct blaster, blower door and combustion appliance safety is required of weatherization workers who analyze existing and modified dwelling heating systems or units. Measures related to combustion appliance safety (CAS) and gas venting are tested and installed to degree deemed appropriate for the specific dwelling pursuant to and as described in the CSD Weatherization Installation Standards (CSD WIS), without limitation, Sections 3, 24, 25 and 26.	
Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.	
Client is informed of dangers of unvented space heaters, including CO, moisture, nitrogen dioxide (NO ₂), and that CO can be dangerous even if a CO alarm does not sound.	
Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.	
Any parts or debris related to installation of measures or removal of hazards is removed from the premises and disposed of properly.	

Space Heaters, Vented Combustion

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is “required” or “not allowed” through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if
--

the issue or testing will be addressed and in what circumstances.	
<input type="checkbox"/> Concur with WPN11-6 <input type="checkbox"/> Alternative Guidance <input checked="" type="checkbox"/>	See guidance for Air Conditioning and Heating Systems at page 4, above.
Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.	
Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.	
Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.	
Standards for Deferral: Describe when deferral should take place for the specific health and safety category.	
Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.	
Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.	
Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.	
Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.	

Spray Polyurethane Foam (SPF)

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is “required” or “not allowed” through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.	
<input checked="" type="checkbox"/> Concur with WPN11-6 <input type="checkbox"/> Alternative Guidance	Use EPA recommendations (available online at http://www.epa.gov/dfe/pubs/projects/spf/spray_polyurethane_foam.html) when working within the conditioned space or when SPF fumes become evident within the conditioned space. When working outside the building envelope, isolate the area where foam will be applied, take precautions so that fumes will not transfer to inside conditioned space, and exhaust fumes outside the home.
Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.	
DOE funds are used for installation of spray polyurethane foam (SPF) consistent with this guidance.	
Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.	
Not applicable.	
Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.	
Check for penetrations in the building envelope. Sensory inspection inside the home for fumes during application.	
Standards for Deferral: Describe when deferral should take place for the specific health and safety category.	
If SPF only viable alternative for use in weatherization measure being installed, and SPF cannot be installed in a manner consistent with this guidance, the measure will be deferred.	
Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.	
Deferral takes place upon discovery, or as soon as practicable, of circumstances described in Standards for Deferral, this section, above. CSD Weatherization Deferral Form, signed by the client.	
Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.	
Online pre-training followed by classroom instruction for basic weatherization includes instruction and hands-on application of various weatherization materials including, without limitation, caulks and spray foams (gap fillers). Training includes use of various products with specification for each application type and any temperature sensitivities. Further, appropriateness and use of particular materials, including gap fillers, is described in the specific section of the CSD Weatherization Installation Standards (CSD WIS) for each measure. A Safety Data Sheet (SDS) for all materials used in the program are kept on file at the central office and in every vehicle used by personnel performing weatherization work for the contractor. The file shall remain at the job site for the duration of all work to ensure that all employees have immediate access to the safety information.	
Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.	
Client/occupant is notified of plans to use two-part foam and precautions that may be necessary during installation of weatherization measures.	
Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.	

Any parts or debris related to installation of measures is removed from the premises and disposed of properly.

Ventilation	
<p>Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is “required” or “not allowed” through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.</p>	
<p>Concur with WPN11-6 <input checked="" type="checkbox"/> Alternative Guidance <input type="checkbox"/></p>	<p>CSD WAP currently incorporates California Code of Regulations Title 24 and ASHRAE 62.2 standards in determination of necessary natural and mechanical ventilation of weatherized dwellings to ensure healthy air quality.</p>
<p>Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.</p>	
<p>DOE funds are used to provide natural or mechanical (or both) means of ventilation pursuant to applicable CSD Weatherization Installation Standards (CSD WIS) manual for the DOE WAP.</p>	
<p>Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.</p>	
<p>If measure is determined to fall within nonfeasibility criteria as described in the CSD WIS (March 1, 2013 revision), the measure will not be installed.</p>	
<p>Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.</p>	
<p>Mechanical ventilation is required to be installed in accordance with CSD WIS Section 49 feasibility criteria (based on California Code of Regulations Title 24 and ASHRAE 62.2). In accordance with ASHRAE 62.2 (2013), mechanical ventilation minimum airflow is based on the assumption of 7.5 cfm per person plus 0.03 cfm per square foot of living space. Components related to mechanical ventilation are installed to the degree deemed appropriate for the individual dwelling, pursuant to and as described in CSD WIS Section 49 (March 1, 2013 revision).</p>	
<p>Standards for Deferral: Describe when deferral should take place for the specific health and safety category.</p>	
<p>Not Applicable.</p>	
<p>Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.</p>	
<p>Not Applicable.</p>	
<p>Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.</p>	
<p>Online pre-training followed by classroom instruction for blower door, duct blaster, and combustion appliance safety is required of weatherization workers who analyze existing and modified dwelling ventilation systems. Additional online Mechanical Ventilation-specific training is required for all assessors, installers, and quality control inspectors.</p>	
<p>Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.</p>	
<p>Ventilation fan controls must have a readily-accessible and labeled override control for occupant use. Client is provided a demonstration with verbal instructions for operating any mechanical ventilation system, the manufacturer's written instructions and warranty, and educated on the importance of operating the ventilation system as designed, in order to avoid buildup of indoor air pollutants, and to remove humidity to prevent moisture damage and mold.</p>	
<p>Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.</p>	
<p>Not Applicable.</p>	
<p>ASHRAE 62.2 Compliance: Provide a narrative describing implementation of ASHRAE 62.2, which will be required during the 2012 program year. Grantees must provide justification if making changes to AHRAE 62.2 specific to their housing stock and local considerations.</p>	
<p>CSD WIS mechanical ventilation pre-installation requirements, installation, and post-testing related to air quality is defined by California Code of Regulations Title 24 and ASHRAE 62.2 (2013).</p>	

Window and Door Replacement, Window Guards	
<p>Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is “required” or “not allowed” through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.</p>	
<p>Concur with WPN11-6 <input type="checkbox"/> Alternative Guidance <input checked="" type="checkbox"/></p>	<p>Replacement, repair or installation is not an allowable health and safety cost in DOE WAP. Replacement or repair of windows (including sliding glass doors) or exterior doors:</p> <ol style="list-style-type: none"> (1) That represent exhibit catastrophic leaks may be replaced as an infiltration measure per the CSD Weatherization Installation Standards (CSD WIS) manual. (2) That are efficiency measures may be replaced if cost justified by an energy audit per CSD WIS and CSD Single Family/Small Multifamily Energy Audit Protocol. (3) Is an enclosure door required to separate a combustion appliance (and combustion gasses) from the living space.
<p>Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.</p>	
<p>Alternate funding sources will be used to address this particular category, i.e. not health and safety funds.</p>	

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.
Replacement or repair of windows or exterior doors may be installed pursuant to the CSD WIS and this guidance.
Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.
Replacement or repair of windows or exterior doors may be considered as a catastrophic infiltration measure or as a cost justified energy efficiency measures as described in the CSD WIS and this guidance.
Standards for Deferral: Describe when deferral should take place for the specific health and safety category.
A measure determined to fall within nonfeasibility criteria as described in the CSD WIS will not be installed.
Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.
Deferral takes place upon discovery, or as soon as practicable, of circumstances described in Standards for Deferral, this section, above. CSD Weatherization Deferral Form, signed by the client, provides an area for Subgrantee to refer client to other programs, agencies or outside assistance if the Subgrantee can identify an appropriate contractor or entity to assist client.
Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.
All Subgrantees, including assessors, inspectors and weatherization workers are made aware of this guidance.
Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.
Not Applicable.
Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.
Any parts or debris related to installation of measures is removed from the premises and disposed of properly.

Other (copy and paste as needed)

Health and Safety Issue: Describe the health and safety category below. Methods for addressing additional energy related health and safety issues must be consistent with DOE guidance.
Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.
Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.
Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.
Standards for Deferral: Describe when deferral should take place for the specific health and safety category.
Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.
Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.
Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.
Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

1 DEPARTMENT OF COMMUNITY SERVICES AND DEVELOPMENT
2 STATE OF CALIFORNIA
3 PUBLIC HEARING, 2014 STATE PLAN FOR THE
4 DEPARTMENT OF ENERGY WEATHERIZATION ASSISTANCE PROGRAM
5
6
7

8 DEPARTMENT OF COMMUNITY SERVICES AND DEVELOPMENT
9 2389 GATEWAY OAKS DRIVE
10 SINEX CONFERENCE ROOM
11 SACRAMENTO, CALIFORNIA 95833
12

13
14 FRIDAY, APRIL 25, 2014

15 10:00 A.M.
16
17

18 ALLEN W. ROSE, CSR
19 CERTIFIED SHORTHAND REPORTER
20 LICENSE NUMBER 13753
21

22 CALIFORNIA REPORTING, LLC
23 52 LONGWOOD DRIVE
24 SAN RAFAEL, CA 94901
25 (415) 457-4417

1 PROCEEDINGS

2 HEARING OFFICER EASTBURN: This is the public
3 hearing for the 2014 State Plan for the Department of
4 Energy Weatherization Assistance Program.

5 Good morning. I am Jeff Eastburn of the
6 Department of Community Services and Development. I am
7 the hearing officer for today's public hearing for the
8 public hearing on the Draft 2014 State Plan for the
9 Department of Energy Weatherization Assistance Program for
10 Low-Income Persons. Today is Friday April 25th, 2014.
11 The time is 10:00 a.m.

12 We are assembling at the Department of Community
13 Services and Development, specifically the Sinex
14 Conference Room on the second floor to conduct a public
15 hearing to receive testimony from the interested parties
16 regarding the proposed Department of Energy Draft State
17 Plan for the 2014 program year. The hearing is being
18 recorded by a court reporter, Allen Rose.

19 The production numbers in the State Plan were
20 based upon projected production. Once the Subgrantees
21 have returned their contracts and confirmed their
22 projected production, the production numbers may be
23 adjusted to meet the contracted goals.

24 If it is determined in the future that a
25 Subgrantee cannot meet their most current production

1 goals, funding may redistributed to another Subgrantee who
2 has the capacity to spend out. If a redistribution of
3 funds occurs, production numbers will be adjusted
4 accordingly.

5 Based upon additional information received by DOE
6 since April 15th, CSD has made changes to the Draft State
7 Plan as follows:

8 Creation of a separate quality work plan added as
9 attachment R.

10 Update to the master file to included analysis to
11 substantiate the health and safety rate. The budget has
12 been updated to reflect the lower rate of 19 percent.

13 Copies of the effected section will be available
14 online by the close of business today. An updated draft
15 of the complete State Plan will be made viable on the CSD
16 website at www.csd.ca.gov by May 1st, 2014.

17 Is there anyone that has testimony at this time?

18 It appears that there are no further comments.

19 The time is now 10:03 a.m. This public hearing is
20 considered closed.

21 CSD will receive written testimony until
22 5:00 p.m. today April 25th, 2014. Thank you.

23 (Hearing concluded at 10:03 a.m.)

24

CERTIFICATE OF SHORTHAND REPORTER

I, Allen Rose, CSR 13753, hereby certify that I am a Certified Shorthand Reporter; that I recorded verbatim in shorthand writing the foregoing proceedings completely and correctly; that I have caused under my direction said shorthand writing to be transcribed into typewriting and the foregoing pages constitute a complete and accurate transcript of said shorthand writing taken at the above-mentioned proceedings.

I further certify that I am not of counsel or attorney for any of the parties to said proceeding nor in any way interested in the outcome of said proceeding.

Dated: April 28, 2014

Allen Rose, CSR 1375

Policy Advisory Council (PAC) Meeting Attendees

PAC (LIHEAP Service Provider) meetings are held on a quarterly basis and attended by representatives from each Subgrantee.

Meetings were held the past program year on the following dates:

September 25, 2013

December 11, 2013

March 19, 2014 (Minutes not yet approved)

June 11, 2014 (Scheduled)

Attendees:

Subgrantee	09/25/13	12/11/13	03/19/14
Amador-Tuolumne CAA	X	X	X
Campeños Unidos	X	X	X
Central Coast Energy Services	X	X	X
Central Valley Opportunity Center	X	X	X
Community Action Agency of Butte Co.	X	X	X
CAC of Santa Barbara County	X	X	X
Community Action Marin	X	X	X
Community Action of Ventura County		X	X
Community Action Partnership of Kern Co.	X	X	X
CAP of Orange County	X	X	X
CAP of Riverside County	X	X	X
CAP of San Bernardino County	X	X	X
Community Enhancement Services	X	X	X
Community Resource Project	X	X	X
Community Services & Employment Training	X	X	X
Contra Costa Emp. & Human Serv. Dept.	X	X	X
County of Nevada Community Development Agency			
Del Norte Senior Center			X
EOC of San Luis Obispo Co.	X	X	X
EOC of San Francisco			
El Dorado County Department of Human Services	X	X	X
Fresno County EOC	X	X	X
Glenn County Human Resource Agency	X	X	X
Great Northern Corporation	X	X	X
Inyo Mono Advocates of Community Action			

Kings Community Action Organization	X	X	X
Lassen County Economic Development Corp.			X
Long Beach Community Services Development Corporation	X	X	X
Madera Community Action Partnership	X	X	
Maravilla Foundation	X	X	X
Mariposa County Department of Human Services	X	X	X
Merced County CAA	X	X	X
Metropolitan Area Advisory Committee	X	X	X
North Coast Energy Services	X	X	X
Pacific Asian Consortium in Employment	X	X	X
Plumas County Community Development Commission	X	X	X
Project Go	X	X	X
Redwood CAA	X	X	X
Sacred Heart Community Service	X	X	X
San Joaquin Co. Dept. of Aging, Children's & Comm. Serv.		X	X
San Benito County Department of Community Services & Workforce Dev.			X
Self-Help Home Improvement Project	X	X	X
Spectrum Community Services	X	X	X
Association of California Community and Energy Services	X	X	X
California/Nevada Community Action Partnership			
Community Energy Services		X	
Hancock	X	X	X
So Cal Forum			
Richard Heath & Associates	X	X	X
TEACH, Inc	X	X	X

Energy Advisory Council

The Energy Council was reconvened to serve as a working representative council to work collaboratively with the department on program and policy priorities. It is comprised of a representative group of service providers who meet monthly.

During this program year, their priorities will be automation, LIHEAP and DOE funding formula, utility program collaboration, and weatherization installation standards and contract updates.

**Low-Income Home Energy Assistance Program (LIHEAP) Service Provider Meeting
Community Resource Project
September 25, 2013**

The LIHEAP Service Providers (LSP) meeting was called to order by LSP Chair Lynda Timbers at 10:04 AM

Roll Call – Attendees in-person or via teleconference:

**Plumas County Community Development Commission
Merced County Community Action Agency
Community Action Partnership of Orange County
Community Services and Employment Training, Inc.
El Dorado County Health and Human Services Agency
Madera County Community Action Partnership
North Coast Energy Services
Community Enhancement Services
Pacific Asian Consortium in Employment
Amador-Tuolumne Community Action Agency
Project Go
Maravilla
Community Action Commission of Santa Barbara County
Community Action Partnership of San Bernardino County
Long Beach Community Services Development Corp
Community Action Partnership of Riverside County
Community Action Agency of Butte County, Inc.
Fresno County Economic Opportunities Commission
Spectrum Community Services, Inc.
Community Resource Project, Inc.
Sacred Heart Community Service
Redwood Community Action Agency
Kings Community Action Organization, Inc.
Economic Opportunity Commission of San Luis Obispo Co., Inc.
Central Coast Energy Services
Community Energy Services
Great Northern Corporation
Contra Costa County Community Services Bureau
Self-Help Home Improvement Project, Inc.
Campesinos Unidos, Inc.
Glenn County Human Resource Agency
Central Valley Opportunity Center, Inc.
Metropolitan Area Advisory Committee
Community Action Partnership of Kern
Mariposa County Department of Human Services
Association of California Community and Energy Services
So Cal Forum
Richard Heath & Associates
Community Services and Development (CSD)
Hancock
Community Action Marin, TEACH, Inc
Not Present:**

2. Approval of Minutes: June 6, 2013

The minutes from the March 13, 2013 and June 6, 2013 meeting were released on June 15, 2013. M/S V. Martinez/M. Culbertson Approved

3. Director's Report: Linné Stout, Acting Director

Site Visits

Since the last LSP meeting Linné Stout had the opportunity to visit several agencies – Project Go, Community Action Agency of Butte, Central Valley Opportunity Center, Community Resource Project, Fresno County Economic Opportunities Commission, and Merced County Community Action Agency. She learned a lot about these agencies and the great services that are provided to assist low-income Californians. At the most recent visit to Merced, she visited a home where the workers were installing floor insulation.

3FF Committee

Linné Stout acknowledged and thanked the three factor formula committee (3FF) for their hard work. The goal of the committee is to provide a recommendation to the Department on the formula used for the allocation of the LIHEAP and Department of Energy (DOE) grants. It is important that each of the agencies understand the factors and what the impact of updating the factors will have on agency funding and services. CSD distributed data to see the factors that are part of the allocation methodology, population, climate and energy costs. In August a letter was sent out informing everyone about the committee including a list of those on the committee. CSD will also provide written communication as well as hold a meeting with Executive Directors Program Managers in the near future to discuss the outcomes.

Solar Decathlon

CSD was selected for a panel presentation at the DOE solar decathlon to be held on October 4, where they will have an opportunity to highlight the work that some of the agencies are doing on the Solar Pilot. It will be held at the Great Park in Orange County. Jason Wimbley will be the moderator for the panel, which is titled *Working Together to Bring Energy Efficiency to Low-Income Communities*, Panel will include California Public Utility Commission (CPUC) Commissioner Catherine Sandoval, Regulatory Policy and Reporting Manager for Southern California Gas Company Andrew Steinberg, Program Support Manager, Community Action Partnership of Orange County Sally Andreatta,, and President of FAFCO, Inc. Robert Leckinger. The panel discussion will highlight the ongoing collaboration between CSD, the California Public Utilities Commission and the Investor Owned Utilities to install solar water heaters by leveraging LIHEAP funding and California Solar Initiative rebates.

Call Center - New staff was added in order to provide better response to the calls received for information on the energy programs. In July, CSD received 16,215 calls and in August we received 15,226.

LIHEAP Expenditures/Grant Balances

CSD was recently informed by US Department of Health and Human Services that the federal grants had a two year timeline in which to spend the funds. However, CSD provided reasons why the LIHEAP funds should be excluded and they believe they will

prevail. CSD is waiting for written confirmation. As a reminder the 2012 LIHEAP closeouts are due September 30.

On July 8, 2013, California received approval from HHS to increase the percentage of LIHEAP funds allocated to weatherization assistance to 25 percent. However, based on the preliminary households numbers they may have to request a good cause waiver instead of the standard waiver request as the HH served are estimated to be lower than last year.

Federal Budget

On September 30 the continuing resolution (CR) expires. If another CR is approved, then the state is expected to be funded at the 2012 level, but they do not know the exact impact of the reductions due to the sequester. If there is a Federal government shut down CSD will keep agencies apprised and determine next steps working with the Energy Council.

Mark Wolfe – NEADA was to meet with OMB staff to discuss the Administration's FY 2015 Budget request for LIHEAP. It appears that there is clear interest in leveraging projects. For example, where LIHEAP can be seen as the base for bringing in other funds – especially utility and/or other funds, shut-off prevention regulations, etc. NEADA wants to make the point that a strong LIHEAP program brings in additional funds to support low income families.

Updated **Poverty Data** shows that the poverty rates did not change for 45 states; however California was one of three states that both the number and the percentage of people in poverty increased. California went from 16.6% to 17% with an increase of approximately 206,000 individuals falling into poverty.

Governor Brown will sign AB 10 which will raise California's minimum wage from \$8.00 per hour to \$10.00 AB 10 will raise California's minimum wage in two one-dollar increments, from \$8 per hour today to \$9 per hour, effective July 1, 2014 and from \$9 per hour to \$10 per hour, effective January 1, 2016. Many experts have stated that increasing the minimum wage to a living wage is one of the biggest ways to lift people out of poverty.

ACA/Covered California

Enrollment for Covered California begins October 1st with implementation on January 1, 2014.

4. Chair's Report: Lynda Timbers

The 3FF committee has been very busy with the assigned tasks. The minutes have been sent out to the Executive Directors (ED) and Program Managers (PM). The 3FF will hold a meeting with EDs to report on the outcomes of this committee. CSD will send a notice on this to EDs to find a good date. The committee expects to be done by next week.

The ACCES roundtable was cancelled but there were many issues that the network wanted to talk about. The next roundtable will be on December 10th. The LSP will be on December 11th.

ACCES held a meeting yesterday and had a discussion on many of the issues brought up to discuss at the Roundtable. We will forward the topics and issues to the LIHEAP Working Group (LWG). If you have any comments or issues please get them to ACCES or the committee members.

The LSP will now have working lunches so all agenda items can be discussed. There will be a half an hour to get your lunch and be back to the meeting.

5. Legislative Report: Arleen Novotney

A report was distributed to the network on AB 327 and SB 1407.

AB 327 has been passed and is waiting for the Governor's Signature. The main points of concern are:

- This Bill repeals the limitations for increasing the electrical services rates for Tier 1 and 2 of residential customers, including the rate increase limitations applicable to electric service provided to CARE customers.
- The rates for CARE customers will be established by the CPUC to ensure that low-income ratepayers are not jeopardized or overburdened by monthly energy expenditures and to adopt CARE rates in which the level of discount for low income electricity and gas ratepayers correctly reflects their level of need, as determined by a specified needs assessment. The needs assessment shall be completed at least every three years.
- CARE program eligibility would also be revised to allow one person household eligibility is based on 2-person household guideline levels.
- Specifies discounts for CARE participants to not be below 30% or exceed 35% of the average non-low-income customer.
- This requires that increases to rates and charges in rate design proceedings, including any CARE discount be reasonable and still subject to a phase-in schedule relative to the rates and charges in effect prior to January 1, 2014.
- Authorizes the PUC to approve a fixed monthly charge no greater than \$10 a month for residential customers and \$5 for low-income customers beginning in 2015 and may allow a cost of living adjustment beginning in 2016.
- Allows the current rate schedule to be in place until January 1, 2018. The CPUC cannot authorize or impose by the default rate schedule for residential customers based on Time of Use (TOU) until 2018. Also this establishes provisions to protect senior or other vulnerable customers, in hot climate zones, from unreasonable hardship due to TOU rates.
- Provides the CPUC with the authority to require IOUs to procure renewable energy generation above that which is required in 33% Renewable Portfolio Standard set in 2011 under SB 2.
- Non Low-Income customers will continue to fund a number of programs to benefit low-income vulnerable populations authorized by the legislature as ESAP.

Why the network needs to be aware of the changes made:

- Increase in Bill Payment assistance customers:
 - WHY: Depending on the final rate increases decided upon by the PUC you may find more low-income households struggling to pay their bill even though they are using the same amount of energy.

- This will increase the confusion for many eligible households.
- The CSD network will need to educate their communities/clients on why their bills may have increased.

AB 1407 is in committee: held under submission or suspense It will likely be introduced in the next legislative session. Why was it put into suspense:

- There is a current proceeding discussing Lifeline at the CPUC
- Legislators sent a communication to the commissioner overseeing the proceeding urging the CPUC to hurry and authorize a wireless Lifeline product. This would offer the 1.2 million current Lifeline customers the option to switch their Lifeline discounts from landlines to their cellular phones
- AB 1407 if passed would superseded the CPUC pending rulemaking on the Lifeline Program if passed

Note: The handouts were provided.

6. Three Factor Formula: Val Martinez

This has been a long process to come together on a fair and equitable distribution plan. The committee needed to have an outcome that will be for the next ten years. The committee members were a representation of urban, rural, each association and size of the agencies and also local governmental agencies.

The minutes are distributed to the network after each meeting of this committee to Executive Directors and Program Managers.

There are three main factors:

- Low-income population
- Energy costs based on utility rates and wood, propane and oil surveys
- Weather data with respect to heating and cooling degree days

The outcomes hopefully will be by early October.

Distributed to the network was a spreadsheet that demonstrated how the factors have changed in each service area based on current funding levels. The factors could further change based on outcomes from the committee, and the 2014 funding level may be lower so the results will also change.

The hope is to give advance notice so the agencies can have time to plan because of the changes in funding. This will be important regardless of an increase in funding or a decrease in funding.

Discussion:

Q: Is the 25% allotted for weatherization able to be changed within the agency contract funding?

R: The state is required by law to apply to increase weatherization to 25% for each contract year. This happened in the mid-1990s to look at the long term energy fix of

weatherization as opposed to a payment on a utility bill. With the decline of DOE funds, weatherization will be much less in the coming years and LIHEAP will need to be used to keep the work going.

7. Automation Update: Ed Lee/Sylmia Britt/RHA

a. CORE System

- CLASS data migration has been completed – Program Years 2008, 2011, 2012 and 2013 were migrated at the implementation of CORE. Program Year 2009 and 2010 were outstanding and not loaded into CORE by the May 2013 start date. As of Sept. 22, 2013, all CLASS data from 2008 through May 2013 has been loaded into the CORE application system.
- CLASS System retirement/shut-off date - CSD is going to leave CLASS running through 12/31/13 in read only mode. CSD is leaving CLASS up and available to ensure agencies are afforded the opportunity to transition completely to CORE and there is no longer a use for the application system.
- CORE Reports – A previously expressed request from LSPs was to eliminate the pre-populated criteria for the four CORE standard reports. CSD completed this change last month, so the reports will start with no data and CORE users may choose the criteria that he/she selects as the report parameters.
- CORE Web Services/Data Exchange – CSD is enabling an option to allow vendor systems to submit Payment Assistance records directly to CORE via Web Services/Data Exchange rather than manually uploading individual or batches of Payment Assistance records. This CORE software functionality is optional as both manual uploads and vendor systems submissions to CORE are both acceptable. CSD will put this new software functionality into production during the week of Sept. 30, 2013.

Discussion:

Q: The rejections are still coming up and may continue until the end of the year. There may be a problem into next year so CLASS may be needed past the December 31st date.

R: CORE already has this historical data now so agencies can find this in CORE. No extension to CLASS past December will be needed to access rejections.

b. Survey Results/Priorities

The CORE forum survey results and CSD is able to make the following enhancements for program year 2014:

- The capability to remove rejections and efficiencies in CORE

- The reports will be enhanced. Selection criteria will be added so agencies can use these reports for other purposes
- Global screen searches will be enhanced
- WPO payments and returns; there is now a group to discuss this item. They will flush out the issues with WPO and CORE
- Performance measures will be implemented into CORE

c. Weatherization Committee

The future of weatherization in CORE will have enhanced validations. CSD has put together a roadmap on how to tackle weatherization in CORE and to assist with implementation and synchronizing the data and reports, a work group will be formed to discuss these issues. This committee will have a couple of face to face meetings and also several calls. The members will need to have one member that subcontracts the work. These members will need to report out to the agencies that use the same system.

Members: 4 Vendors with their choice of an agency representative.
 ServTraq
 Hancock
 Cap 60
 Other vendor

CORE application system, next week another functionality will be added. The Vendor system will talk to CORE starting next week so files can be placed into CORE.

Discussion:

Q: With Hancock, the agencies need to double enter data into the bucket. They need approval from CSD to use the contractor's equivalent contained in their system. The numbers are close to matching the bucket data and in EARS.

R: CSD is working on this issue with the vendors to be able to ensure all works well between the agency systems and CORE and the bucket.

Automation has a purpose for CSD in monitoring, to collect information. Much of the data collected now doesn't meet the needs of DOE and CSD. Each vendor will have to lay out a plan for their data collection. CSD needs to figure out how to align all needs.

Hancock has tried to get some of the forms in this system approved. This will need to be in writing before they can be used by agencies. CSD needs to make sure that all of the data is transferred into the bucket by all agencies. This is to fulfill the LIHEAP data needs. Some agencies are not doing this data submission. This will be one of the first tasks of the committee to approve forms within a system for use in the program.

It is important to look at the reimbursement side of the data as well as the forms and work completed. Currently the data does not match. If this was aligned then it would make the process of reimbursements quicker and more efficient.

EARS and the bucket will hopefully be tied together soon. CSD is trying to have these two systems data reconcile with each other. At this time there is a disconnection between the two systems data.

Q: Is there a way to pull agency reports off of the bucket?

R: CSD takes the data from the reports in the system. This is why monitors ask agencies to reconcile this data. At the agency, they need to go through all files to find the possible difference. The discrepancies come from the EARS report.

In EARS it only shows the dollar amounts. If it also showed the number of reported measures the agencies could use the data to reconcile both.

Response: The bucket has the details so the hope is to have this data accessed so the discrepancies can be reconciled. The agencies can then have their data come directly from their own systems. Auditors at CSD look at this data and it needs to be reconciled.

Example:

An agency had a problem with missing post inspections. With access to the file that is transferred the agency could reconcile the discrepancies. The monitors are sending continual discrepancy reports. The data is there but if the agencies can't access this data then it is hard to reconcile these CSD discrepancy reports.

Leveraging issue:

Duct blaster data is not available to enter into EARS. Also items that were charged to another program that were leveraged with LIHEAP. These show as errors on EARS. The system is set up to count all measures as a unit and causes number discrepancies.

The checks of the files by the agencies to find the discrepancies takes a lot of time and very often it comes out that the discrepancy numbers were not discrepancies at all.

Note: In processing a cash assistance application the apply date equals the intake date.

8. LIHEAP Working Group Report: Kathy Andry

a. Expenditure Performance

It is the Department's responsibility to ensure that funds reach as many low-income customers and that funds are expended. As a result, it is important that CSD strengthen its ability to work with underperforming agencies to achieve sufficient expenditure performance or if that is not possible to redirect funds so that funds are not in jeopardy of being returned.

- The LWG reviewed and recommended polices on the best approach to handle expenditure performance. It was recommended that contractors develop four benchmarks during the term of the contract and if agencies are not able to meet at least 60% performance by September 30 that they will have to explain how full expenditure will be achieved by the end of the contract.

- CSD will implement monthly performance monitoring by field staff to verify that agencies are on track. If an agency is not on track they will need to explain within a specified time period on how they resolve the deficiency.
- CSD will closely monitor and will enter into negotiations with contractor if they are substantially behind in their benchmarks, which may result in agency being placed on high-risk. CSD recognizes that there may be events beyond agency control that has caused performance issues and CSD will work with agencies to help resolve.
- CSD will consider an agency successfully performing if they have spent at least 90% of their allocation by the end of the contract.

Discussion:

If any quarter benchmark is not met, then the CSD field monitor will contact the agency to have them explain why they missed their benchmark and explain how they will achieve performance in for the next quarter.

Historical performances will be looked at also to determine an agency's expected expenditures. The first year of these new monitoring aspects, an agency may have some leeway if their prior performance has been at an acceptable level.

The non-performers should have the funds adjusted sooner to have the funds moved to agencies that have the capacity to expend those dollars.

b. County Allocations

The Department deems it important that providers that serve multiple counties ensure that funds allocated to each county are expended in that county.

- LWG recommended that we establish the same threshold for performance that at least 90% of the funds dedicated for that county are expended in the county. Meaning that the remaining 10% can be transferred between counties based on circumstances that there is no acute need or when an agency can readily expend the last 10% in another county to avoid under expenditure or loss of funding.
- County allocations only relate to direct program activities. Cost for Admin, Intake Outreach, T&TA are "umbrella costs" for the total contract and all areas. Note: if only 90% if the contract is expended than administrative and assurance 16 costs will need to be proportionate
- Cost attributed for liability insurance, vehicle and equipment, workers' compensation general operating expenditures will have to be proportionately budgeted from each county allocation.
- CSD is redesigning the budget page for weatherization and EHA-16 so agencies will be able to direct program activities by county. CSD is designing a reporting feature

in EARS to allow the agencies to enter budgets and expenditures for each county for direct program expenditures; however, it will not tie to the details because of IT considerations that need more time to develop/design.

Discussion:

CSD is using EARS as a way to track the county allocations for direct program activities only.

If agencies wish to move funds from one WPO to ECIP HCS for that county, than it will follow the minor modification process.

c. Performance Measure Implementation

CSD is expanding the intake form for the 2014 LIHEAP contract to be able to collect data from clients via the intake process to respond to the new federal reporting requirements as set forth below:

Measure		Applicant or Utility	Question on Application
# of LIHEAP Bill Payment –Assisted Households		Agency Reported	<i>Agency will report whether payment was for gas, electric, wood, propane or oil.</i>
# of LIHEAP Bill Payment –Assisted Households use:	Main Heating Fuel Type	Application	What is the main fuel you use to heat your home?
	Electricity as a Supplemental Heating Fuel	Application	Do you also use electricity to heat your home?
	Wood as a Supplemental Heating Fuel	Application	Do you also use wood to heat your home?
PREVENTION OF HOME ENERGY CRISIS	Past Due Notice	Application	Do you have a past due or disconnection notice?
	Risk of running out of Deliverable fuel	Application	Do you have less than 30 days’ worth of wood, propane or oil?
Number of LIHEAP – Assisted Households that had:	Repair or replacement of operable home energy equipment	Agency Reported	<i>Agency reports whether repaired or replaced H/CS was operable.</i>
RESTORATION OF HOME ENERGY	Energy service restored after disconnection	Application	Is your gas or electricity currently turned off?
	Received shipment of fuel after having no fuel	Application	Are you out of wood, propane or oil?
	Received	Agency	<i>Agency reports whether repaired or replaced</i>

Measure		Applicant or Utility	Question on Application
	repair/replacement of inoperable heating/cooling system	Reported	<i>H/CS was inoperable.</i>

CSD will add the additional elements to the intake form except all the heating and cooling data is already reported into EARS.

d. Other LWG issues:

Other items that LWG is working are as follows:

- The energy audit usage to target measure installation for energy efficiency purposes.
- Developing a loading order for weatherization measures under the LIHEAP program where ranked in order of being the most cost effective based on climate conditions and housing characteristics.
- Developing a maximum reimbursement model based on different factors for the region. The maximums seem to be a fictitious cap. CSD needs a cost threshold on when to install a measure. For instance, doors, the cost differs between providers. We need to question when will a measure be cost effective? This should be a consideration so measures decrease the burden of the home energy costs. Health and safety will not be subject for this consideration.

Discussion:

The concern is that the costs for installing a measure may be higher in some areas due to limited supply and delivery. Measures may be more cost effective in colder areas of the state versus warmer areas, which may result in some homes receiving a different compliment of measures than another home.

There are many reasons for the differences in costs as the ability to bulk purchase in urban areas and being able to warehouse these items. Small agencies do not have this ability. CSD needs the cost for energy savings returns.

The network commented that LIHEAP has been a safety net program as opposed to DOE that has always been an energy saving program.

Q: When MUDS are weatherized, do all units in a building need to be qualified to do all units within that building?

R: The contract states that 66% of the households need to qualify to do the whole building. If there are vacant units they must be designated to rent to low-income.

Comment: The problem is that the contract is not clear on the eligibility of MUDS. CSD will discuss this in the LWG.

Q: Currently the 2013 contract runs through 1-31-14. It is possible to start and complete jobs in January?

R: Agencies are able to start and complete jobs in January. They do not have to be started by December 31st to be able to have them billed within that contract.

Noon to 12:30 – Working Lunch

9. 2014 LIHEAP Contract: Kathy Andry

a. Preliminary Contract Changes

- Contract changes will include the expenditure and county allocation as described earlier.
- CSD is working on the intake form to include the new data collection elements.
- CSD is proposing to modify the priority plan process where agencies submit their plans upon return of the contract. The reasoning is that in the past the “percentage plans” were completed before allocations were known so what would mostly happen is when the budgets were returned that in most cases agencies modify what they originally budgeted because they are aware of their allocation.
- What this will mean is that the initial allocation will be based on 2013 Percentage Plan; however, agencies will have flexibility to make changes through the budget process. Once CSD receives the budget, the allocation specialist will change the allocation spreadsheet to reconcile with the actual budget.

2014 LIHEAP Carryover:

At this time some agencies have not submitted their close-outs on time. This delays the close-out for that grant statewide and also delays the redistribution of carryover.

The 2012 redistribution is now delayed until possibly the end of the 1st quarter of the 2014 contract year. The goal is to have the close-outs submitted timely so the carryover can be distributed much earlier.

CSD will expand the performance criteria to include administrative items such as timely reporting and submission of closeouts. There will be other admin items that will be monitored under the performance consideration criteria.

Discussion:

Q: What will happen to the 2011 LIHEAP carryover?

R: This is somewhat tied to the 3FF committee discussions. The carryover may be used to phase in the new formula reductions. Also it can be used to supplement funding reductions. There is also under discussion options on how to distribute these funds. A clearer picture will be needed on the federal allocation of funds to better determine how these will be used.

b. Contract Implementation

CSD is working on the contract change matrix and part of this process requires the Department to seek a 30 day comment period. They are seeking input from the providers if there is a way to shorten the review process to two to three weeks. CSD will work with the LWG to determine feasibility of a shortened period without compromising the network work to weigh in. The goal is to be able to release the LIHEAP contract by mid-November.

- CSD goal is to conduct a webinar on the proposed changes soon after the release.
- CSD does not plan to make many changes to EARS/CORE other than the county allocation budget. They will work on developing the 2014 LIHEAP specifications in the month of October.

10. Department of Energy (DOE) Program: Kathy Andry

a. 2013 DOE Contract Release

- DOE has provided CSD with a conditional approval of the \$1.52 Million 2013 DOE award, and has only released 25% of the funding. The conditions are based on final approval of the DOE State plan.
- Because of the delays in receiving the full award and approval of the 2013 DOE State Plan, CSD will not release the contracts until 100% of the funding is received. CSD will work through October with DOE to complete the changes to the state plan. The contract term will be shorter, possibly a 4-6 month term. The funding will be small so CSD is confident that the contracts can be expended.
- The DOE reimbursement was increased to \$6,900 per unit.

Discussion:

Q: Can the LIHEAP maximum per unit also be raised to meet the DOE average?

A: This will be discussed at the LIHEAP Working Group. The increase in the number of audits being done will increase the costs. In some areas that do not use audits, the repair and replacement work has increased because of the referrals from utility contractors because the utility companies are capping off the defective gas appliances in many cases. These measures need to be addressed as Health and Safety (H&S) issues. Many agencies have requests for waivers on costs of repair and replacement measures to fix the health and safety issues in a home.

b. 2014 DOE Program Planning

- As mentioned in the August 30, 2013 webinar hosted by CSD, there are many changes that will be implemented for the DOE program in 2014 and beyond. The premise for these changes is a result of the scrutiny received under ARRA that identified serious areas of deficiency with poor management and quality of work.

- Over the next three years DOE will require states to implement key changes to improve the quality of work and program management. The overall plan will require states to ensure that weatherization installation standards meet DOE standards, all weatherization personnel are fully trained to the standards, inspections forms must meet minimum standards, and inspectors will have to possess the Home Energy Professional QCI Certification by PY 2015.
- The webinar is posted on CSD's Contractors website as a point of reference and offers more details on what is coming.

To keep pace with the changes, CSD is working with RHA to update the WIS, Field Guide to be implemented in 2014.

Installation Standards

All DOE weatherization measures installed must meet the Standard Work Specifications (SWS) for single-family, multi-family, and mobile homes beginning with PY 2014.

CSD has commenced the internal review of the CSD's Weatherization Installation Standards (WIS) changes to bring us in alignment with the DOE standards— there are approximately 50 sections to review. The internal review will be completed over the next 30-45 days. The WIS committee comprised of designated agency field specialist and agency consultations will be asked to review the standards before implementation.

Possible DOE WIS/DOE REGS Committee members:

El Dorado
RCAA
CAPOC
Project Go
CRP

Field Guide:

California must implement a Field Guide beginning with PY 2014. The Field Guide will examine the job roles of weatherization field personnel, defines best practices and procedures, and outlines measure-specific policies for CSD's weatherization programs. The field guide is designed to complement the WIS manual.

CSD will follow the same process for review of the WIS by conducting an internal review and including the WIS committee in the review process.

Once the WIS/Field Guides are in place – CSD will provide training to the entire network on the changes.

Discussion:

The DOE funding is so small that it will only cover training. LIHEAP will need to be used to support this training. Will CSD allow funds be used to fund training only with no units completed since the funding is so small?

There was a request to use all DOE funds for training with no percentage breakdowns. This will need authorization from DOE. DOE understands that this will be an issue. Each state will need a sound case to change the allocation percentages. Each area allocation will need some weatherization services.

The leveraging with LIHEAP is crucial for this training. The benefits will apply to both programs. The LIHEAP T&TA may need an increase as well. All of the things with LIHEAP can only be stretched so far. With DOE having so many restrictions and very little funding, agencies will need to determine whether it is something that they will continue to administer. CSD has the same situation with very little administration dollars set in DOE. They will look into scaling down the program to make it manageable. This is a very challenging time.

It seems reasonable to consider that LIHEAP is actually subsidizing DOE and not leveraging dollars. This is certainly not the intent of LIHEAP. LIHEAP does very good work and should not be undermined.

Would it be possible to approach DOE to train in bulk by the state as a set aside? The large network is a problem for this amount of DOE funding. Possibly the carryover can be used for bulk training. The required DOE trainings will be expanded to all types/classes of workers.

11. CPUC and CSD Pilot Project Update: Chuck Belk/Lynn Wiley

This is to have better leveraging between programs.

Geographic Coordination:

- The Geographic Coordination pilot is being designed to effectively leverage the IOU (ESA) and CSD (LIHEAP) programs in order to decrease energy usage and enhance weatherization offerings to high-energy users and clients that utilize non-regulated fuel sources.
- The pilot is almost ready to launch. Contract amendments allowing for the leveraging of LIHEAP with the IOU's ESA program are at both Butte CAA and Fresno EOC.
- Enrollment and weatherization assessments will be performed using a tablet-based application that will capture customer and dwelling information and then generate any required forms needed for each program.
- Weatherization work activities will be shared by both LIHEAP and ESA – the tablet will determine which program each measure will be installed under (Based on building type, ownership, fuel type, climate, etc.)
- Costs for intake, qualification, outreach and assessment will be shared by both LIHEAP and ESA
- Next Steps:
 - 9/16 – 9/30 Contract Amendments signed and back to CSD
 - 10/1 – 10/8 Roll-Out training to Butte & Fresno
 - 10/9 – End Begin enrolling households, followed shortly by weatherization assessments and installation of measures. RHA will provide ride-along mentoring for the first few dwellings weatherized in each county.

Bulk Purchasing:

- Work on the CSD-CPUC Bulk Purchasing Pilot has slowed, but CSD is hopeful that they can still work out an arrangement that will benefit service providers. The agreement was initially going to focus on ten 10 measures that could be purchased through an agreement that SoCal Edison has with a supplier. Due to contractual / procurement constraints it is down to (2) measures: Refrigerators and Evaporative Coolers (Wall & Roof Mount).
- CSD has held conference calls with 12 different service providers from around the state to identify interested parties.
- They have requested the ability to release pricing information from the supplier to gauge interest from the agencies. They recognize this is likely the major decision piece for most providers although the two (2) year parts and labor warranty offered is also a plus.
- Utilizing the bulk purchasing method may require some agencies to change their weatherization business model (i.e. delivery / installation) – this is being evaluated and will likely depend on the size of price breaks offered.
- Upcoming conversations between the materials supplier and service providers will focus on:
 - Delivery requirements (Minimum delivery quantities)
 - Warehousing constraints
 - Appliance pricing
 - Any needed changes to service model (i.e. requiring receipt of merchandise, storage, delivery and installation of appliances, recycling of old appliances)

Solar water heating pilot

The solar water heating pilot is moving forward and SHHIP will have the first install this week. Though all 14 participating LSPs are trained and ready to go, there are administrative aspects of the project that are more complex, specifically: meeting the complex rebate requirements, which requires the IOUs to mail out outreach letters to potential customers. .SCG began mailing outreach letters in August, and SDG&E followed in September.. PG&E has not yet mailed any outreach letters. CSD has been receiving referrals as a result of the IOU mailings and are forwarding those referrals to the appropriate agencies. In addition, those agencies who are “dual providers” (ESAP and LIHEAP) have the ability to seek out their own projects, rather than wait for the IOUs to mail letters. To date, the greatest success has been from the outreach done by those dual providers.

CSET has had quite a few referrals. They are concerned that the eligible referred customers may market the program to other households who may also want the SWH. They must have the utility letters to qualify.

12. 2014 Monitoring Program: Kristen Hart

- CSD is beginning to ramp down the 2013 monitoring season, which will end first week of November

- CSD will do a webinar after the season is over to highlight common findings/recommendations and/or issues found in the field.
- Just a reminder, if you have Corrective Action Plans that are due, or outstanding, please get those in as soon as possible so that CSD can close out all the monitoring reports and move on to 2014.
- Once this year's monitoring is over, CSD will begin looking at developing a scope for 2014 and training staff to it.
- CSD is also in the process of revamping the desk reviews to go from a quarterly review to a monthly review. These reviews will really focus on current production and expenditures to ensure that agencies are meeting their goals.
 - Each monthly will also have a couple of additional things that staff will look at. This is to ensure that CSD is meeting our responsibility for compliance monitoring, but minimizing redundancy. For example, they won't look at diagnostic testing each month, but maybe only once or twice a year. However, it will still be up to the agencies to ensure that they can account for any discrepancies found during those reviews-when asked.
 - Once CSD gets the new reviews finalized, they will let the network know what to expect with the monthly desk reviews.

Discussion:

Q: The network asked if the monthly reviews will require agency to submit corrective action plan.

R: CSD will request a corrective action when the agency is behind in expenditures.

Network suggested that maybe the first two months the agency can just be noticed and then on the end of the quarter a plan can be requested. CSD will put a proposal together and run it through the LWG. The expectation is that the explanation needs to be provided to CSD on the deficiencies.

13. Announcements

- a. Save the Date – December 11 for next LSP meeting.
- b. ACCES roundtable December 10th
- c. EOW conference will be in San Diego in April
- d. CCES will be the new energy service provider for San Mateo County
- e. Project Go will now service Nevada County
- f. Spectrum will now service all of Alameda County including Berkeley

Adjournment: 2:31 PM

**LIHEAP Service Providers
Community Resource Project
December 11, 2013**

The Low-Income Home Energy Assistance Program (LIHEAP) Service Providers (LSP) meeting was called to order by LSP Chair Lynda Timbers at 10:08 AM

1. Roll Call – Attendees in-person or via teleconference:

**Amador-Tuolumne Community Action Agency
Campesinos Unidos, Inc.
Central Coast Energy Services
Central Valley Opportunity Center, Inc.
Community Action Agency of Butte County, Inc.
Community Action Commission of Santa Barbara County
Community Action Marin
Community Action of Ventura County
Community Action Partnership of Kern
Community Action Partnership of Orange County
Community Action Partnership of Riverside County
Community Action Partnership of San Bernardino County
Community Energy Services
Community Enhancement Services
Community Resource Project, Inc.
Community Services and Employment Training, Inc.
Contra Costa County Community Services Bureau
Economic Opportunity Commission of San Luis Obispo Co., Inc.
El Dorado County Health and Human Services Agency
Fresno County Economic Opportunities Commission
Glenn County Human Resource Agency
Great Northern Corporation
Kings Community Action Organization, Inc.
Long Beach Community Services Development Corp
Madera County Community Action Partnership
Maravilla Foundation
Mariposa County Department of Human Services
Merced County Community Action Agency
Metropolitan Area Advisory Committee
North Coast Energy Services
Pacific Asian Consortium in Employment
Plumas County Community Development Commission
Project Go
Redwood Community Action Agency
Sacred Heart Community Service
San Joaquin County Department of Aging and Community Services
Self-Help Home Improvement Project, Inc.
Spectrum Community Services, Inc.**

TEACH, Inc.
Association of California Community and Energy Services (ACCES), SoCal Forum
Richard Heath & Associates (RHA)
Hancock

Not Present:

2. Approval of September 25, 2013 minutes

M/S by V. Martinez/N.Magsig Approved

Notes from the meetings will be sent out by ACCES. These are not official minutes but discussion notes only. The official minutes for the meeting will be sent out within a two week period.

3. Director's Report – Jason Wimbley

- At the Department of Community Services and Development's (CSD's) request, the Three Factor Formula Advisory Committee (TFF) reconvened to reexamine the committee's (formula update) proposal and need to make any further refinements to the proposal to address anomalies and other concerns expressed during the November 5th meeting with Executive Directors on the 2013 TFF update and implementation plan. The TFF will continue to meet and hopes to complete its reexamination by February 1, 2014.
- CSD recently issued a communication to activate the SWEATS program in response to severe cold temperatures across the state. During the inclement weather period, providers may provide SWEATS emergency provisions to impacted households. The Department asks that agencies remain attentive to monitoring the impact of cold weather events within their service area, and in particular on at-risk individuals/households. CSD will continue to issue weather advisories and will let agencies know when the freeze is over.
- CSD recently finalized the annual Household Report for Federal Fiscal Year (FFY) 2013. For the FFY covering October 1, 2012 – September 30, 2013, a total of 278,000 households received LIHEAP services (i.e., cash assistance, weatherization, emergency services). This household data is relevant to the Department's request to U. S. Department of Health and Human Services (HHS) to increase the percentage of weatherization funding from 15 percent to 25 percent of the total grant.

To obtain approval of the waiver from the HHS, the Department must demonstrate that by increasing the weatherization allocation services for the utility/fuel assistance will not be compromised of less than the prior year, and if it is, the Department must show good cause as to why HHS should increase weatherization allocation, which might be difficult to support if the annual differences in cash assisted households is significantly large. The waiver

submitted earlier this year projected that 334,000 households would be served and the actual served was 278,000, a difference of more than 56,000 households. Attempts at crafting a good cause waiver can be further challenged by reductions in annual grant funding, which will reduce service numbers across the board. CSD will need to make a case for the lower household number to get the waiver up to 25 percent.

- Heat and Eat is a program that leverages CalFresh and LIHEAP assistance to qualify CalFresh recipients for the enhanced standard utility allowance or larger food stamp benefit. Currently, the Heat and Eat program provides a nominal LIHEAP outreach benefit of \$0.10; however, Farm Bill reauthorization may set the minimum LIHEAP benefit to either \$10 or \$20 significantly increasing the amount of LIHEAP funds used for this program. If the benefit does increase, CSD will work with the California Department of Social Services (DSS) to take a targeted approach to apply the benefit. DSS estimates that at least 320,000 CalFresh recipients would need to be targeted which would result in \$3.2 million of LIHEAP funding (based on a \$10 minimum) or \$6.4 million (based on a \$20 minimum).

4. Chair's Report – Lynda Timbers

The first quarterly 2014 LIHEAP service provider meeting will be held on March 27th. The ACCES roundtable will be the day before on March 26th.

(After the meeting it was determined that these dates are in conflict with the National Community Action Foundation Legislative Conference. The next LSP will be on March 19th with the ACCES Roundtable on March 18th.)

5. Three Factor Formula (TFF) Committee Report – Val Martinez

The Committee met for the last four months and offered a recommendation to the Department for completing updates to the TFF and guiding the implemented use of the updated formula. The Committee will continue to meet to address questions/concerns with the proposed formula updates and will attempt to find an equitable solution. Please contact any member if you have any questions or comments.

6. Automation Update – Ed Lee/Sylmia Britt

Combined Outcome Reporting Engine (CORE) Update

The CORE application system is up and running to receive Program Year (PY) 2013 Home Energy Assistance Program (HEAP), Fast Track & Wood, Propane and Oil (WPO) records. The CORE system has been “status quo” since July 2013 because CSD is in a contract dispute with the software vendor. CSD has been in discussions with the software contractor and hopes the discussions will

produce successful results. CSD expects some type of direction/decision within the next 45 days.

CORE will be updated to support PY 2014 implementations. The CORE system will be *shut down on Monday, Jan. 6th at 8:00 a.m.* for PY 2014 implementation and testing.

CSD will continue to be in contact with the vendors on any updates. CORE will be restarted on Monday, Jan. 13th at 8:00 a.m., and at that time agencies can begin transfer of PY 2014 records for payment. Whatever communication is shared with software vendors must also be communicated to the local service providers. For example, if data collection requirements change or PY 2014 LIHEAP Weatherization or emergency heating and cooling services measures changes then CSD should always ensure both LSPs and software vendors receive the same information. CSD has shared benefit level by poverty group details with the software vendors and will continue to share information as necessary for PY 2014 implementation.

The suggestions/priorities from the CORE Forum meeting that was going to be implemented in Jan. 2014 has been delayed until the first quarter of next year.

One of the items included the reporting of missing WPO payments or payment totals are not matching up with CSD Expenditure Activity Reporting System (EARS) or local agency systems. CSD advised agencies to please input all records into CORE to help minimize discrepancies.

Agencies have experienced that some cash assistance payments were not paid. CSD was finally able to replicate the problem and identified the cause. Unfortunately, CSD will not be able to offer a permanent fix and for the time being will be able to run a list of the rejections so the agencies can reconcile these records. This will be more advantageous if this list comes sooner to the agencies and CSD will continue to make these reports available until a permanent fix is in place.

The phone duplicates have been a problem. Some clients have new numbers that belonged to another client in a previous year. To correct this, the agency needs to resubmit the record after understanding what the problem is.

CSD needs to have the agencies report any problems. We'll have a list of the "Key Dates" included in the LIHEAP Start-Up Package.

Weatherization Automation Update

The first meeting was yesterday for this committee. The meeting is comprised of CSD, vendor representatives and select agency end-users.

CSD will meet regularly with this committee and the first priority is to ensure all agencies are submitting monthly uploads into the bucket repository. The uploads contain electronic applicant records for all rendered direct LIHEAP and Department of Energy (DOE) services. CSD relies on the information contained within the bucket to complete the annual LIHEAP Household Report and monitoring programmatic and fiscal compliance. The first objective is to establish regular and consistent reporting into the bucket. Once accomplished, CSD will pursue added functionality to leverage and further streamline programmatic and fiscal reporting. To help vendors comply with electronic reporting requirements (i.e., bucket reporting), CSD created and distributed a 'mapping' tool to assist vendors in mapping data from local systems into the bucket reporting schema. All vendors must comply with the bucket reporting requirement by January 15, 2014. The long term weatherization automation objectives will center on standardizing data inputs, data fields and validations as to the accuracy of reported information to CSD from different system platforms.

In attempts to accommodate the continued use of agency equivalent weatherization forms on an interim basis, the Department will issue data collection standards to ensure all systems and forms are capturing required information and confirm the methods and formats this information will reside in for each individual agency. Understanding the variance in forms and operations between providers, this information will help the adaptation of CSD's monitoring to local agency operations and methods of data collection. Understanding the desire of some agencies to go 'paperless', CSD instructed RHA to create electronic forms that will serve as template for defining design and data standards of electronic forms going forward.

Thus far, RHA has worked with only a few agencies on an adhoc basis to assist with designing the electronic form prototypes. CSD would like to expand the pilot realizing there is still work to be done to get the forms to be used by the whole network. RHA will prepare electronic forms templates for the pilot.

Blower door, Duct blaster and Diagnostic forms are being developed. It will be easy to receive these forms on a tablet. Agencies can call RHA for a use release. Once the data points are agreed on then they can be released to the vendors. The hope is to not have double entries.

Question:

Can the electronic forms be unlocked so the agencies can have the ability to map these forms into their data systems? They will need the option so they can go paperless.

At this time, CSD will not unlock the forms and prefers for agencies to pilot the electronic forms as a “hardcopy” form. For purpose of the electronic form pilot, the form can be completed on a tablet and downloaded and printed out. This will cause the agencies to collect data from several sources to make a client file. This will cause gaps with the electronic forms since they do not communicate with the data systems. We understand this may create some additional work for some agencies but the desire is to focus on the design of the forms first, before exploring how to integrate the forms into local agency systems. Form integration will be difficult and may take about six months to finalize workflow specifications, data validations, data inputs and mapping data collection and reporting to each data element captured on forms. Going forward any agency electronic forms will need to be reviewed and approved by CSD. The Department would like a completely vetted single-form for certain activities like diagnostic testing, but open to allowing agencies/vendors to develop alternative forms for assessment and post inspection – meeting newly defined form standards. Vendors/agencies should understand electronic form design will need to provide technical resource information by linking to weatherization installation standards and policy documents.

The system vendors and agencies can vet these forms for their systems. There are several vendors and CSD needs to take time before integrating these forms into any system.

The agencies need to be able to link the forms into their systems so billing can be completed electronically. Agencies will never be on the same page as other agencies. The timeframe needs to be short on the testing and comment period. The optional use of these forms in an agency also needs to be considered.

Agencies have different work models and CSD is trying to accommodate these changes. CSD will be taking a look at the mapping necessary to receive data as pre-information on energy usage as well as other data points that may be useful to collect.

The agencies will need in writing a hold harmless document for the record on the ‘pilot’ use of these forms including the intake form and where electronic signatures will be permitted. CSD is allowing the use of the IT funds to purchase tablets. RHA can have training for each agency through any tablet. These forms are working on IOS and Android tablets. RHA is going to add the Surface tablets soon.

7. LIHEAP Working Group (LWG) Report – Kathy Andry Public Comments to 2014 LIHEAP Contract Changes:

Funding

CSD has received 90 percent of the 2014 LIHEAP grant award totaling \$132.3 million; this amount includes both state operations and local assistance funding.

Once the remaining 10 percent is released, CSD estimates the grant award total to be \$147 million which will likely be reduced by approximately 6 percent due to sequestration, bringing the final estimated grant award to \$138 million. This is approximately \$6 million less than the 2013 LIHEAP grant award.

CSD is initially releasing 50 percent of the local assistance portion of the grant award to allow for continued discussions of the TFF committee. The network is concerned with the lack of information on the total allocation to assist with planning efforts. The TFF will work as fast as possible to come up with an equitable formula. Regardless, CSD will release the remaining funds in February either under the new formula or existing formula.

CSD anticipates mailing the contracts out by December 23rd or 24th. The funding and the contract numbers will be released as soon as available. All forms including the priority plans will be part of the contract process.

The initial 50 percent release does not include carryover; however, the 2011 and 2012 carryover will be included in the 2014 allocation. The transfer of any agency's 2012 funds into the 2014 will not be subject to any distribution formula. These funds will be transferred directly to the agency's new 2014 contract. The allocation spreadsheets will be out in a week. The allocation for 2014 will be in CORE by January 14th.

Service Area Expenditure

Issue: Some agencies expressed concern with implementing the requirement for those agencies with multiple counties or zip code areas to expend at least 90 percent of the grant allocation for direct program activities in the respective county or zip code area. Mostly providers were concerned with the requirement as it relates to weatherization and Energy Crisis Intervention Program (ECIP) Heating and Cooling Services (HCS) since there are operational challenges that will need to be overcome to achieve this requirement.

CSD Response: CSD has evaluated agency concerns with respect to the new expenditure and reporting requirements for providers with multiple service counties/areas. CSD understands that the primary issues are operational in nature and mostly a concern with weatherization and ECIP HCS.

Considering the implementation challenges expressed by providers, CSD is going to modify the requirement as follows:

- CSD will still expect that agencies make a good faith effort to fully expend allocations for direct program activities within that respective county or area. Rather than imposing budgeting and tracking requirements in EARS, CSD will rely on the agencies to develop a plan that sets forth how costs will be allocated for admin, program support and direct program activities by county or area and

how direct program activities will be tracked. CSD will monitor agencies to described plans.

- CSD will allow transfer of funds between service counties/areas as long the agency documents the circumstances prompting the need to transfer funds between service counties/areas and how the transfer did not compromise services to the area(s) from where funds are being redirected, and plans to address the barriers to achieve ideal service levels in the future. This information will need to be submitted at the conclusion of contract term and may be requested during monitoring compliance reviews and quarterly performance assessments performed by CSD's Field Operations Unit.

The agencies are very appreciative of these changes and compromises from CSD.

Expenditure Benchmarks

Issue: There is a concern with developing monthly expenditure benchmarks and CSD monitoring to this monthly goal.

CSD Response: CSD will request agencies to project expenditures goals for the quarter and CSD will monitor quarterly. The benchmarks are locally determined with a threshold of 60 percent by September 30, if providers are not able to achieve the threshold by then – CSD would like an explanation from the agency on how they intend to achieve at least 90 percent by the end of the contract term.

CSD field staff will be evaluating performance on a quarterly basis and if there is slippage we will seek an explanation. We encourage providers to be proactive in communicating with field staff to advise if they are not going to meet their performance benchmarks.

Automation Supplemental Allocation (ASA)

Issue: There was quite a bit of confusion with the language so CSD did some clean up to remove the requirement to submit an ASA plan because essentially providers have already provided one.

CSD Response: Additionally, the \$50,000 can be used for Information Technology automation needs to comply with updated or new CORE requirements and with on-going programmatic CORE-IT expense. Costs may also be used for training on upgrades to system.

Contractors who used the \$50,000 to purchase a system and now want to switch, must get approval from CSD.

Proportionate Spending

Issue: Providers were requesting that CSD forego the requirement that Administrative and Assurance 16 expenditures are proportional to overall expenditure of consideration and non-consideration allocations.

CSD Response: Administrative and Assurance 16 expenses are the only categories that will need to be expended proportionately to the agency's allocation for consideration and non-consideration. Costs for the other categories can be 100 percent expended regardless if the overall expenditures for consideration and non-consideration are fewer than 100 percent.

The reason that Administrative and Assurance 16 costs must be expended proportionally to the agency's allocation for consideration and non-consideration is because federal law restricts these categories to a certain percentage so when unexpended funds are carried over then those funds must include enough Administrative and Assurance 16 funds to support delivery of services.

CSD will work with the LWG to determine if allowing 100 percent expenditure in Admin/Assurance 16 is feasible as it impacts carryover.

Comment: The return of funds from the utilities has caused problems with agencies achieving full contract expenditure in the past. CSD determines the ending expenditure for HEAP and Fast Track by evaluating the highest level of recorded expenditure during the program year, as opposed to using final expenditures recorded at the time of closeout that could include returned benefits. This method of evaluating HEAP and Fast Track expenditures will avoid penalizing agencies for any late utility returns.

Budget Modifications

Issue: Agencies expressed that there is an administrative burden placed on agencies when transferring funds between line-items as it requires agencies to submit paperwork and wait for the transfer to occur.

CSD Response: CSD is going to meet internally to determine if transfer transactions can be streamlined. The current model is that all modifications and amendments are needed 45 days prior to the end of the contract. CSD will look at the timeframe and try to find a solution that will be more workable.

Pre-Screening Clients

Issue: Agencies were concerned with the language stating that if a contractor pre-screens they must notify the applicant of their right to submit an application.

CSD Response: CSD modified the language to clarify that if an applicant appears to be ineligible, Contractor must inform the applicant of such and to

advise them that if their circumstances change they can apply later. If the applicant insists, then an application must be made available.

Our federal funder, HHS, was most concerned with verbally denying a client over the phone without giving them an opportunity to apply, if they so choose or request. So it is important when pre-screening that you apply the income guidelines and agency priority plan, and let the applicant know that they potentially do not qualify and if their circumstances change they can apply.

Priority Plan and Agency Defined

Issue: Recommended deleting the requirement for agencies completing the detailed information on how they will use agency defined categories.

CSD Response: CSD will continue obtaining this information to ensure that agencies are in alignment with how they are applying the broadly defined categories. CSD needs these planned categories so they will know how the definitions are used by each agency. These details will be in the contract.

Measure Rate Increases

- *CVA Venting:* CSD has evaluated the CVA venting price and is modifying to include another category or CVA with louver doors with a price up to \$500.
- *Door Repair Limitation:* CSD is removing the limitation that door repair is limited to three doors.
- *Mobile Home Furnace:* There is no longer a distinction between mobile home furnace and other furnace types. Meaning if you need to replace a furnace in a mobile home you will charge it to the type of system you are repairing/replacing.
- *Duct/Ceiling/Water Heater Timers:* CSD is evaluating the request and any increase will be made part of the first amendment.

Comments: Priority list measures are a challenge because of the utility referrals for the larger items such as HVAC measures. Fresno is receiving many more referrals for these types of measures and since these are Health & Safety (H&S) issues they must be rectified. The recent unit average increase helps agencies to complete these units.

The utility program is much larger compared to LIHEAP. So these H&S issues can be done under the ECIP component. But if it is under weatherization, then there may not be enough measures to weatherize the unit because of the three measure minimum. CSD is looking into how each of the programs can better serve areas by leveraging with utility programs.

CSD explained that cost is always a factor in considering installation of a measure and has to be reasonable. The first priority of the LWG in 2014 is to evaluate a cost structure for the LIHEAP program recognizing that there are regional cost differences.

Questions: Will there be training on the new toilet requirements? CSD will work with RHA to develop training for this new measure.

There are two different caps on averages, audits and no audit? CSD will develop a method to evaluate the different unit averages.

8. Start-Up Package Changes – Sylmia Britt/Kathy Andry

The Start-up package will be ready in about a week which incorporate the issues from the network to include:

- Rental
- Housing and Urban Development documents
- Duplicate checks
- Requests for name changes
- Requirements for applicants under 18
- Veterans Affairs benefits and rental and solar leasing

Working Capital Advance form (WCA): The WCA form has been revised to allow agencies to indicate whether they are seeking an advance for weatherization and/or EHA-16. The form is updated and available on CSD website. The advance process will be reviewed and evaluated for 2014.

Expedite Form: A new expedite form is being created and will be made available soon. The cost for the expedite will vary and will need to be paid in advance.

Public Information: CSD will need to have current information on each agency. Please look at the CSD website and if anything needs to be changed fill out the form that will be included in the contract package and send to CSD.

Intake Form: The form was updated to capture the new data elements required by HHS. Also a data category for CalFresh recipients was added to the form. This will be only what the client tells an agency and will not need verification. The vendors will need to know of any changes so they can incorporate them in the systems. Cal/Fresh totals will be recorded in EARS. This is just informational for DSS and the Heat and Eat (H&E) program. If the client already has a LIHEAP payment they would not necessarily receive the H&E payment whether the federal amount is \$10 or \$20 per recipient. So the collection of information will help understand how many H&E recipients might already receive a HEAP/FT payment. This can save some LIHEAP funding.

Any client that filled out a 2013 form will not have to go back and fill out the new 2014 form.

The applications are needed in English and Spanish in a writable PDF form.

CSD clarified that if an agency wishes to have their contractor equivalent on the CSD website, they must notify CSD. CSD is not posting the standard intake form since many agencies have a customized form specific for their agency and may not accept the standard form. So if the agency wants to post their application to fulfill the need to make the applications available they can send it to CSD. These will be posted in the agency profile.

Federal Transparency Act: CSD advised that it must complete federal transparency reporting requirements for each agency that includes information on the salaries of the top five officers for each agency. There are exemptions if you already report this in your 990's. CSD will be issuing a communication soon to gather this information. This information is also needed for the Community Services Block Grant funded agencies.

Service Directory: Can CSD make a service directory for the agencies? CSD can provide this after reviewing the data that may have changed.

9. Department of Energy Updates – Kathy Andry

Status of 2013 DOE Contract

CSD has a negotiations call with DOE today on concerns they have with the 2013 DOE State Plan, which includes issues with budgeting, monitoring and percentage for Health and Safety (H&S). The most notable change that will impact providers is DOE is requesting California to modify the H&S percentage from 25 percent to 15 percent. CSD must provide a comprehensive justification for a percentage over 15 percent, which will require a special review by the DOE committee which will further delay grant award with no assurance of approval.

Once we receive approval of 100 percent of the grant award, CSD is prepared to release the contract. The term will remain six months and will be based on when the contract is released. Meaning if we release the contract January 1, then the contract term will likely be February 1 to August 1.

Discussion: Do the agencies want to go with the 25 percent?

- The H&S including Mechanical Ventilation (MV) is much higher. If the 15 percent is used, this will drive the LIHEAP H&S much higher. MV is not, and should not be included in H&S

- If we go at the 15 percent, then the providers might collect data on the higher costs. It is very hard to get an approval from the DOE committee on anything higher than 15 percent.
- If the H&S goes down to 15 percent and the program gets more funding the bar will be set at that forever. Delaying the release of contracts to discuss this case further is worth the time. The home repair will be greatly reduced.
- There are other states that conform to the 15%. We may consider the 15 percent for the 2013 DOE program to ensure the funds are not at risk.
- What is the statewide average on this spending? CSD thinks it is close to 25 percent.
- Air quality is a H&S issue.
- DOE program emphasizes energy efficiency and does require H&S issues are addressed.
- There will also be more requirements for agencies doing DOE Weatherization Assistance Program and some agencies will not want to administer DOE any longer.

Network recommended that CSD make the case to justify the 25 percent for H&S, and if not approved or CSD does not hear by the end of January, resubmit at the 15 percent. There is a lot of backup to support the 25 percent. ASHRAE mandates and other mandated issues make the H&S go up.

Note: During the negotiation call DOE approved the 25 percent for H&S since this was approved last year; however, in FFY 2014 CSD will need to submit a justification.

2014 DOE Program Implementation

Status of Weatherization Installation Standards (WIS) and Field Guide

In support of the state of California's weatherization programs (LIHEAP and DOE-funded programs), CSD provides it network agencies with WIS, which include measure policies in the form of section "Preface Pages". These quality assurance documents are intended to guide field personnel in performing diagnostics, assessing homes, installing measures, and observing relevant health and safety, and lead-safe practices while performing work in clients' homes.

To facilitate better application of the quality assurance documents, CSD tasked RHA with:

1. Separating measure policy from the quality assurance measure installation standards;
2. Updating existing standards to incorporate DOE Standard Work Specifications;

3. Reviewing existing measures in comparison with changes made for the 2014 Building Energy Efficiency Standards;
4. Revising diagnostics sections to address multiple learning styles;
5. Development of formalized assessment, installation, and post-inspection policies; and
6. Incorporation of relevant program policy from the “contracts” and CSD Program Notices, to reduce duplication of materials.

The review process is comprised of multiple layers of review in order to enhance program accuracy and engage stakeholder participation. The review teams are composed of designated agency and consultant representatives, who represent the field and administrative departments within each network agency. Their primary function is to:

1. Review documents for compliance with current program regulations.
2. Explore any important components/definitions that are omitted from the documents.
3. Build a process for team interface, and obtain sign-off from all stakeholders.

There are five batches with the first batch to be released January 1, 2014 and will allow the committee two weeks to review with the review to end March 20, 2014.

The WIS committee will be given the CSD reviewed guide. This will need to be reviewed by the end of March. The following are the members of the committee:

Garry Swaffar, ATCAA
Mike Culbertson, Santa Barbara
Todd Lewis, NCES
Tomás Pérez, ETC
Val Martinez, Redwood
Fred Ellis, RHA
Mike Polinko, Merced
Sally Andreatta, OCCAP
Arleen Novotney, ACCES
Frank Devai, CRP
Linda McQueen, NCES
Thanh Tran, PACE
Lynda Timbers, Project Go
Kyle Hartmann, ELDHS

Comment: The WIS should be released to the entire network and have their comments coordinated by ACCES.

The field Guide will be in three batches and will be reviewed by the WIS committee. The first batch will be released in February. This is a new guide on installation as well as old issues for review.

DOE Training Requirements Update

The Quality Control Inspector's training needs to be completed by July 1, 2015. The curriculum needs certification for each state. The WIS and Field Guide needs to be completed and approved by July 2014.

The Building Performance Institute (BPI) certification will be needed. The test out will be by a BPI certification center. The costs will be paid to BPI. This cost is about \$2,500. The pass rate at this time is about 50 percent.

The inspector and the assessor will need to be different people. There may be some exception for rural areas that do not have staff for each job.

Title 24 changes: CSD and RHA are working to have a webinar to understand the changes that will take effect January 1, 2014. All alterations that require a permit may require other measures that need to be completed. This will be different for each jurisdiction. Agencies should check with their local jurisdictions to determine which areas will require new measures.

Note: The California Energy Commission has revised the effective date of the 2013 California Building Energy Efficiency Standards to July 1, 2014.

10. California Public Utilities Commission (CPUC) Pilot Project Update— Chuck Belk/Lynn Wiley

Geographic Coordination Pilot

As a reminder, the Geographic Coordination pilot is being designed to effectively leverage the Investor Owned Utilities (IOU) (ESA) and CSD (LIHEAP) programs in order to decrease energy usage and enhance weatherization offerings to high-energy users and clients that utilize non-regulated fuel sources.

Where we are:

- After some delays in order to allow Pacific Gas & Electric to get their contracts in place, we officially launched the pilot at the end of November.
- Webinar training was held in mid-November to demonstrate the tablet-based application that will be used in the pilot. Enrollment and weatherization assessments are being performed using a tablet that captures both customer and dwelling information and then generates any required forms needed for each program. Based on the assessment, a list of weatherization measures to be installed is generated and either emailed

back to the agency for printing, or is uploaded to the agency computers when the assessors return.

- Ride-along mentoring began in Fresno during Thanksgiving week and was offered in Butte County last week.
- As of the 1st week of December we have 12 enrolled / qualified households and weatherization installation activities will follow shortly.
- The pilot was initially designed for a six month trial run, but because we're only targeting 100 homes initially, we'll likely complete the pilot sooner.

Data Sharing with the CPUC

The Governor's office wanted to have a link between the low-income energy programs, which resulted in a Memorandum of Understanding with the CPUC and CSD. As a starting place, CSD and the CPUC are working on data sharing efforts with utilities to better coordinate the programs. CSD engaged discussions on data sharing with the utilities at a rule making session at the CPUC on smart meters.

In collaboration with the utilities, CSD has modified the consent language on the intake form to support the collection of utility account information for LIHEAP recipients from the IOU's. The utilities weighed in on the language as well as the CPUC, and CSD ensured that all federal requirements were included. The hope for the future is to also have the income requirements become the same.

The utilities say that personal identifiable information is not available for sharing. This includes address, telephone number etc. This causes much concern over the tablet applications and other issues with the data. The security issues could include the electronic signatures. The state says that this is not acceptable. Although these regulations are for big state issues not low-income applications so the CPUC may not accept these signatures.

Solar Water Heating Pilot

The IOU's have taken the lead on outreach by sending out letters on the program to potential clients. The IOU's took the lead since there were security issues with sharing client's personal information. The response rate on the letters sent out is very low. There have been about 600 responses.

So far there have been two installs each by Self-Help Home Improvement Project, Inc., and Fresno. There have been many targeted letters to potential customers. Some of the agencies had no customers in their areas. These agencies have been given the authorization to use the regular rebate.

There will be a webinar for all solar water heating contractors soon. The CPUC may make some allowances to access the low-income solar rebate.

Comments: What is the possibility to do homes outside the enterprise zones? This pilot was to use the low-income solar rebate. It appears that we will not meet the goal and the regular rebate will be opened up for the agencies to use. CSD will contact agencies when and if this additional option can be used for this pilot.

11. Announcements

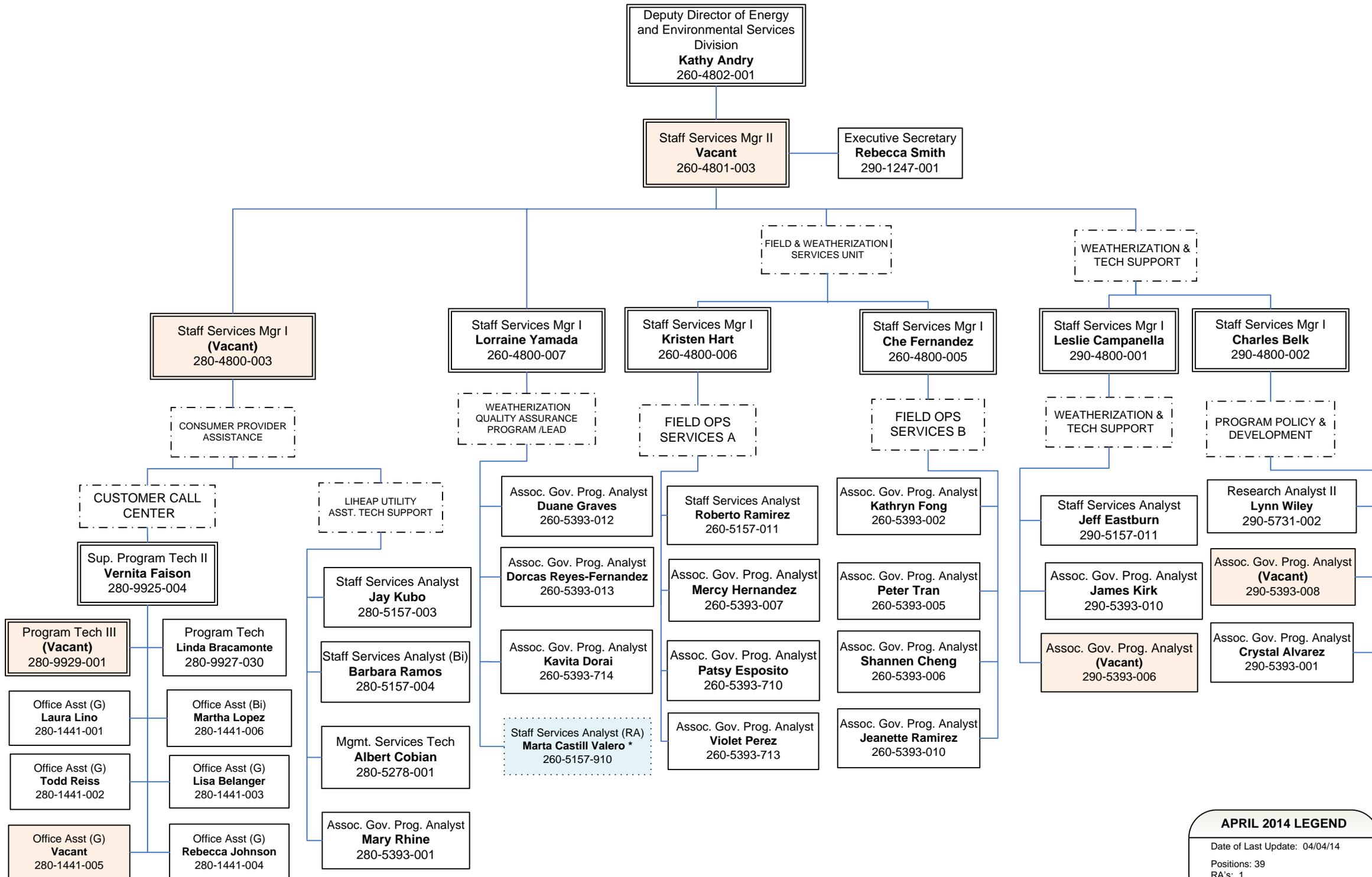
Energy OutWest will be in San Diego April 14-18, 2014. Please make sure that you sign up for the tutorials that will be on Monday April 14th and Tuesday April 15th. These are half and full day sessions on field technical issues. We are also having a Critical Thinking session for all staff including management. These tutorials fill up quickly and are limited in the number of attendees.

<http://www.energyoutwest.org/conference/>

(After the meeting it was determined that the next LSP will be on March 19th with the ACCES Roundtable on March 18th.)

Adjournment: 2:01 PM

ENERGY AND ENVIRONMENTAL SERVICES DIVISION



APRIL 2014 LEGEND

Date of Last Update: 04/04/14

Positions: 39

RA's: 1

* In the Blanket

Explanation of Indirect Costs

Category	Actual Expenditures State Fiscal Years 2010-11, 2011-12, 2012-13		2014 Budget Estimate	
Total DOE Expenditures	\$1,986,802		\$958,280	
Direct Costs				
Administrative	\$80,244	4.04%	\$132,110	13.79%
T&TA	1,622,285	81.65%	628,201	65.56%
Total Direct Costs	\$1,702,528	85.69%	\$760,311	79.34%
Indirect Costs				
Total Indirect Costs	284,283	14.31%	197,970	20.66%
Total Costs	\$1986,802	100.00%	\$958,280	100.00%

Indirect Cost	Total Direct Costs	Indirect Rate	Total Indirect Costs
Total	\$958,280	20.6588%	\$197,969.53

Actual DOE WAP direct and indirect costs from the last three state fiscal years were used to estimate the indirect rate. No costs were associated with Program Year 2013 and all funding was carried over into 2014.

State Administrative Manual (SAM)

The State Administrative Manual (SAM) is a reference source for statewide policies, procedures, requirements and information developed and issued by authoring agencies such as the Governor's Office, Department of General Services (DGS), Department of Finance (DOF), and Department of Human Resources (CalHR). In order to provide a uniform approach to statewide management policy, the contents have the approval of and are published by the authority of the DOF Director and the DGS Director. The manual is available at <http://sam.dgs.ca.gov/>.

A-133 Audit

The two most recent A-133 Audits, Federal Compliance Audit Reports for Fiscal Years Ended June 30, 2012 and June 30, 2013, can be found at <http://www.bsa.ca.gov/pdfs/reports/2012-002.pdf> and <http://www.bsa.ca.gov/pdfs/reports/2013-002.pdf> respectively.

WPN 14-4 Quality Work Plan Requirements

The Department of Energy has determined that workers providing weatherization services under the DOE weatherization assistance program must be properly trained and certified. As such, the following tenants shall be considered:

- Standard work specifications
- Accreditation of Energy Efficiency Training Programs/Centers
- Home Energy Professional (HEP) Certifications

Working in partnership with DOE, the National Renewable Energy Laboratory defined the basic skill sets for each for four job classifications:

- Installer/Technician: Performs the actual installation of the work.
- Crew Leader: Directs and supervises the work of the Installers.
- Energy Auditor: Assesses the home before the work begins for energy savings opportunities and writes a scope of work for the crew.
- Quality Control Inspector: Inspects the quality of the installed work.

The first classification accreditation to be developed and tested is the Quality Control Inspector (known as QCI). The Quality Control Inspector is defined as: a residential energy efficiency professional who ensures the completion, appropriateness, and quality of energy upgrade work by conducting a methodological audit/inspection of the building, performing safety and diagnostic tests, and observing the work.

Section 1 – Work Quality Guidelines and Standards

CSD has incorporated all SWS requirements and new energy and building codes into the Weatherization Installation Standards (WIS). A new and separate Field Guide has been written to accommodate Job Task Analysis, measure feasibility criteria and field work procedures. Both manuals are currently under review by internal technical staff, third-party technical consultants and the Subgrantee network. The manuals are scheduled to be released by August 2014.

Once the manuals are released, training will be provided through webinars and workshops to ensure that the new standards and expectations are clearly defined and understood.

Section 2 – Communication of Guidelines and Standards

CSD contracts have always incorporated by reference and required adherence to the WIS, Energy Program Notices, policies (including priority list and audit protocols), and other federal

and state guidelines. Adherence to Appendix A to Part 440 is included in the WIS. Contracts currently contain the following language:

Contractor shall adhere to all CSD program standards pursuant to the following documents and manuals which have been incorporated by reference and made part of this Agreement as if attached hereto:

- a. CSD Low-Income Weatherization Assistance Program Policies and Procedures;
- b. CSD Conventional Home Weatherization Installation Standards (WIS);
- c. CSD Inspection Policies and Procedures;
- d. CSD LIHEAP/DOE Program Health and Safety Appliance Replacement Policy;
- e. Official State and Federal Program Notices;
- f. DOE WAP Disaster Relief Plan;
- g. Current LIHEAP Eligibility Verification Guide.

CSD contracts have also contained language that requires Subgrantees to include all program requirements in their subcontractor agreements, as follows:

Contractor may enter into subcontract(s) to perform part or all of the services contemplated under this Agreement. Prior to the commencement of subcontracted services under this Agreement, Contractor shall obtain board approval, to include but not be limited to an assurance that the subcontractor agreement(s) shall comply with all terms, conditions, assurances, and certifications of this Agreement for the nonprofit and local governmental agencies performing services in the area(s) described in EXHIBIT A, Section 2.

The contract language will be updated for Program Year 2014 to specifically include adherence to the new Field Guide, SWS requirements, quality work standards, inspection compliance and QCI qualifications, training requirements, and certifications. By signing the CSD contract, Subgrantees are acknowledging receipt of all technical manuals, policies and protocols.

Additional communication in support of the standards is provided by the hotline maintained specifically for technical questions and a FAQ. CSD conducts "Technically Speaking..." webinars that disseminates information regarding new requirements, clarification on policies and standards and field issues identified through monitoring or upon Subgrantee request. All current weatherization documents and forms are readily available through the CSD Contractors website. CSD is also administering an automated forms pilot that allows access to the current standards at strategic points while performing an assessment, diagnostic or inspection. Implementation date of the forms will be dependent upon the incorporation of the forms by third party software vendors that Subgrantees have contracted with.

Section 3 – Inspection and Monitoring of Work Using Guidelines and Standards

CSD will conduct periodic client file reviews to determine that every unit reported as a "completed unit" has received the appropriate final inspection, ensuring that all work meets the

minimum SWS specifications. CSD will also ensure that each client file contains a form which sufficiently certifies that the unit has received a final inspection. The current inspection form, CSD 611 Contractor Post-Weatherization Inspection Report, completed by Subgrantee QC staff, will be revised to include certification of adherence to SWS standards. Inspections performed by CSD or their contractor are documented on CSD 822 QA Inspection Program Third-Party Contractor Evaluation Report. This form will also be revised to include language certifying that the inspected dwelling meets SWS standards. Both forms are currently required to be maintained in the client file.

Through client file reviews, a percentage of assessments are currently reviewed by both QC inspectors and field monitoring staff. All energy audits are submitted and reviewed by CSD's Technical Support Unit prior to the commencement of work. These monitoring practices will continue.

CSD will perform quality assurance reviews of at least 5 percent of all completed units. For smaller Subgrantees, staffing levels do not always allow the separation of duties between the assessor/auditor and inspector to provide the independent review of the assessment/audit that DOE seeks. On a case-by-case basis, CSD may grant an exemption to this requirement and increase the number of inspections to a minimum of 10%.

Disciplinary action will be dispensed when inspection protocols are not followed. Depending upon the severity, this can be in the form of additional training, additional state inspections, disallowances and other sanctions including suspension of the QC inspector in question.

Based on the results of quality assurance reviews, CSD will develop and provide additional one-on-one or group enhancement (Tier 2) training(s) to provide supplemental assistance to our agencies and improve areas of weakness to ensure DOE inspection requirements are consistently met. Currently, CSD has field training, mentoring, online training and field staff assessment available. These will each be enhanced to meet DOE requirements.

CSD QC staff will continue to monitor the department's third-party inspectors to ensure compliance by making onsite visits during their inspections.

Subgrantee, CSD and third-party QC inspectors will be in place by the July 1, 2015, deadline and no dwelling will be billed to the DOE program without an inspection performed by a certified inspector.

Section 4 – Training to Implement and Maintain Guidelines/Standards

In order to tailor California's existing field worker training program to meet the Weatherization Assistance Program (WAP) certification requirements, California will implement a two-phase approach. The first phase will update the core technical classes (Basic Weatherization, Combustion Appliance Safety, and Duct Blaster/Blower Door Diagnostics) to address key

program changes implemented with the adoption of new program policy since 2011, address the new 2013 California Title 24 requirements, and incorporate the DOE Standard Work Specifications not already included in CSD's current Weatherization Installation Standards. The second phase of training program redesign will include development of additional Job-Task Analysis-aligned curricula to address the supplementary technical and "soft skill" components defined for Installers, Quality Control Inspectors, Auditor/Assessors, and Crew Chiefs included in the NREL JTAs. These role-specific courses will be required in addition to the core technical classes. Each curriculum, once updated, will be submitted to IREC through the accreditation process.

In order to ensure that all DOE QCI accreditation requirements are met, CSD has developed a training program model intended to include all of the tasks a Quality Control Inspector may perform, as well as the knowledge, skills, and abilities required to do these tasks, and most importantly become properly certified.

CSD intends to train and certify prequalified QCI candidates at each agency, if possible. This is the ideal, but given that funding at some agencies is inadequate or no suitable candidate exists, CSD will use the state's certified QCI team who would provide full DOE inspection services where needed. This may be necessary as supplemental inspection activity is likely to be a necessity. Within the hybrid program design, CSD will pre-determine the number of agencies whose inspection needs will be served by:

- CSD staff-comprised QCI team; and/or
- CSD program partner whom CSD contracts to provide the QCI services.

Phase I: Development and Deployment

1. CSD will compare QCI job-task analysis and exam blueprint with existing curricula to ensure training and certification compliance.
2. CSD's model will contain the following:
 - a. Establishment of a policy for validation of the Quality Control Inspectors' credentials.
 - b. Develop policies and procedures to address situations when the QCI is not inspecting units using the standards adopted by the state and consistent with the SWS. This policy will include monitoring of the QCI and procedures for disciplinary action if inspection protocols are not consistently followed.
 - c. Begin coordination with an accredited training center to establish training approach.
3. When an agency has nominated at least one QCI candidate, CSD will:
 - a. Assemble a training webinar on required QCI prerequisites and application process.
 - b. Perform webinar and distribute the QCI application to Managers for candidate selection.

Phase II: Candidate and Application Coordination

1. CSD will use CSD QCI staff, third party representative and/or Subgrantee who will participate in the certification application process, then attend an accredited training and participate in the certification exam as an initial test group.
2. This same group will:
 - a. Provide technical support for agencies/candidates completing the application.
 - b. Collect agency candidate applications and review document for compliance.
 - c. Determine “test group” of applicants to receive preparatory workshop and participate in DOE testing assessment.
 - d. Select initial training group to participate in accredited training and exam. Submit applications of “test group” to BPI.
 - e. Develop and provide preparatory workshop.
 - f. Facilitate candidate training and exam process.
 - g. Monitoring pass rates and certificates. Adjust enhancement mentoring as needed.

CSD will ensure evaluation of each QCI candidate (considering BPI certifications, work experience, technical and soft skills assessment, etc.) to determine if accredited training is appropriate to improve the likelihood for certification before the exam is attempted.

The department’s third-party technical contractor will become accredited affiliate instructors. Accredited instructors shall shepherd qualified Subgrantee inspectors through the application process, completion of testing, and final certification.

Phase III: Preparation for Recertification Compliance

DOE requires recertification every three years. In order to be eligible for recertification, candidates must have accumulated a minimum of 10 qualifying continuing education units (CEUs) each year over the three years of certification. In order to meet recertification requirements and diminish the effects of the “perishable knowledge” phenomenon, CSD will develop a CEU training plan, curricula, and prepare instructors to provide workshops, since the stated intent of DOE is to apply similar certifications requirements (including the CEU component) to all job classification.

Phase IV: Long-Term Plan for Certification Compliance

The DOE-approved QCI curriculum currently incorporates many more “soft skills” than are addressed in the CSD diagnostics and basic weatherization curricula. Update and modification of this curriculum will keep travel costs to a minimum and allow CSD to build a “stepped” learning process, whereby the both technical and soft skills are taught and reinforced at many levels. Once the QCI training is prepared, the same accreditation process would be applied to the other three defined job roles.

Changes to the QCI Plan

As CSD works towards meeting the new DOE requirements, the plan as outlined may need to be revised to accommodate changes made by DOE during the upcoming program year, unsuccessful certifications of candidates and other unforeseen difficulties. Any significant changes will be resubmitted to DOE for approval.

Monitoring - Areas of Responsibility

	Subject	Unit Performing Monitoring			
		Field	QAI	Technical Support	Financial Audit
Programmatic and Management Monitoring	Subgrantee Review	X	X	Special Investigations	
	Financial / Administrative	X		Special Investigations	
	Equipment / Inventory/ Materials	X			
	Eligibility	X		Special Investigations	
	Rental	X	X		
	Feedback and Reporting	X	X		
	Energy Audits	X	X	X	
	Field Work	X	X		
	Health and Safety	X	X	X	
	Quality Assurance	X	X	Special Investigations	
Training and Technical Assistance	X	X	X		
Subgrantee Monitoring	Program Overview (Client File Review, Work Orders, etc.)	X	X	Special Investigations	
	Financial / Administration	X		Special Investigations	
	Inventory	X			
	Energy Audits	X	X	X	
	Qualifications and Training			X	
	Weatherization of Units		X		
	Health and Safety	X	X		
Final Inspections		X			
Financial Monitoring	Financial Management / Accounting Systems and Operations	X		Special Investigations	X
	Audits				X
	Payroll / Personnel	X			X
	Vehicles and Equipment	X			X
	Procurement	X			X
	Sub-awards / Subgrantee Monitoring	X		Special Investigations	
	Invoicing	X		Special Investigations	X
Records Retention	X				