

STATE OF OREGON
Sustainable Energy Resources for Consumers Plan
FOR THE UNITED STATES
DEPARTMENT OF ENERGY

December 1, 2010 to March 31, 2012

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INTRODUCTION

The Sustainable Energy Resources for Consumers (SERC) grant funds will be accepted and administered as an amendment to Oregon's current American Recovery and Reinvestment Act (ARRA) Weatherization Assistance Program (WAP) State Plan for 2009 – 2012.

The primary objective of the SERC grant is to expand the Weatherization program for materials, benefits, and renewable and domestic energy technologies not currently covered in WAP. The State of Oregon will be carrying out two unique projects, which will bring sustainable energy resources to low-income Oregonians.

Project #1: Solar Photovoltaic Pilot

The purpose of this project is to install solar photovoltaic systems in single and multi-family homes occupied by low-income Oregonians. The objective of this pilot is to substantially reduce electric bills for recipient households.

Participating Agencies: ACCESS, CSC, NeighborImpact, ORCCA and UCAN

Project #2: Sustainable Energy Efficiency Alternatives

The purpose of this project is to install specific energy efficiency measures that are not currently allowed under the existing WAP. The additional measures include Energy Star ceiling fans; hybrid, solar, and tankless hot water heaters; triple pane windows; high efficiency heating and cooling systems; and energy usage monitoring control systems; and **radiant barriers*. The SERC activities will be coupled with existing weatherization and energy education programs. CSC will be specifically installing in 60 units any combination of the Energy Star Certified General Electric brand GeoSpring® Hybrid Heat Pump Water Heater, home monitoring device (HEM) installations using the Energy Detective and the installation of high efficiency heating/cooling systems that meet or exceed Energy Star criteria. It will strive to package all of these systems together when optimally applicable.

**Radiant barriers and coatings are commonplace in high-temperature industrial applications (typically 500° F or more), and they are marginally effective at ordinary temperatures. To be cost-effective in building applications, they must have a very low incremental cost (approximately from 2 to 10 cents per sqft., depending on the application). Radiant barriers are most effective at roof level, facing down toward the attic, a typical rafter/joist configuration, with an air space. In the case of Project 2, a foil facing radiant barrier was added to rigid insulation utilized in TPO installations on mobile homes. A TPO installation(R-16 rigid with a foil face radiant barrier) was applied to the roof after additional insulation(R-50) is dense packed into the mobile home ceiling. Attics with more than R-19 insulation significantly reduce radiant barriers impact. Insulation is a better investment than radiant barriers wherever the climate demands both heating and cooling as is the case for Project 2. Homes with dark-colored roofs will benefit most from radiant barriers and in this case the TPO's are a highly reflective white. The cost of this radiant barrier will average .25 cents per sqft.*

SERC grant parameters require that applications have the potential to save energy and a national evaluation priority for SERC is to determine the cost-effectiveness and best value of these applications to low and moderate income families. SERC was created to allow local weatherization agencies to install weatherization materials and technologies that have promise for energy savings and benefits to customers.

*After reviewing the current installation practice, discussions with the Department of Energy and review of previous studies from Oak Ridge National Laboratory regarding radiant barriers, the radiant barrier as integrated in this application was unlikely to be cost-effective, **and therefore no more dwelling units will receive this technology after May 31st, 2011.***

SERC funding resources originally slated to cover radiant barriers will be put to better use towards other Project 2 applications , involving mobile home housing stock.

Participating Agency: ACCESS and *CSC

The State of Oregon (SERC) State Plan for United States Department Of Energy (DOE) is based on the rules contained within 10 CFR Part 440; 10 CFR Part 600; and all subsequent guidance contained in the U.S. DOE Weatherization Program Notices (WPN). It is the responsibility of the subgrantee to know and be familiar with these rules and guidance. All DOE rules and guidance can be found on the web at: www.waptac.org

Part I – Annual File

1.01 Overall Main Budget with Allocations

Agency	Administration	Program	Total	Units Planned
ACCESS*	\$69,620	\$1,253,169	\$1,322,789	110
CSC	\$69,620	\$1,253,169	\$1,322,789	104
NeighborImpact	\$69,620	\$1,253,169	\$1,322,789	104
ORCCA	\$69,620	\$1,253,169	\$1,322,789	104
UCAN	\$69,620	\$1,253,169	\$1,322,789	104
Total	\$348,100	\$6,265,845	\$6,613,945	586

OHCS Admin	\$348,104
Sub Admin	\$348,100
Sub Program	\$6,265,845
Total	\$6,962,049

* ACCESS allocation includes both Solar PV and Sustainable Energy Efficiency Alternative Projects as described on page 4.

1.02 Subgrantees

Oregon’s low-income weatherization network is made up of 20 subgrantees each with their own service area. There are five (5) subgrantees that will be participating in the SERC program.

The following is a list of Oregon’s weatherization subgrantees that have been approved and will be participating in SERC activities.

Name: **ACCESS Inc. (ACCESS)**
 Address: 3630 Aviation Way
 City: Medford
 State: Oregon
 Zip: 97504
 Congressional District(s): 2 & 4
 Percent of subgrantee allocation: 20%
 Funding: \$69,620 Admin and \$1,253,169 Program
 County(s) served: Jackson

Name: **NeighborImpact (NI)**
 Address: 2303 SW 1st Street
 City: Redmond
 State: Oregon
 Zip: 97756
 Congressional District(s): 2
 Percent of subgrantee allocation: 20%
 Funding: \$69,620 Admin and \$1,253,169 Program
 County(s) served: Crook, Deschutes, and Jefferson

Name: **Community Services Consortium (CSC)**
Address: 545 SW 2nd St, Suite A Contact: Steve Jole
City: Corvallis Phone: 541-752-1010
State: Oregon FAX: 541-752-6025
Zip: 97330 E-mail: sjole@csc.gen.or.us
Congressional District(s): 4 & 5
Percent of subgrantee allocation: 20%
Funding: \$69,620 Admin and \$1,253,169 Program
County(s) served: Benton, Lincoln, and Linn

Name: **Oregon Coast Community Action (ORCCA)**
Address: 2110 Newmark Contact: John Huntsman
City: Coos Bay Phone: 541-888-7117
State: Oregon FAX: 541-888-7027
Zip: 97420 E-mail: johnh@orcca.us
Congressional District(s): 4
Percent of subgrantee allocation: 20%
Funding: \$69,620 Admin and \$1,253,169 Program
County(s) served: Coos and Curry

Name: **United Community Action Network (UCAN)**
Address: 280 Kenneth Ford Dr. Contact: Alesha Sullivan
City: Roseburg Phone: 541-492-3512
State: Oregon FAX: 541-672-1983
Zip: 97470 E-mail: alesha.sullivan@ucancap.org
Congressional District(s): 4
Percent of subgrantee allocation: 20%
Funding: \$69,620 Admin and \$1,253,169 Program
County(s) served: Douglas and Josephine

1.03 Geographic Areas Served

The five (5) subgrantees that will be participating in the SERC activities are ACCESS, CSC, NeighborImpact, ORCCA, and UCAN. Each subgrantee has indicated that the majority of the services provided through SERC will be carried out in their traditional service territories. Two (2) subgrantees, including CSC and UCAN, have expressed an interest in providing SERC services outside their normal service territory. Both CSC and UCAN may provide services to other surrounding counties.

1.04 Energy Savings

Historically, Oregon's WAP has required a Savings to Investment Ratio (SIR) of one (1) or greater for all weatherization measures. Activities under the SERC program do not have a SIR requirement, but must have the potential for energy savings.

All residential units will receive appropriate weatherization measures before being considered for additional SERC improvements.

1.05 Monitoring Activities

Monitoring is the principle method by which OHCS can identify areas within the subgrantee's program operation and administration where assistance may be required. OHCS will augment its existing monitoring program to include review of SERC activities. OHCS will perform quality assurance field visits on a minimum 10 percent of each sub-grantee's completed SERC units.

1.06 Training and Technical Assistance

OHCS will utilize existing program Training and Technical Assistance funds to develop training opportunities for network agencies looking toward renewable technology programs.

OHCS staff will provide technical assistance on SERC related matters to all subgrantee participants, above and beyond that which is provided by DOE. Technical assistance may include but not be limited to the following:

- a. Provide guidance in use of regulations.
- b. Provide information obtained from local programs on innovative and successful program methods that are readily adaptable to other projects.
- c. Provide monitoring of local projects to assure improvement in quality and services.
- d. Identify specific problem solving techniques in areas of labor, transportation, administration, management and financial control.
- e. Provide information on new materials, procedures and processes for renewable technologies.
- f. Coordinate efforts among federal, state, local and private agencies to assure continued improvements in the effectiveness of SERC projects.
- g. OHCS shall address deficiencies that are identified by program review, audit, reports, regional or national reviewer or other sources.

1.07 Leveraging Activities

For over five (5) years, Oregon's WAP network has successfully collaborated with the Energy Trust of Oregon to provide solar water heating systems to low-income Oregonians. Their training and guidance, in combination with support from many of Oregon's municipal and customer owned utilities, has been essential in the successful introduction of renewable technologies to the low-income population. These partnerships will continue to be important as the SERC program is implemented across the state.

The network will also work with the Energy Trust of Oregon, the Oregon Department of Energy and local electric utilities to leverage all incentives and tax credits available for photovoltaic installations.

Oregon is home to several photovoltaic manufacturing facilities, and has several community colleges and workforce programs that train and employ individuals in solar technologies. Multiple education entities in Oregon have also recently received ARRA training grants that will help to expand the workforce available to provide system installations.

If successful, this pilot could be scaled statewide to collaborate with existing photovoltaic installation programs that currently target moderate-income consumers. These programs, such as *Solarize Southwest Portland* and *Clean Energy Works*, combine bulk purchasing and contracting with on-bill financing to reduce up front project costs by as much as 40 percent, allowing consumers to pay remaining costs through energy savings on utility bills.

1.08 DOE Funds as Leverage

Existing DOE ARRA WAP funds and other weatherization resources will be leveraged to ensure that eligible residential units receive full cost effective weatherization services before SERC measures are completed. **Regular DOE WAP grant funds will not be leveraged on SERC projects.**

1.09 Eligible Population

The income eligibility level for the DOE WAP Program is 200 percent of the Poverty Income Guidelines. In determining the level of eligibility for the SERC program, the State shall use the DOE criteria of 200 percent of poverty.

1.10 Audit/Energy Assessment

Prior to an audit of a prospective dwelling, the subgrantee shall have a completed application and all necessary paper work, including proof of income eligibility, owner's name and address/contact information as well as utility supplier(s).

1.11 Client Education

Subgrantees will provide client education by incorporating step-by-step educational tools for consumers including component installation, costs savings, maintenance and system trouble shooting. They will provide the education through various means, including but not limited to, agency professional staff, installation contractors and equipment/material manufacturers who will readily provide assistance in marketing and technical support for the subgrantees and clients. Subgrantees will also collaborate with community organizations to provide workshops including Solar Oregon, Solar Now, the Energy Trust of Oregon, and the Oregon Department of Energy.

1.12 Permission to Proceed

Prior to **any** work being done on a dwelling, and prior to a subcontractor visiting the dwelling for purposes of evaluating the cost of the job, the subgrantee **MUST HAVE A SIGNED STATEMENT FROM THE OWNER** (or owner's agent) that permission has been granted to perform weatherization and baseload measures on, and at, the dwelling. The statement **must** include a list of proposed measures that will be installed.

1.13 Energy Audit Procedure

DOE has approved the Residential Energy Method Rate (REM/Rate) for use in the Oregon WAP. SERC activities do not have to be cost effective; however, REM Rate will still be utilized to project energy savings associated with all technologies installed through the SERC program.

1.14 Final Inspection

One hundred percent of projects completed under the SERC program **must** have a Final Inspection Certification. The certification shall be signed by a designated subgrantee staff person and documented in the completed file. The inspection form **must** have information that indicates that all measures designated to be installed, including mechanical work, were installed in a workman like manner and in compliance with SERC specifications.

Furthermore, a copy of a Final Inspection Certification form signed by a designated subgrantee staff person shall remain with the owner/occupant. This inspection form **must** indicate:

- a. All of the measures were installed in a workman like manner and according to specifications.
- b. The measures installed should under reasonable conditions save energy and/or make the dwelling more comfortable for the inhabitants.
- c. All of the installed measures are guaranteed for material and workmanship defect for a period of no less than one year (365 days) from the date signed.

1.15 Analysis of Effectiveness

In order to calculate the most accurate energy savings, subgrantees are required to obtain twelve months prior energy usage for each dwelling before SERC activities are completed. Additionally, obtaining the energy usage records of the 12 months following SERC activities would be useful information to compare actual savings with projected savings. The results will be used to measure the effectiveness of SERC measures installed.

1.16 Energy-Related Health and Safety Repairs

Energy-related health and safety costs and incidental repair costs are both allowable when necessary to ensure proper performance of the installed SERC measure. For any one unit, the combined costs for health and safety and incidental repairs should not exceed the cost of the installation of the SERC material/technology itself. For all SERC units within the State, the combined costs for health and safety and incidental repair shall not exceed 10 percent of the statewide average SERC cost per unit. DOE has set the statewide average SERC cost per unit at \$12,000, thus the combined health and safety and incidental repair costs should not exceed \$1,200 per unit. If additional funds are needed for these costs, additional rational will be need to be provided.

Activities may include, but are not limited to, minor repairs to the roof allowing installation of SERC measures; minor repairs/upgrades to the electrical system; and lead safe work practices.

1.17 Administrative Expenditure Limits

U.S. DOE Weatherization Assistance Program Final Rule 10 CFR Part 440.18 (d) clearly defines the amount of allowable administration funds as up to 10 percent. Not more than five (5) percent of new SERC funds will be used by the state for administrative purposes, with the remainder to go to subgrantees.

1.18 Davis-Bacon Act-Compliance

The SERC projects were awarded through funding under the American Recovery and Reinvestment Act of 2009. Section 1606 of the Recovery Act requires the payment of not less than prevailing wages under the Davis-Bacon Act, to all laborers and mechanics employed by contractors and subcontractors on projects funded directly by or assisted in whole or in part by and through the Federal Government pursuant to this Act.

1.19 Program Procurement

It is the subgrantee's responsibility to identify and procure the local resources necessary to operate this program. These would include, but not be limited to, local and state funds; donated materials; space; support; and any resources not provided for by U.S. DOE funds. Such resources are to be identified by the subgrantees in their grant proposals to OHCS. Additionally, prior to operating the program, the subgrantee shall insure the criteria are met.

Contractor Procurement: All subgrantees that employ private licensed contractors to provide weatherization, repairs, or inspections where the cumulative one (1) year compensation is \$25,000 or more, **must** have a policy in place and use said policy to procure contractors.

1.20 Certify Work

Subgrantees and their subcontractors **must** certify all weatherization work and materials, including base load measures, for a period of one year from the time of completion. Certification includes the repair and replacement of defective measures resulting from improper installation or material defect.

1.21 EPA Compliance

Subgrantees shall comply with the Environmental Protection Agency (EPA) regulations as set forth in 40 CFR Part 248 - Guidelines for Procurement of Building Materials, which encourages the use of recyclable materials. Subgrantees shall use recyclable materials whenever possible. Compliance with EPA regulations also applies to the decommissioning of replaced baseload appliances whether subcontracted out or not.

1.22 Reporting Requirements

Summary of Reporting for SERC:

Report	Frequency	SERC Included?
Monthly Report	Monthly	NO
OMB 1512	Quarterly	YES, included in existing report
Federal Financial Report	Quarterly	YES, included in existing report
Existing Quarterly Performance Report	Quarterly	NO
New Quarterly Performance Report	Quarterly	YES, new report in PAGE

Each sub-grantee shall submit certified and timely reports to OHCS detailing the progress made towards the program objective(s), as well as all administrative and program expenditures. The report **must** correspond with the subgrantee's accounting records, and be certified by the subgrantee's chief executive officer. **Quarterly reports are to be reviewed by OHCS on, or before, the 5th day of the month following the last day of the quarter being reported.**

Reporting Format – OHCS has provided all subgrantees with online access to OPUS Weatherization for the purpose of reporting weatherization activities. OPUS will be updated to include the new reporting metrics for SERC.

1.23 Maximum Service – Holistic Approach

All subgrantees are responsible to ensure each household has received the maximum amount of services available within the expenditure limitations to maximize energy savings. Subgrantees are encouraged to utilize all funding available to deliver the highest level of energy efficiency improvements in a holistic approach on each dwelling receiving services. Holistic approach refers to treating the dwelling as an integrated complex system where the shell, mechanical, and occupants, all interact and affect the energy usage.