

Progress Report on the Expenditure of American Recovery and Reinvestment Act Energy-Related Funds

**Report to the Minnesota State
Legislature**

**Pursuant to Minn. Laws 2009, Chapter
138, Article 5, Section 2**

April 15, 2010

**Office of Energy Security
Minnesota Department of Commerce**

I. INTRODUCTION

On February 17, 2009, President Obama signed into law the American Recovery and Reinvestment Act (ARRA). In May 2009 the Minnesota Legislature passed, and Governor Pawlenty signed S.F. 657, legislation that designates Minnesota's share of the ARRA energy dollars into various programs.

This report is the second required by the Laws of Minnesota for 2009, Chapter 138. Article 5, Sec. 2., **ACCOUNTABILITY AND TRANSPARENCY REPORTING**, requires that:

The commissioner, after compiling information supplied by the commissioners of administration, education, and employment and economic development, and the Office of Higher Education, shall report on the progress of the programs funded by this act to the house of representatives and senate committees with jurisdiction over energy finance and workforce development policy by September 1, 2009, January 15, 2010, April 1, 2010, and September 1, 2010. The report must include a complete accounting of all federal stimulus money spent on the programs funded to the extent allowable by federal law, including, but not limited to:

- (1) the specific projects funded, including the building owner and project manager, and, for nonresidential projects only, the project location;
- (2) for weatherization projects, the number of units weatherized, including number of rental units weatherized, energy usage information, income data, and type, cost, and funding source of the weatherization measure installed;
- (3) the number of jobs retained or created by each project, including data on hiring from communities experiencing disproportionately high rates of unemployment, including, but not limited to, low-income, rural, tribal communities, and communities of color;
- (4) the total calculated and actual energy savings for each project;
- (5) the remaining balances in each stimulus account;
- (6) the non-stimulus money leveraged by stimulus money for each project;
- (7) the training courses provided, including the location and provider of courses offered, the funding source for each training course, and the total number of trainees; and
- (8) compliance with state prevailing wage, veterans, and disadvantaged business enterprise requirements.

The reports must be made available to the public on the Office of Energy Security Web site.

This report summarizes not only the work that has been done to date but also provides detail on the data points set out in Chapter 138. The first reporting date required by the federal government was October 10, 2009 with quarterly reporting due January 15, 2010, April 1, 2010 and September 1, 2010. We include numbers covering the first quarter of 2010 in this report.

II. REPORTING

The Office of Energy Security (OES) submitted all of the required ARRA related reports on time to the appropriate parties (U.S. Office of Management and Budget (OMB) and Minnesota Management and Budget (MMB)) for the federal January reporting. OES is required to submit a copy of its ARRA Section 1512 report to MMB, along with a project level detail report, no later than the seventh business day after the end of each quarter. Once MMB has reviewed and approved the documents, OES submits the ARRA Section 1512 reports to FederalReporting.gov. The information submitted to FederalReporting.gov is then used to update Recovery.gov on all ARRA related activities across the country. All of this reporting is in addition to our regular quarterly reporting reports, which are due 30 days after the end of the quarter. In addition, the U.S. Department of Energy (USDOE) now requires monthly reporting as well as weekly phone calls. OES staff works in close cooperation to ensure that information provided in all of these various reports, including this report, are consistent with each other.

III. FUNDING

Since February 2009, OES has submitted applications and received funding for multiple programs, including the Weatherization Assistance Program (both regular formula and ARRA), the State Energy Program (both regular formula and ARRA), the Energy Efficiency and Conservation Block Grant Program, the Energy Efficiency Appliance Rebate Program, Energy Assurance Planning, and the Save Energy Now grant. All of these awards, with the exception of the Save Energy Now grant, are formula grants from USDOE.

ARRA Funding

Following are descriptions of both ARRA formula and competitive grant funding.

State Energy Program – \$54,172,000

- Funds support public buildings retrofits, residential energy financing, renewable energy programs, energy education, training, data collecting, emerging technologies, and more.
- Submitted initial application: March 23, 2009
- Submitted comprehensive application: May 12, 2009
- Received initial NFAA: April 20, 2009 (provided \$5,417,200 – 10% of award)
- Received second NFAA: June 24, 2009 (provided \$21,668,800 – 40% of award; changed Terms and Conditions)
- Received third NFAA: September 19, 2009 (provided \$27,086,000 – remaining 50% of award; changed Terms and Conditions)
- Received fourth NFAA: December 10, 2009 (revised National Environmental Policy Act (NEPA) Requirements provision and SEP Narrative Worksheets)

Reporting Period	SEP ARRA funds expended (amounts are cumulative)	SEP ARRA jobs created/retained (FTEs are not additive over quarters)
04/20/2009 – 09/30/2009	\$113,507	4.30
10/01/2009 – 12/31/2009	\$1,162,979	36.58
01/01/2010 – 03/31/2010	\$3,642,907	50.85

Weatherization Assistance Program – \$131,937,411

- Funds support the installation of energy conservation measures in eligible low-income homes. A total of 32 local service providers cover the entire state. Average (set by USDOE) fund amount that can be expended per home is \$6,500.
- Submitted initial application: March 20, 2009
- Held public hearing: April 27, 2009
- Submitted comprehensive application: May 12, 2009
- Received first NFAA: March 26, 2009 (provided \$13,193,741 – 10% of award)
- Received second NFAA: April 10, 2009 (changed Terms and Conditions, corrected USDOE clerical errors)
- Received third NFAA: July 2, 2009 (provided \$52,774,964 – 40% of award)

- Received fourth NFAA: September 19, 2009 (provided \$65,968,706 – remaining 50% of award, changed Terms & Conditions)
- Received fifth NFAA: January 25, 2010 (Monthly reporting requirement, revised Wage Determinations, Project Officer changed)

Reporting Period	WAP ARRA funds expended (amounts are cumulative)	WAP ARRA jobs created/retained (FTEs are not additive over quarters)
04/20/2009 – 09/30/2009	\$5,044,059	169.50
10/01/2009 – 12/31/2009	\$13,502,882	346.48
01/01/2010 – 03/31/2010	\$27,561,338	454.66

Energy Efficiency and Conservation Block Grant (EECBG) – \$10,644,100

- Funds will support three activities: mandatory EECBG sub-grants, energy efficiency improvement sub-grants, and public outreach/program administration.
- Submitted application: June 25, 2009
- Received NFAA: September 14, 2009 (provided \$10,644,100 – 100% of award)

Reporting Period	EECBG ARRA funds expended (amounts are cumulative)	EECBG ARRA jobs created/retained (FTEs are not additive over quarters)
04/20/2009 – 09/30/2009	\$0	0
10/01/2009 – 12/31/2009	\$18,523	1.20
01/01/2010 – 03/31/2010	\$44,112	1.51

Save Energy Now – Competitive Grant, Request for \$875,568

Includes partial (\$349,985 or 40%) ARRA FUNDING

- Funds will support a full package of industrial energy efficiency resources to assist MN business and industry to implement energy efficient technologies and practices in order to realize energy savings.
- Submitted application: October 16, 2008
- Notice application was not among those initially selected: February 25, 2009
- Notice application would be funded with ARRA funds: June 11, 2009
- Revised budget forms submitted: July 30, 2009
- Revised budget forms submitted: August 18, 2009
- Received NFAA: November 16, 2009 (provided \$349,985 – 40% of award)

Reporting Period	SEN ARRA funds expended (amounts are cumulative)	SEN ARRA jobs created/retained (FTEs are not additive over quarters)
10/01/2009 – 12/31/2009	\$0	0
01/01/2010 – 03/31/2010	\$561	.02

Energy Assurance Planning – \$678,986

- Funds will support development of greater capacity within OES and other agencies to 1) strengthen and expand State and local government energy assurance planning and resiliency efforts, 2) create jobs and 3) build in-house State and local government energy assurance expertise.
- Submitted application: July 30, 2009
- Received NFAA: August 17, 2009 (received \$678,986 – 100% of award)

Reporting Period	Energy Assurance ARRA funds expended (amounts are cumulative)	Energy Assurance ARRA jobs created/retained (FTEs are not additive over quarters)
04/20/2009 – 09/30/2009	\$0	0
10/01/2009 – 12/31/2009	\$0	0
01/01/2010 – 03/31/2010	\$121	0

State Energy Efficient Appliance Rebate Program – \$5,009,000

- Funds will establish and/or supplement established Energy Star appliance rebate programs.
- Submitted initial application: August 14, 2009
- Comprehensive application due: October 15, 2009
- Received initial NFAA: August 25, 2009 (received \$500,900 – 10% of award)
- Received second NFAA: December 11, 2009 (received \$4,508,100 – balance of award; changed Terms and Conditions)

Reporting Period	Appliance Rebate ARRA funds expended (amounts are cumulative)	Appliance Rebate ARRA jobs created/retained (FTEs are not additive over quarters)
04/20/2009 – 09/30/2009	\$0	0
10/01/2009 – 12/31/2009	\$0	0
01/01/2010 – 03/31/2010	\$508,924	3.46

IV. BARRIERS TO IMPLEMENTATION

Davis Bacon Act (DBRA)

Prevailing wage requirements of the Davis-Bacon Act and Davis-Bacon Related Acts (DBRA) are applicable to construction contracts for work in excess of \$2,000 funded in whole or in part with ARRA funds. As noted in our September report, DBRA compliance presented significant barriers to implementation of WAP and SEP residential programs. USDOE and U.S. Department of Labor (USDOL) have provided determinations and guidance that largely address those barriers.

USDOL issued initial WAP-related wage determinations for Minnesota on September 3, 2009. While corrections to some determinations have been necessary, weatherization activities have moved forward quickly.

On November 19th, USDOL issued an opinion that prevailing wage requirements under ARRA do not apply to financial assistance provided directly to individual homeowners. In addition, USDOE issued guidance on this issue for SEP, EECBG and Appliance Rebate projects on December 30, 2009.

National Environmental Policy Act (NEPA)

NEPA requires USDOE to assess the potential environmental impact of activities financed in whole or in part with federal funds. Under 10CFR Part 1021, USDOE may determine that some broad categories of activities, by their nature, will likely not have an adverse environmental impact and do not require review (a categorical exclusion.) An activity that is not categorically excluded cannot proceed without further review by USDOE to determine whether an Environmental Assessment (EA) or Environmental Impact Statement (EIS) is warranted. USDOE has cautioned the states that activities that require an EA or EIS could be significantly delayed.

In approving Minnesota's SEP plan, USDOE categorically excluded program administration, residential energy efficiency programs, utility coordination and training and workforce development activities. USDOE prohibited implementation of renewable energy programs, commercial/industrial programs, and public building retrofit programs pending submission of additional information it deemed necessary to make NEPA determinations.

Based on USDOE guidance and negotiations with USDOE NEPA compliance staff, OES requested and received categorical exclusions for the following additional activities:

Commercial/industrial

- Energy-efficiency grants and shared savings agreements
- Small-scale solar, wind and ground-source heat pump grants
- Biomass facility feasibility study grant

Government building energy-efficiency grants

Schools/local government renewable energy grants

- Small-scale solar, wind and ground-source heat pump grants

Residential and small business renewable energy rebates

- Small-scale solar, wind and ground-source heat pump rebates

Renewable energy activities under the categorical exclusions are limited to:

- Installation of small renewable energy sources located on or contiguous to existing buildings or existing facilities.
- Photovoltaics – appropriately sized units on existing rooftops and parking shade structures; or 60kW systems or smaller installed on the ground within the boundaries of an existing facility;
- Solar thermal hot water --- appropriately sized units for residences or small commercial buildings;
- Wind turbines – 35 kW or smaller;
- Ground-source heat pumps – 5.5 tons of capacity or smaller.

For the Energy Efficiency and Conservation Block Grant Program, USDOE followed a similar path for NEPA review by granting categorical exclusions for certain activities. The process was slightly different than the one used for the SEP program, but resulted in the same list of categorical exclusions. OES submitted its NEPA filing on January 25, 2010 which provides assurance that it will only award sub-grants for projects that fall within the categorical exclusions. Furthermore, OES is required to immediately contact U.S. DOE if it identifies a project that may involve an “extraordinary circumstance.” The result of this effort was that the Request For Proposal (RFP) issued by OES for the EECBG program was solely for activities that are categorically excluded from NEPA review. OES received notice from USDOE on April 7, 2010 that its January 25, 2010 filing was approved.

Activities of a type or scale not categorically excluded are still prohibited. Any such activity proposed would require USDOE review and approval. However, given the potential of review requests from more than 2,000 SEP and EECBG grantees nationwide, and the limited capacity of USDOE NEPA compliance staff, it may not be feasible to undertake any other activities not categorically excluded.

National Historic Preservation Act (NHPA)

Section 106 of the National Historic Preservation Act (36CFR 800) requires Federal agencies to take into account the effects of their undertakings on cultural resources that are listed on or eligible for the National Register of Historic Places. The Act allows the Federal agency to delegate responsibility for ensuring compliance with Section 106 to State officials, and also allows the Federal agency or its delegate to negotiate a programmatic agreement to streamline review of undertakings that are repeated multiple times and/or that have little potential to cause adverse effects to historic properties.

In the case of the ARRA-funded energy projects, USDOE elected to employ both delegation of responsibility for compliance and programmatic agreements as mechanisms for meeting the requirements of Section 106. In both instances, however, the authority for utilizing these alternate procedures was late in coming, delaying implementation of Section 106 review for Minnesota's ARRA-funded energy programs.

USDOE issued a letter delegating responsibility for compliance with Section 106 to State Energy Offices on August 28, 2009. Little guidance on negotiating a Programmatic Agreement (PA) was forthcoming until February 5, 2010, however, when USDOE finalized a prototype Programmatic Agreement that had been negotiated in consultation with the Advisory Council for Historic Preservation. OES received the prototype on February 12, 2010. With this document in place, OES has proceeded quickly to fulfill its Section 106 responsibilities:

- OES hired a qualified Historic Preservation Planner to oversee the Section 106 process in early January. The planner began work on a part time basis at the end of January, and began full time work in mid February.
- Immediately upon receipt of the prototype Programmatic Agreement from USDOE on February 12, 2010, OES's preservation planner met with compliance staff at the Minnesota State Historic Preservation Office to tailor the prototype PA to the specific requirements of Minnesota's historic preservation program. A revised version of the PA was sent to USDOE and the ACHP for review on March 4, 2010. Final revisions were completed on March 17, 2010. The programmatic was signed by MnSHPO and OES on March 25, 2010 and the final document was sent to USDOE for signature on March 26, 2010. The fully executed agreement was received by the OES on Tuesday, March 30, 2010.

The PA determined that a number of program activities typically completed as part of WAP, SEP, and EECBG programs have no potential to adversely affect historic properties, and that they are therefore exempt from review under section 106. Activities not included on the list are still subject to review by the State Historic Preservation Office.

- While negotiations for the PA were under way, OES began to develop and implement systems for tracking projects to ensure that those requiring review were identified, that applicants submitted necessary documentation, that the projects received appropriate attention, and that a record of decision for each project was retained in OES files. Mechanisms for record keeping include a web-based electronic form for use by WAP sub-grantees (due for release by mid-April) and a paper form/checklist that will be used to review SEP and EECBG projects.

Staff also developed materials intended to provide background on the Section 106 process, to familiarize service providers and program managers with categories of exempt and non-exempt work, and to provide instructions for preparing documentation required for reviews. Staff met with WAP sub-grantees on March 18th to explain the review process, describe the intake and monitoring procedures, and describe the types of work that are exempt from review.

- As these procedures were developed, OES's preservation planner began Section 106 reviews for SEP funded residential solar energy and ground source heat pump projects, and has reviewed project proposals submitted for the first round of EECBG funding.

Buy American Recovery Act

Recipients using federal grant funds for construction, alteration, maintenance or repair projects on public buildings or public works will be required to comply with the provisions of the Buy American Recovery Act. This Act requires that all iron, steel and manufactured goods used in such projects must be produced in the United States.

OES has only recently begun to receive applications requesting EECBG funding for public building projects. Applicants have been advised that they will be expected to comply with Buy American provisions; OES is working to develop mechanisms or evaluating proposals to ensure that the requirements are met. The requirements themselves are still somewhat in flux, with the USDOE issuing limited waivers for some projects and redefining "supply items" as recently as March 19, 2010.

IV. PROGRAM UPDATES

Article 2 – Energy Efficiency

Weatherization Assistance Program (WAP)

OES continues to work with 32 Weatherization Assistance Program service providers to increase the number of multi-family and rental units weatherized using ARRA funds. OES contracted with a New York company for access to software that will provide 60 electronic multi-family audits. All service providers have equal opportunity to use these audits. Two webinars were held to train auditors on the use of the multi-family audit, known as EA-Quip. A multi-family audit training was held on December 14 and 15, 2009. Additional multifamily audit and weatherization work training is planned for mid May 2010.

As directed by State legislation, OES raised the income eligibility for WAP to 200% of Federal Poverty Income Guidelines (FPIG). eHEAT, the software shared with the Low Income Energy Assistance Program that is used to identify eligibility, has been adjusted to recognize these households. All eligible households are prioritized using USDOE guidelines, including: disability, elderly, households with children under the age of 19, high energy use, and high energy burden.

With grant guidance effective March 2, 2010, USDOE and United States Housing and Urban Development (HUD) released guidelines for a Memorandum of Understanding between the two federal agencies. Although this guidance was originally intended to recognize existing HUD household eligibility for Weatherization Assistance Program purposes, the guidance instead provided two lists of buildings where at least 66% of residents were purported to meet WAP eligibility. Service Providers must still canvas all residents and confirm they have applied for the WAP program through the joint LIHEAP/WAP application or ask them to apply. All other eligibility priorities also apply.

Minnesota's Davis Bacon wage determinations were not released until September 3, 2009. Amendments to those wages were released on December 14, 2009 and went into effect mid January 2010. According to the Davis Bacon amendment to the USDOE Weatherization grant to OES, the State of Minnesota is designated to receive and retain the original signed weekly Davis Bacon wage reporting documents for a three year period. OES designed a form specific to Minnesota for this purpose and is now receiving the weekly wage reports. OES is required to complete a random sample review of these reports to confirm that the correct Davis Bacon wages are used to pay workers. All inquiries about Davis Bacon wages must be addressed to USDOE.

On Thursday, January 13, 2010, the Minnesota Weatherization Assistance Program was recognized by USDOE for outstanding performance in the number of low-income homes it has weatherized using ARRA funds. Gil Sperling, currently a senior advisor to DOE Assistant Secretary Cathy Zoi, and former manager of the Weatherization and Intergovernmental Program in the Office of Energy Efficiency and Renewable Energy (EERE), presented the award. Sperling recognized Minnesota as a national leader in weatherization and a role model for other states. Weatherization workers, managers and executive directors from many community action agencies from across the state attended the award ceremony.

The Weatherization Assistance Program recently signed a contract with the Minnesota State Historical Preservation Office (SHPO) to streamline the requirement for all houses more than 45 years old to undergo a review from SHPO to determine if those houses meet SHPO standards for historical significance before weatherization work on any house can commence. The agreement will allow most weatherization work to continue immediately after review by the OES preservation planner.

On April 22, 2010, any home built before 1978 where a particular area of lead paint may be disturbed must have onsite a person certified by EPA as a Lead Renovator. This new designation requires a day long training and successful passing of a test. In addition, any organization engaging in such work must be registered with EPA as a Lead Firm. Firm status requires no testing, but a fee is required. Anyone or any firm engaging in lead work after April 22, 2010 will face steep fines if found not to comply. All state WAP monitors will be Lead Renovators as of April 24, 2010. Service Providers have been informed of these requirements and of the penalties for non-compliance. There is currently a three week backlog to receive Firm status. DOE is working with EPA to allow any provider or weatherization contractor who has submitted an application for Firm status to continue working after April 22, 2010.

Residential Energy Efficiency Programs

Energy Saver

Chapter 138 requires OES to coordinate with the Minnesota Housing Finance Agency (MHFA) to use stimulus funds in conjunction with existing MHFA financing programs. It also allows other entities to develop additional programs that may include loans, grants and rebates.

OES and MHFA created a residential rebate program for energy efficiency improvements to use with MHFA's existing home improvement loans. Through this program, participating homeowners may receive an Energy Saver Rebate for 35 percent of the cost of the eligible improvements financed with a Fix-up Fund loan, up to \$10,000.

The program is designed to help homeowners with household income up to \$96,500 improve home energy efficiency. Eligible components include the replacement of select heating and cooling appliances, exterior doors and windows, attic air sealing, wall and attic insulation, water heaters and light fixtures. The program is focused on ensuring that many rebate-eligible improvements will also qualify for the Federal Tax Credit for energy efficiency improvements.

The Energy Saver program rolled out on December 7, 2009 and is expected to be complete by September 15, 2010. This program will provide approximately \$4.1 million for residential energy efficiency improvements.

The MHFA Energy Saver Rebate Program served 1140 homes through March 2010 providing rebates totaling \$4.1 million. The average rebate is approximately \$3600, and the average cost of eligible improvements is about \$11,400. This program was very popular and attracted a high degree of interest.

Project ReEnergize

In an effort to reach additional market segments, OES worked with the Builders Association of Minnesota (BAM) to create a residential program that provides rebates to homeowners who make energy efficiency improvements, including air sealing, insulation along with window and water heater replacements in their homes. The program was structured on providing Minnesota's existing network of licensed builders and remodelers incentive tools that could be leveraged to achieve residential energy savings and put builders and remodelers to work.

Educational programs for contractors were developed and held throughout the state. The contractor programs provided training on program eligibility, rebate process along with general energy education. The separate performance testing training provided for contractors and insulation sub-contractors focused on best practices for air sealing attics, recording energy savings and improving occupant safety. Fourteen (14), 2-hour contractor training programs and twelve (12), 8-hour performance testing training programs were held throughout the State providing the opportunity for 996 licensed contractors to expand their scope of services and market energy efficiency projects.

Project ReEnergize requires contractors to pre-notify BAM of the projects that are under construction. As of April 4, 2010 the pre-notifications indicated the following:

Energy Efficiency Measure	Pre-notified Rebate Amount
Attic Air Sealing	\$191,200
Wall Insulation	\$40,800
Attic Insulation	\$171,200
Windows in combination with air sealing	\$404,700
Windows without attic air sealing	\$2,004,250 or \$2.0 million
Water heater replacements	\$69,700
Total pre-notified rebate amount	\$2,877,450 or \$2.9 million

This unreserved rebate program was available to homeowners beginning October 1, 2009. As of April 4, 2010, rebates totaling \$2,120,950 have been issued for 975 houses (470 houses during first quarter of 2010) and include among other eligible improvements, the replacement of 7,323 windows. Specific details regarding the rebates issued are below:

Energy Efficiency Measure	Rebate Amount
Attic Air Sealing	\$108,000
Wall Insulation	\$21,600
Attic Insulation	\$101,600
Windows in combination with air sealing	\$204,000
Windows without attic air sealing	\$1,670,750
Water heater replacements	\$15,000
Total Rebate Amount	\$2,120,950

The Program has had a significant impact on window replacement. As the program progressed, increased emphasis on other improvements occurred diminishing the windows only rebate component from 100% to its current 89%.

In addition to homeowner rebates, the Project ReEnergize program includes the creation of an interactive incentive finder website that will provide a single point source for existing and potential homeowners and the building community to identify possible

incentives related to energy efficiency in residential homes. This long term tool will allow Minnesotans to easily receive a relevant and detailed list of energy efficiency incentives based on their geographic location. This website is available to the public at www.homeincentivefinder.org.

Project ReEnergize will ultimately provide more than \$2.5 million in direct rebates to Minnesotans who make residential energy efficiency improvements.

Innovative Energy Residential Efficiency Program/ Small City Energy Efficiency Grant

OES continues to work with both Duluth and Park Rapids in development of these programs. Both cities are now exploring two-phase projects. For Duluth, Phase 1 will include the formation of a one stop shop to inform and engage Duluth residents and target households who will benefit most from home improvements and complete a market analysis and fully flushing out the development a revolving loan fund to ensure it is viable.

The City of Park Rapids and its project partners are also exploring a 2-phase project. Legislation was passed this session to allow the City to use the funds to address both residential and commercial building energy efficiency. Project participants are currently drafting a scope of work for phase one.

Outreach Activities to Increase Residential Participation In Energy Efficiency Activities

Article 2, Section 5 requires OES to award grants for residential energy conservation outreach services to maximize new households participating in stimulus-funded programs. OES selected three applicants for grant awards.

Common Ground of Duluth received a contract award of \$128,853 to reach households in Duluth and the nine northeastern counties including Koochiching, Itasca, Saint Louis, Lake, Cook, Aitkin, Carlton, Kanabec, and Pine. Outreach efforts will focus on lower income households to create awareness about weatherization, home energy efficiency and all conservation programs available to them, not just stimulus opportunities. In addition, within Duluth, door-to-door canvassers will distribute information on energy programs, energy saving measures, neighborhood workshops, and information on Energy Star. Door to door canvassers will be hired through Community Action of Duluth utilizing low income, ethnically diverse crews. Canvass members will receive additional training in green job opportunities, financial awareness, and community service projects. Work begins May 2010.

OES successfully completed a contract with the Saint Paul Neighborhood Energy Connection (NEC) for the amount of \$273,000. NEC will work to create awareness about available ARRA programs, which include weatherization and home energy efficiency and conservation programs, focusing on Minnesota's lower income households in both urban areas and small cities. NEC will reach out to each population through home visits, workshops, and a hotline.

Northwest Community Action, Inc. received a contract award of \$84,000 to partner with three rural Community Action Programs to reach out to low income households, area businesses and local governments in rural northwestern Minnesota regarding weatherization and energy conservation resources. Specific efforts will focus on reaching 10,000 eligible households to create awareness about weatherization, home energy efficiency and various conservation programs. In addition, information on accessing energy programs and energy saving measures will be provided to over 200 businesses, utilities, banks and lenders, housing program administrators, "green" construction contractors and renewable energy specialists. The partnership of the four Community Action Programs will develop a series of presentations and case studies showcasing successful residential efforts as well as energy conservation projects on commercial and community facilities. The project will also conduct follow up with 10 percent of the referred households to evaluate local information and access to weatherization and energy conservation services.

Energy Efficiency and Conservation Block Grants to Local Governments

The plan submitted in June 2009 was approved by USDOE on September 14, 2009. Progress was made on receiving guidance from USDOE regarding the NEPA requirements for certain eligible activities and a template of categorical exclusions was provided. A summary of activity for each sub-project follows.

Mandatory sub-grants

The RFP for the mandatory grants (Laws of Minn. 2009, Ch 138, Art. 2, Sec 6.) was initially issued on December 14, 2009 with proposals due on January 25, 2010. Because complete proposals submitted by the original deadline were not sufficient to utilize all funds available, and many proposals did not contain adequate information for OES staff to verify the energy saving estimates, the RFP was reopened February 11, 2010. New proposals were allowed and applicants who previously submitted proposals were requested to provide additional information about how they derived the energy saving estimates. The RFP closed March 3, 2010. Projects were evaluated and applicants who made the short list were notified March 12, 2010.

Grant negotiations are underway and OES expects to have all grants executed by mid May. Many of the grant proposals will need to undergo National Historical Preservation Act, Section 106 historical review, which may prove to be an impediment to getting contracts completed. OES has internal staff working to keep this process moving so that contracts can be completed on time.

***Local Government and School District Renovations
Energy Efficiency Improvement Subgrants***

OES will use up to \$8 million for a Facility Cost-share Program. Funds will be awarded to make cost-effective energy improvements to existing facilities. Minnesota school districts, park districts, towns, cities, counties, townships, or any combination of these units operating under an agreement to exercise powers jointly will be eligible for the program. Emphasis will be placed on projects that have a pay-back between 2-15 years that are ready for immediate implementation. Projects will be evaluated and selected based on energy-savings per grant dollar, jobs created and retained, greenhouse gas emissions reductions, and geographic distribution. Grant funds will provide up to 50% of the improvement costs up to a maximum of \$100,000. A minimum percentage of the funds will be set aside to ensure equitable distribution both geographically and categorically.

The RFP for the Facility Cost-share Program is planned for release on April 19th; proposals will be due five weeks after the RFP is issued.

EECBG Coordination, Outreach and Administration

Communication between OES, USDOE and prospective grant recipients is ongoing. Bi-weekly updates are provided to the USDOE monitor assigned to OES. Currently, OES is negotiating contracts with the local governments who are on the short list. Grants are expected to be executed by mid May.

OES also set up a meeting to with other Minnesota formula grantees to discuss the federal ARRA requirements and reporting, particularly the Section 106 historical review and programmatic agreement. OES will continue to work with these large Minnesota cities and counties and provide as much help as our resources allow.

**Local and State Government Building Renovations
Public Building Enhanced Energy Efficiency Program (PBEEEP)**

Local Government Component

OES continues to work with Center for Energy and the Environment (CEE), the primary contractor, on program design, funding administration, program release, and project contracting.

Initial project phases will be funded by PBEEEP (managed by CEE) through a combination of Federal Oil Overcharge funds and ARRA stimulus funds.

A two phase release plan for PBEEEP is envisioned. The first phase will be a revised pilot development phase. CEE's development contract partner firms will be trained to conduct PBEEEP projects and will execute pilot project work. During the pilot phase, the provider participation and engagement development activities will be developed. Pending other development activities, PBEEEP will be ready for release following the completion of these activities.

State Government Component

Work continues on the screening and investigation phase and enrolling new buildings in the program. At the close of the quarter there are fifteen active projects with a total of 318 buildings comprising 11.5 million square feet. An interagency agreement between the Office of Energy Security and the Department of Administration is now in place to use ARRA funding to assist with the cost of the screening and investigation. Funding for this effort was authorized by Laws of Minn. 2009, Ch 138, Art. 2, Sec. 8.

Detailed Project Information:

<u>New Applications</u>	<u>Buildings/Area</u>	<u>Date</u>	<u>Status</u>
Corrections: Shakopee	14 / 242,068 ft ²	1/12/10	Screening
Corrections: Willow River	13 / 57,806 ft ²	1/12/10	Complete
Corrections: Faribault	38 / 1,147,454 ft ²	1/12/10	Screening
Corrections: Moose Lake	26 / 538,858 ft ²	1/22/10	Screening
MNSCU: MSU Moorhead	33 / 1,704,438 ft ²	2/11/10	Screening
Administration: History Center	1 / 415,953 ft ²	3/8/10	Screening
MNSCU: St. Cloud State	63 / 3,130,898 ft ²	3/4/10	Screening

<u>Other Screenings Begun</u>	<u>Buildings/Area</u>	<u>Date</u>	<u>Status</u>
Minnesota Academies	17 / 340,013 ft ²	1/13/10	Screening
MNSCU: RCTC	31 / 739,000 ft ²	1/19/10	Investigation
MNSCU: Century College	25 / 722,000 ft ²	1/25/10	Investigation
MNSCU: SMSU	27 / 1,140,000 ft ²	3/22/10	Screening
<u>Investigation RFP Created</u>	<u>Buildings/Area</u>	<u>Date</u>	<u>Status</u>
Corrections: Rush City	6 / 424,968 ft ²	2/3/10	Issue 4/1/2010
Corrections: Red Wing	15 / 30,120 ft ²	3/2/10	Not Yet Issued
DNR: St Paul	1 / 37,440 ft ²	3/4/10	Not Yet Issued
DNR: Grand Rapids, Brainerd and Fergus Falls	3 / 114,765 ft ²	3/4/10	Not Yet Issued
MNSCU: RCTC	31 / 739,000 ft ²	3/24/10	Not Yet Issued

Article 3 – Renewable Energy

Renewable Electric Generation and Geothermal Facility Rebates

In December 2009, USDOE provided final determinations on NEPA requirements for renewable energy rebates. USDOE initially prohibited implementation of renewable energy programs, pending submission of additional information deemed necessary to make NEPA determinations. USDOE issued draft guidance on August 17, 2009 providing size limits for various technologies that would likely permit USDOE to grant categorical exclusions for those activities. Those limits included wind turbines of 20 kW or smaller and ground-source heat pumps (GSHP) of 10 tons capacity or smaller. USDOE subsequently revised limits on ground source heat pumps to closed-loop systems of 5.5 tons capacity or smaller. OES submitted a request to the DOE for an increase to the wind turbine size limit from 20kW to 40kW since the 40kW limit was identified in the rebate program authorized under 2009 Laws, Chapter 138, Art. 3, Sec. 2 and these size categories have nearly identical environmental impacts. OES provided USDOE with requested information on wind installation characteristics and USDOE indicated that it would provide categorical exclusion for small wind projects up to 35kW in rated capacity.

In autumn 2009 USDOL clarified the issue of requiring federal prevailing wage requirements of Davis-Bacon and Related Acts (DBRA) for homeowners. Although initially it appeared that prevailing wage requirements would apply to homeowners, which would have presented a significant barrier to implementing a residential renewable energy rebate program, USDOL issued a determination indicating that

prevailing wage requirements will not apply to energy efficiency and renewable energy programs for homeowners. USDOE and USDOL have since indicated that federal prevailing wage requirements will apply to renewable energy rebates for small businesses. The USDOL must yet determine appropriate job classifications and prevailing wages for renewable energy project installers, designers, etc.

The applicability of National Historic Preservation Act and State Historical Preservation Office (SHPO) guidelines to small wind and ground source heat pump projects may also be a barrier to implementing this grant program. OES' preservation planner is working with project staff to streamline processes.

OES launched the Residential Ground Source Heat Pump Rebate (GSHP) program on February 16, 2010. Interest in the GSHP rebate has been very high. As of March 31, 2010, OES has received over 250 applications. In mid-February, OES received word that the DOE was considering a higher capacity limit for Categorical Exclusion (CX) from NEPA review of closed-loop Ground Source Heat Pumps. Based on this information, OES informed applicants on February 19, 2010 that conditional rebate reservations would be issued for systems over 5.5 tons, pending a final determination from the DOE. It appears that the DOE will not issue a determination with a higher limit for CX after all, but will instead increase staff to allow for NEPA review of higher capacity systems. OES is working with the DOE to clarify the process for NEPA review.

OES has developed draft guidelines for a Residential Small Wind Rebate Program and expects to launch the program in late April. OES requested performance data and other information from small wind turbine and tower manufacturers. OES issued a contract to develop an online application to determine wind speed from site coordinates, based on state wind maps, for rebate eligibility.

Solar Rebate Program/Solar Cities Program

OES launched the ARRA funded solar electric and solar thermal programs in February and March 2010.

Solar Electric Rebate Program

As scheduled, incentive levels decreased for residential solar electric rebate applications received after March 31. Similarly, incentives to businesses with 20 or fewer full time employees will decrease for applications received after April 30. The purpose of this decrease is three-fold: 1) to increase the number of early applicants in keeping with the economic stimulus goals for the program; 2) to acknowledge the fact that solar electric

system prices are declining and therefore less of an incentive is required for consumers to act; and 3) to extend the benefit of solar rebates to more consumers.

Solar Electric Rebate Program as of March 31, 2010	
Estimated Solar Electric funds available	\$2.4 million
Number of applications received	172
Number approved	32
Dollar amount approved	\$278,000
Dollar amount pending approval	\$1,216,000

Solar Hot Water and Solar Air Heat Rebate Programs

Incentive levels for both the residential and business solar thermal programs were set at \$25 per square foot. Given the recent availability of new solar electric incentives to a broad number of consumers in Minnesota, interest in solar thermal is relatively low. A higher state incentive of \$25 rather than the originally proposed \$15 per square foot is intended to spur interest in the solar thermal industry.

Solar Hot Water and Solar Air Heat Rebate Programs as of March 31, 2010	
Estimated solar thermal funds available	\$500,000
Number of applications received	12
Dollar amount pending approval	\$24,000

Solar America Cities

The Solar America Cities Minneapolis Saint Paul team is working with its partners, including Xcel Energy and St. Paul District Energy, to support the effort to increase the use and visibility of both solar thermal and solar PV at strategic sites along the Central light rail Corridor. The Cities have secured cost-share contributions from their original USDOE Solar America Cities grant to supplement the state solar funds. These federal cost-share funds will be used to conduct site assessments and structural engineering evaluations.

Approximately 20 locations along the Central Corridor have been identified for initial solar site assessments. The Cities completed three site assessments in March and project partners are in the process of completing two additional assessments. The remaining solar site assessments are scheduled to be completed in April 2010. Engineering studies are being conducted simultaneously at select parking ramps and buildings. Upon completion and analysis, the Cities and their partners will choose the most viable

projects to pursue and those projects will go out for competitive bid in early summer. To date, funds spent on site evaluations have been cost-share contributions. The use of stimulus funds is being reserved for solar installations.

School District and Local Government Renewable Energy Grant Programs

OES is developing technical parameters and evaluation and scoring criteria for competitive renewable energy grants to school districts and local government pursuant to Minn. Laws 2009, Chapter 138, Article 3, Section 5. OES anticipates release of a Request for Proposals in May 2010. Proposals will be evaluated based on reliability, cost-effectiveness, extent of energy efficiency and conservation measures implemented, and other criteria established under Chapter 138.

Emerging Renewable Energy Industries Grant Program

Minn. Laws 2009, Chapter 138, Article 3, Section 6, directs \$2,000,000 to the “Emerging Renewable Energy Industrial Grant Program.” The purpose of this grant program is to provide funding for a portion of the cost of one or more activities necessary to enable an applicant to enter into the manufacture in Minnesota of an eligible technology, to improve or expand an existing Minnesota manufacturing activity, or to modify a manufacturing facility or activity in Minnesota to enable greater utilization of Minnesota suppliers. By providing funding for this purpose, the State intends to promote improved economic performance of both the direct recipient and its Minnesota suppliers and customers.

OES offered six applicants partial funding of their proposed projects, and is working with five of the six to complete the grant process. Grants awarded by OES under this solicitation must be reviewed and approved by USDOE under NEPA conditions of the SEP State Plan. In addition, OES has proposed reallocating funds to this program to award four addition grants.

Article 4 – Commercial and Industrial Sector Energy Projects

Grants to Commercial and Industrial Facilities

OES and the Saint Paul Port Authority (SPPA) finalized a contract that provides \$5 million in seed money to the SPPA to create a Revolving Loan Fund (RLF) for energy efficiency improvements in commercial and industrial buildings. This RLF is the primary component of the SPPA’s Trillion BTU Program with additional funding through Xcel Energy’s 2009 and 2010-2012 Conservation Improvement Programs. All of the ARRA grant money will go into loans; no SPPA grantee hours will be charged to ARRA funds.

The Trillion BTU Program will leverage ARRA funding provided to the SPPA with support from local economic development agencies (EDA) and municipalities in Xcel Energy's electric and gas service territories to create a revolving loan fund, expand existing EDA loan programs, and provide technical assistance to prospective participating businesses.

Loans will be made to borrowers with significant potential energy cost savings from the RLF, consistent with standard prudent lending practices. As loans are repaid by the borrowers, the money will be returned to the RLF to make additional loans.

A second component of the program consists of integrating energy efficiency into the Lean Manufacturing framework (a production practice that considers the expenditure of resources for any goal other than the creation of value for the end customer to be wasteful, and thus a target for elimination) and developing recommendations for utility program integration.

CEE will administer the program in partnership with the SPPA and Xcel. Other partners include the Minnesota Technical Assistance Program (Mantrap), which will provide technical expertise in facility benchmarking, and energy analysis, and Enterprise Minnesota, which will coordinate development of the Lean Manufacturing 2.0 Pilot. SPPA will manage the revolving loan fund.

To date the St. Paul Port Authority is in the process of making 3 loans using \$450,000 of grant funds with match by the City, Port Authority, and Xcel Energy. This represents a total of \$1.6 million in total project expenditures and an estimated 9.2 billion Btu's in energy efficiency improvements.

Energy Programs in Commercial and Industrial Buildings

On December 24, 2009, an RFP was issued that provides \$4.1 million to owners of commercial and industrial facilities, nonprofit organizations and EDAs for energy efficiency improvements in commercial facilities. Proposals were due on February 12, 2010, with a projected grant start date of May 3, 2010.

This program focuses on providing funding incentives for energy efficiency installations that provide direct energy demand reductions, energy cost savings and employment opportunities. Additionally, this RFP provides EDAs and nonprofits the opportunity to receive seed money to create revolving loan fund programs. Revolving loan funds will provide access to capital to borrowers who might not have other

resources, reduce borrowing costs, and create jobs while providing long-term sustainability of benefits.

Funding provided in the commercial/industrial facilities program will be matched at a minimum of dollar for dollar by program participants. Additional leveraging of grant funds is expected and is available to recipients through utility conservation improvement programs and federal tax credits.

We received and evaluated 269 proposals resulting in the selection of 47 grant recipients. Notification of the grant recipients has occurred and we have begun developing grant contracts, monitoring plans, and NHPA Section 106 screenings of grantee project facilities.

Article 5 – Miscellaneous

Statewide Training Plan

In the first quarter of 2010, OES, along with its partners, moved forward in a variety of areas. Policy analysis surrounding job creation continued while stakeholders in the training sector were interviewed to help identify current and future training needs. The development of a statewide network for outreach was started , using the Statewide Energy Training Plan as a catalyst for communication and cooperation.

OES is working with iSEEK to develop interactive career pathways. iSEEK plans to transform current ethanol and wind career pathways into fully interactive, on-line tools. Three additional career pathways are planned for energy efficiency – both new and existing buildings – and transmission jobs.

OES is also working with iSEEK and an outside GIS map developer to produce an easier, informative tool for individuals to obtain information about green training opportunities through an interactive training map that will feature multiple levels of training including certificate and degree programs, apprenticeships, and industry recognized certifications.

OES is working closely with Department of Employment and Economic Development, MnSCU, the Minnesota Office of Higher Education, and the Governors Workforce Development Council to coordinate the multiple USDOL and USDOE grants that have come to Minnesota.

Training Access and Affordability

Three well qualified grantee teams were selected to provide programs that reach low income and disadvantaged Minnesotans. Each of the successful project teams included a Weatherization Service Provider as the Lead Agency, an existing weatherization training provider and a low-income advocacy agency. The sum of the selected projects will have statewide coverage, including one tribal nation, and offer training in both rural and urban areas. Over 350 low-income individuals will be trained in weatherization techniques. Two contracts are active, with the third beginning in April. The two active project teams are comprised of: MN Valley Action Council, Emerge, and Dunwoody College, providing training in the Twin Cities, Duluth, Bemidji, Brainerd, and Mankato, and a Bemidji area team comprised of the Red Lake Community Action Program, Red Lake Tero, Red Lake YouthBuild, and the Northwest Community & Technical College. The third contract, which began in early April, is made up of a team from Minneapolis: Community Action of Minneapolis, Sustainable Resource Center, and Summit Academy OIC.

All funded projects will include hands-on training and on-the-job training, providing access of participants to future employment opportunities. In addition, each project team includes a placement partner with expertise in supporting low-income participants with outreach, support, and support services to ensure placement into green energy-related jobs.

A second competitive solicitation of up to \$1 million will be targeted toward curriculum development and training for energy efficiency in commercial buildings as well as renewable energy. This RFP will go out in the second quarter.

Accountability & Transparency Reporting

(1) The specific projects funded, including the building owner and project manager, and, for nonresidential projects only, the project location:

Contracts were executed to the Builders Association of Minnesota (\$3 million) and MHFA (\$4.4 million). Both projects provide rebates to homeowners for installing energy efficiency measures in their homes. Contracts have been awarded to the Saint Paul Port Authority, but they have not yet contracted with companies for work with ARRA funds.

(2) For weatherization projects:

- **The number of units weatherized (2008) including number of rental units weatherized (283)**
 - Refer to **Attachment B: Total Counts – All Agencies**
- **Energy usage information**
 - Please see discussion under (4), Energy Savings
- **Income data**
 - Refer to **Attachment C**. An initial analysis was done in January regarding Annual Income for ARRA Weatherized Households; the data has not changed so the attachment did not change.
- **Type, cost and funding source of the weatherization measure installed**
Type, cost, and funding source of the weatherization measure installed

MeasureType	Cumulative Costs	Number of Dwellings	Average Cost Per Dwelling
Baseloads	\$189,237	1525	\$124
Building Insulation	\$6,011,064	3165	\$1,899
Doors and Windows	\$356,409	460	\$775
General Heat Waste and Air Infiltration (Air Sealing)	\$1,598,957	3016	\$530
HVAC Systems	\$3,620,992	1910	\$1,896
Health and Safety	\$2,936,348	3911	\$751
General Repairs	\$263,023	705	\$373

(3) The number of jobs retained or created by each project:

OES has been instructed to report jobs as having been "created/retained/not lost". Each quarter's FTEs are calculated separately and, in accordance with OMB/MMB instructions, are not additive over the quarters.

	October	January	April
WAP	169.5	346.48	454.66
SEP	4.3	36.58	50.85
EECBG	0	1.2	1.51
Appliance Rebate	0	0	3.46
Energy Assurance	0	0	0
Total	173.8	384.26	513.48

- **Including data on hiring from communities experiencing disproportionately high rates of unemployment, including, but not limited to, low income, rural, tribal communities, and communities of color:**

Information on hiring from communities of color, women, disabled, and veterans is provided in **Attachment D**. The attachment provides data from Weatherization Assistance Program service providers only. No data was received from BAM or MHFA because those projects consist of homeowner rebates. No data was received from SPPA because they are just completing contract negotiations with a number of companies; energy efficiency work will begin soon.

Information from the service providers includes data from their own crews as well as from subcontractors. Not all agencies provided all contractor data so the percentages are based only on service providers that submitted complete data. That said, the outcomes still compare favorably with the hiring goals that are provided by the Minnesota Department of Human Rights.

(4) The total calculated and actual energy savings for each project:

Weatherization Assistance Program:

Oakridge National Laboratory develops a formula for USDOE so that energy savings may be calculated by states. The formula, set forth in our grant contract with USDOE when the average amount per household was approximately \$3000, is appropriate for this quarter because agencies are spending, on average, \$3000-3500 per household. Using this formula, savings per household for the ARRA grant are determined to be 30.4 MBTU per household.

2008 dwellings X 30.4 million BTU/dwelling = 61,043 million BTU saved

1 Therm = 0.1 million BTU

Savings in Therms is 610,430, which is \$610,430 at \$1.00 per Therm.

Average annual savings per weatherized household is estimated to be \$304.

Actual energy savings can be calculated only after a sufficient amount of time (at least one year) has passed so that energy use can be compared for time periods before and after weatherization measures have been implemented, and so that yearly variation in weather conditions can be taken into account.

Project ReEnergize - BAM

Currently, seven percent of the projects in Project ReEnergize have performed air sealing. The percentage of air sealing jobs did not increase as was expected during the previous quarterly report.

Insulation and air sealing has accounted for an estimated 3,262 MMBtus of annual energy savings. Window replacements have been extensive in the Project ReEnergize program. Current estimates for annual energy savings for window replacement to date is 11,622 MMBtus. Water heater replacement to date is estimated to save 75 MMBtus. This totals 14,959 MMBtus annual energy savings.

To date, Project ReEnergize is estimated to achieve an annual energy savings of \$149,595 or about \$153 annual energy savings per home.

Energy Savers - MHFA

This program started in early December and has committed to serving greater than 1,100 homes. Based on 434 rebates processed, the energy saver program is currently anticipated to save in excess of 12,569 MMBtus to date of energy consumption annually. This equates to about \$136,656 annual energy savings or about \$314 annual energy savings per home.

(5) The remaining balances in each stimulus account:

	Grant Award	Expenditures to date	Balance
WAP	\$131,937,411	\$27,561,338	\$104,376,073
SEP	\$54,172,000	\$3,642,907	\$50,529,093
EECBG	\$10,644,100	\$44,112	\$10,599,988
Appliance Rebate	\$5,009,000	\$508,924	\$4,500,076
Save Energy Now	\$349,985	\$561	\$349,424
Energy Assurance Planning	\$678,986	\$122	\$678,864
TOTAL	\$202,791,482	\$31,757,964	\$171,033,518

(6) The non-stimulus money leveraged by stimulus money for each project:

Weatherization Assistance Program

\$ 1,162,401 in CIP dollars has been leveraged to date.

\$ 1,083,487 in other federal funds (Low Income Heating Assistance Program (LIHEAP), Community Development Block Grant (CDBG)) have been leveraged to date.

Project ReEnergize - BAM

Approximately 975 rebates averaging \$2,170 have been committed to Minnesotans participating in Project ReEnergize. Rebates in this program have leveraged almost four more dollars in residential energy expenditure by rebate recipients for every rebate dollar.

Energy Savers - MHFA

Approximately 1,100 rebates averaging \$3,566 have been committed to Minnesotans participating in the Energy Savers program. The average corresponding contract amount is \$11,175. Current rebates in this program have leveraged more than \$12.7 million in total residential energy improvement projects with rebate recipients adding approximately \$2 to every rebate dollar.

- (7) **The training courses provided, including the location and provider of courses offered, the funding source for each training course, and the total number of trainees:**

Refer to **Attachment E, Training Courses**, for more detailed information about training courses to date. There were 544 trainees in the Weatherization Assistance Program and 163 trainees who worked in the Energy Saver Rebate program.

- (8) **Compliance with state prevailing wage, veterans, and disadvantaged business enterprise requirements:**

State Prevailing Wage

Solar Electric Installations

OES is requiring prevailing wages to be paid for solar electric projects co-funded through the state's solar rebate program. For residential solar electric projects, federal prevailing wages are required at this time in lieu of state prevailing wages since state residential determinations have not been made. OES worked with Minnesota Dept of Labor and Industry (DLI) to develop a survey for solar electric installers so that DLI can make residential wage determinations. The Office of Energy Security and the Minnesota Dept of Labor and Industry co-hosted a webinar on prevailing wage compliance and reporting for solar installation businesses on April 7, 2010.

Weatherization Assistance Program service providers were not required to provide information for state prevailing wage because in Minn. Laws 2009 Chapter 138, Article 3, sec. 8, Solar Electric Installations, is the only place that requires that state prevailing wage be paid. Davis Bacon federal prevailing wage is required for WAP, and we are following those requirements.

Veterans and Disadvantaged Business

Compliance summaries for veterans and disadvantaged businesses from the Weatherization Assistance Program service providers were detailed in the January 15, 2010 report. There has been no change in agencies' efforts to market employment opportunities to veterans and disadvantaged businesses. Please see veteran hiring data in **Attachment D**.

Builders Association of Minnesota/MHFA

No data was received from MHFA or BAM because those projects consist of homeowner rebates.

Competitive Energy Activities, Training and Other Inquiries Handled by OES Staff from January through March 2010

OES staff assisted over 127 clients in understanding funding opportunities and project financing related to the American Recover and Reinvestment Act (ARRA) and with development and delivery of energy related educational and training opportunities during the January 2010 through March 2010 period. This report reflects data from OES client logs that include records of clients who required more assistance than a simple referral could satisfy.

Clients who contacted OES for financial, grant or training assistance were from the following sectors:

- 35% - Non-Government Organizations
- 27% - Businesses
- 23% - Individuals
- 15% - Government (includes public schools, colleges, university)

OES's training and educational outreach was the largest category of client assistance provided this quarter, comprising almost half (46%) of the client contacts. Ground source heat systems information and the ground source heat system rebate program was the other large segment of this quarter's inquiries, comprising just over 25% of the total clients who received in-depth assistance.

Clients who contacted OES for financial, grant or training program assistance were seeking assistance for the following types of projects:

- 40% - Energy efficiency funding opportunities
- 20% - Energy efficiency training
- 13% - Energy efficiency and renewable energy training

- 8% -Renewable energy funding opportunities
- 7% -Renewable energy training
- 5% -Energy efficiency and renewable energy funding opportunities
- 7% -Miscellaneous training or funding opportunities

The primary category of interest for the clients inquiring about ARRA opportunities was:

- 26% - Ground source heat pump rebates
- 14% - Weatherization training
- 14% - Energy efficiency funding opportunities
- 13% - Miscellaneous training
- 11% - Miscellaneous funding opportunities
- 9% - Training development
- 8% - Renewable energy funding opportunities
- 5% - Both energy efficiency and renewable energy funding opportunities

In addition to general inquiries, and client assistance, OES staff conducted a number of pro-active outreach activities around the state to let targeted organizations know about ARRA funds so they could, in turn, let their client know about the programs. Many of these activities included presentations on the various national level funding ARRA programs as well as the state's specific competitive programs that were being set up for energy conservation and renewable energy projects. The following is a list of the ARRA related presentations that OES staff gave during January 2010 through March 2010.

Presentations on ARRA and Related Energy Programs:

January 30, 2010

Minnesota Renewable Energy Society, *Careers in Renewable Energy Workshop*.

Location: St Paul. 30 attendees.

Presentation focused on training available for new installers in wind and solar; highlighted ARRA funded solar and small wind programs.

February 19, 2010

Renewable Energy Roundtable.

Location: St Cloud. 33 attendees.

Review and discussion of DOE ARRA bioenergy grant awards made in 2009, and state assistance available for federal and state energy-related, ARRA funded grant programs.

February 23, 2010

Energy Design Conference, ARRA Funding – Where We Are.

Location: Duluth, MN. Approximately 70 attendees.

Presented an update on status of programs such as Weatherization and State Energy Programs using ARRA funding. Presenters: Marilou Cheple and Jeremy DeFiebre.

February 22-24, 2010

Energy Design Conference – Multiple sessions

Location: Duluth, MN. 160+ through sessions; more through staffing booth.

Info Center and Demand Efficiency staff presented a day-long session on Conservation Improvement Program design for over 50 utility company representatives, including information on blending utility rebates and incentives with state and federal rebate and incentive programs. A presentation (to over 80 people) was also made by OES staff on the history and progress of ARRA in the state, along with an outline of future components. Additionally, OES staff made a presentation on the state Solar Rebate Program to over 30 people. Throughout the event, the Info Center staffed a booth, distributing information on energy efficiency, conservation, and renewables as well as the latest on ARRA-related rebates and incentives.

March 4, 2010

Great River Energy – Weatherization Assistance Program – An ARRA Overview.

Locations: Maple Grove, MN. Approximately 45 attendees.

An update of the ARRA program, encouragement of “fuel neutral” contributions, and how the Weatherization Assistant software may be used to determine energy savings for CIP. Presenters: Marilou Cheple and Jeff Haase.

March 6, 2010

South Minneapolis Housing Fair – ARRA-funded Rebate Information

Location: Minneapolis, MN

Info Center staff made a presentation on energy efficiency and conservation opportunities, with a focus on the ARRA-funded rebates and incentives.

General Outreach

The OES website received 137,719 web hits and 488, 616 page views from individual visitors from January 1 through March 31, 2010. Of these web visits:

- 145,540 page views: “Appliance Rebate Program” page
- 12,549 page views: “Funding” section main page
- 9,010 page views: “Economic Stimulus” main page

- 33,271 page views: “Rebates & Credits” main page
- 3,502 page views: “Grants and Loans” main page

OES continues to send out grant and other funding opportunities listings every three weeks to over 700 participants on a Listserv; many of these participants also forward on these grant listings to their clientele Listserves. OES has also created three email distribution lists through the Constant Contact software, which allows greater flexibility and administrative management than traditional email list-serves.

- **Energy Stimulus Funding-Homeowners:** updates and information on efficiency and renewables incentives and rebate programs, with a residential focus. Subscribers as of March 31: 1,855.
- **Energy Stimulus Funding-Businesses and Non-profits:** updates and information on efficiency and renewables incentives and grant programs, rebate programs, plus related reports and data specific to businesses. Subscribers as of March 31: 983.
- **Energy Stimulus Funding-Local Government:** updates and information on efficiency and renewables incentives and grant programs, efficiency financing, plus related reports and data specific to local governments. Subscribers as of March 31: 553

Success Stories on ARRA Impact

OES has also created various “success stories” regarding the impact of ARRA funds in Minnesota. To date, OES has published success stories predominately highlighting the Weatherization Assistance Program, with plans to highlight the State Energy Program and Energy Efficient & Conservation Block Grant program in the near future. The stories include comments from personal interviews with Minnesota citizens, local weatherization service provider staff, OES staff, and more. Copies of current success stories can be found on the OES website as well as in **Attachment F**.

VI. OTHER INFORMATION

Following are descriptions of the other two formula grants that arrived after the Minnesota legislative session had ended.

Enhancing Government Energy Assurance Capabilities and Planning for Smart Grid Resiliency

OES is the primary entity within the state of Minnesota responsible for the development of a State Energy Emergency or Energy Assurance Plan. OES will lead the execution of a project funded under the ARRA that seeks to enhance the state's overall capabilities with respect to energy assurance and energy system resiliency, and will engage a number of state agencies in the refinement of the state's existing plans and procedures. The goals of the State Enhanced Energy Assurance Capabilities Project will be to develop greater capacity within the OES and other agencies to 1) strengthen and expand state and local government energy assurance planning and resiliency efforts by incorporating response actions for new energy portfolios and Smart Grid applications; 2) create jobs, and 3) build in-house state and local government energy assurance expertise.

These goals will be achieved by hiring new personnel to lead project activities and coordinate the involvement of other state agencies and entities; hosting workgroups and conducting individual state agency and energy stakeholder interviews to engage, inform and train project partners; revising the state's existing Energy Assurance plan to incorporate feedback from participating state agencies and stakeholders; establishing an ongoing state agency workgroup focused on energy assurance efforts; incorporating cyber security measures and procedures for protecting state utility smart grid investments; enhancing the energy emergency response procedures that are currently in place in Minnesota Rules; providing multiple energy emergency training sessions for both state agencies and local emergency response professionals; and conducting a minimum of two energy emergency exercises that fully test the state Energy Assurance plan within the state and regionally.

The OES has been involved in several regional coordination initiatives with FEMA Region V states and the National Association of State Energy Officials. Within the state the OES has been participating in Smart Grid Workgroup meeting convened by the OES and the University of Minnesota to discuss Smart Grid implementation challenges, including cyber security components. The OES continues to work on resolving staffing challenges related to the Energy Assurance planning grant.

State Energy Efficient Appliance Rebate Program

The Minnesota Appliance Rebate program launched on March 1, 2010, providing rebates ranging from \$50-\$200 for a refrigerator, freezer, dishwasher or clothes washer. Within 24 hours, 25,926 rebate reservations were issued and another 9,400 residents were added to a wait list. The launch was not without its challenges, however, as demand caused the program web site to crash and calls to the program hotline overwhelmed phone lines. An analysis of the data received indicates that had the system functioned properly, all available program reservations would have been made in less than two minutes.

During the months preceding the launch, Helgeson Enterprises was awarded the contract as the rebate vendor following a competitive RFP process, and a webinar was held on January 15 to collect feedback from retailers, utilities and other stakeholders. The program website was launched on February 1 and provided program guides for retailers and residents as well as ENERGY STAR model information.

To ensure that old units were removed from the grid, consumers were required to demonstrate proof of recycling for refrigerators and freezers, which qualified them for an additional rebate. To help residents understand their recycling options, staff engaged with retailers and worked with utilities and encouraged them to offer bounty programs during this time period (several new programs launched in March and Otter Tail Power moved up its program start date to accommodate the rebate program). Staff also communicated with the county solid waste sites to ensure they understood the program and a list of "other recyclers" was also created with the help of the Minnesota Pollution Control Agency.

The rebate application submission deadline has been extended to April 30 due to the shortage of a number of appliance models that caused delayed deliveries to consumers. Several retailers, including those outside the metro area, reported much higher sales compared to the previous 15 months.

Request for Proposal Chart

Please refer to Attachment A.

Attachment A

Name of RFP	Type*	Posting Date	Closing Date	# of RFP Downloads	# of Proposals Received	Evaluation Completed	Notes
Increase Residential Participation in Energy Efficiency Activities	G	10/05/2009	11/06/2009	204	10	11/30/2009	Negotiations with highest ranking responders underway.
Weatherization Training Providers	G	10/14/2009	10/30/2009	N/A	3	12/02/2009	Negotiations with highest ranking responders underway.
Emerging Renewable Energy Industries	G	10/19/2009	12/18/2009	337	26	01/28/2010	Negotiations with highest ranking responders underway.
Appliance Rebate Fulfillment Vendor	PT	11/09/2009	11/23/2009	55	6	12/09/2009	Contract fully executed and rebate program open to the public.
EECBG – 60% Competitive	G	12/14/2009 (reopened 02/18/2010)	01/25/2010 (closed 02/22/2010)	1024	125	03/19/2010	Negotiations with highest ranking responders underway.
EECBG – 40% Facility Cost-Share	G	04/19/2010 (Est.)	05/24/2010 (Est.)	N/A	N/A	N/A	Still under development.
Energy Programs in Commercial and Industrial Programs	G	12/21/2009	02/12/2010	842	150	03/24/2010	Negotiations with highest ranking responders underway.

*Type: G = Grant; PT = Professional Technical Contract

Attachment B - TOTAL COUNTS - ALL AGENCIES

	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Program Year
<u>1. Units By Dwelling Type</u>					
Owner-Occupied Single Family Site Built	373	807	1585	0	2765
Renter-Occupied Single Family Site Built	45	197	259	0	501
Multi-Family (5 or more units per building)	0	4	18	0	22
Owner-Occupied Mobile Home	13	117	139	0	269
Renter-Occupied Mobile Home	1	6	3	0	10
Shelter	0	0	3	0	3
Other	0	0	1	0	1
UNCATEGORIZED	0	0	0	0	0
TOTAL ARRA Units:	432	1131	2008	0	3571

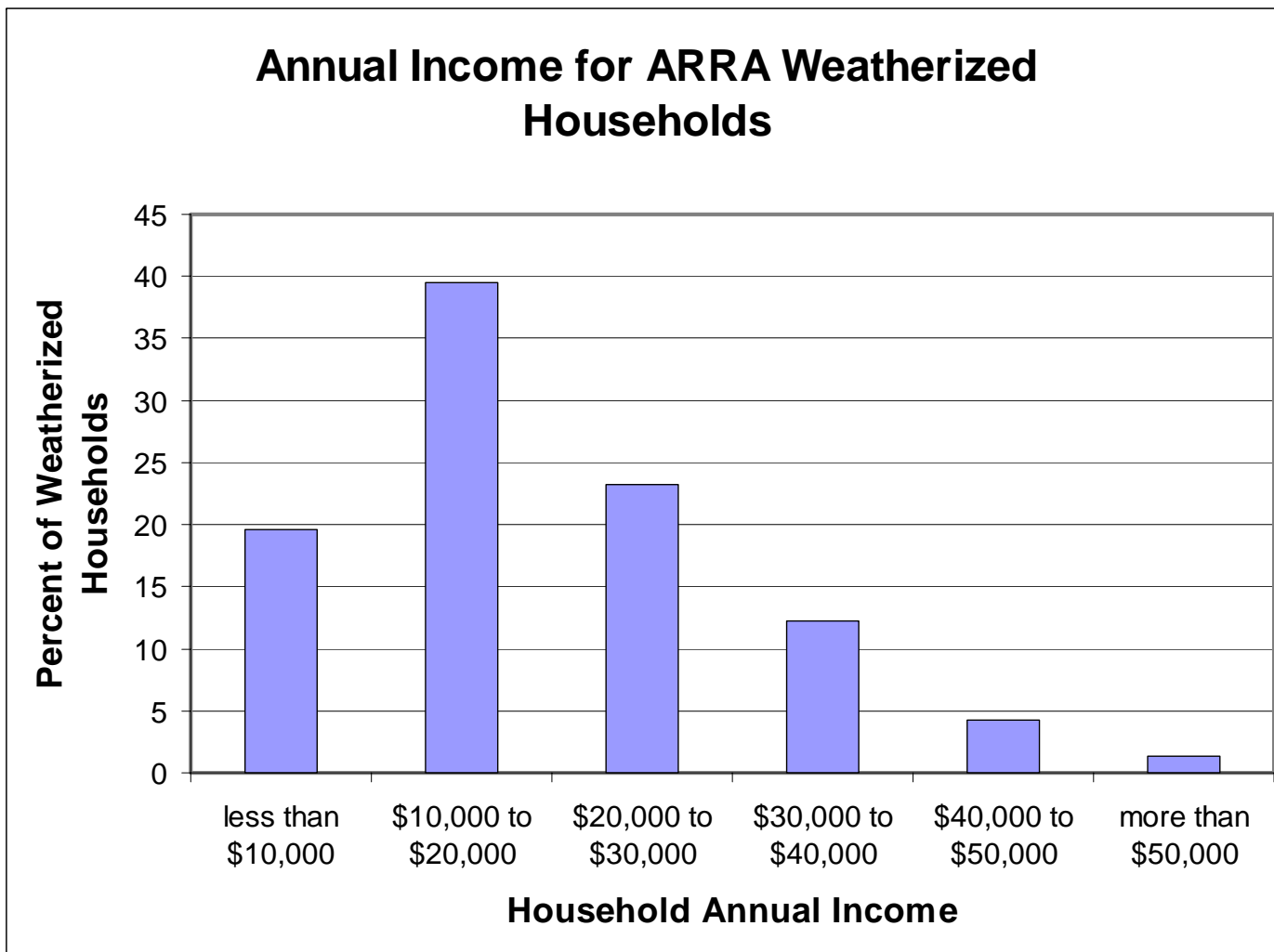
<u>2: Units By Primary Heating Fuel Type</u>					
Natural Gas	294	788	1410	0	2492
Fuel Oil	76	116	189	0	381
Electricity	10	47	77	0	134
Propane/LPG	42	160	299	0	501
Kerosene	0	0	0	0	0
Wood	3	18	29	0	50
Other	7	2	4	0	13
UNCATEGORIZED	0	0	0	0	0

<u>3: Units By Occupancy</u>					
Elderly-Occupied	177	388	690	0	1255
Disabled-Occupied	106	307	534	0	947
Native American-Occupied	10	44	93	0	147
Children-Occupied	173	569	1043	0	1785
High Energy Use	266	695	1098	0	2059
High Energy Cost Burden	0	14	25	0	39

<u>4. Other Unit Categories</u>					
ReWeatherized	12	8	14	0	34
Low Cost / No Cost	0	1	0	0	1
TOTAL Other Units:	12	9	14	0	35

<u>5. Total People Assisted with Grant Funds</u>					
Elderly	213	468	853	0	1534
Persons with Disabilities	122	362	633	0	1117
Native American	19	119	257	0	395
Children	380	1368	2494	0	4242
TOTAL Occupants:	1057	3208	5793	0	10058

ATTACHMENT C - Annual Income for ARRA Weatherized Households



Attachment D - Weatherization Service Provider Actual Hiring Outcomes

Geographic Area	Persons of Color	Women	Disabled	Veteran
<u>Seven-County Metro</u>				
* Total Hires - 544				
Hired	67	88	4	62
% of Total	12%	16%	1%	11%
<u>Central MN</u>				
** Total Hires - 102				
Hired	4	10	0	2
% of Total	4%	10%	0%	2%
<u>Southwest MN</u>				
** Total Hires - 150				
Hired	3	1	0	2
% of Total	12%	4%	0%	8%
<u>Southeast MN</u>				
Total Hires - 153				
Hired	2	58	5	23
% of Total	1%	38%	3%	15%
<u>Northeast MN</u>				
Total Hires - 224				
Hired	10	58	0	23
% of Total	4%	26%	0%	10%
<u>Northwest MN</u>				
Total Hires - 175				
Hired	23	32	2	27
% of Total	13%	18%	1%	15%

* The Total Hires number represents the total number of employees hired by the weatherization service providers and their contractors using ARRA stimulus funding. These numbers do not correspond to the full-time equivalents (FTE) referenced elsewhere, since the FTE calculations are based on the actual number of hours worked during the reporting quarter relative to the available hours during the quarter.

** Individual category hires were not provided by all weatherization service provider contractors. Percentages are based only on service providers that submitted complete data.

Attachment E - Training Courses

Training Course Name / Opportunity	Training Course Location	Training Course Provider	Number of Trainees - ARRA Funded
EPA Lead Renovator's Certification	Lakes and Pines, 1700 Maple Ave E, Mora MN 55055	Midwest Environmental Consulting	35
Energy Design Conference	Duluth, MN	MN Power	2
Auditor Training	Bemidji MN	Dunwoody	6
Motivational Interviewing	Lakes and Pines, 1700 Maple Ave E, Mora MN 55055	Susan Littrell	8
Supervisor Training	Lakes and Pines, 1700 Maple Ave E, Mora MN 55055	Total Development Concepts	8
Performance Evaluations	Lakes and Pines, 1700 Maple Ave E, Mora MN 55055	Soldo Consulting	8
Residential Contractors Continuing Ed(New Federal Lead Ren	Worthington Travel Host	Kaplan Professional School	1
Excel Training	In House	Agency Personnel	1
EPA Renovation, Repair, & Painting Training	Sustainable Resources Center-Minneapolis, MN	National Center for Healthy Housing	1
WX Multi Family Training	St Cloud Civic Center, St Cloud, MN	Wisconsin Division of Energy	1
Energy Auditor Course	Dunwoody College	Dunwoody	1
Energy Design Conference	Duluth Event and Convention Center	MN Power	9
Lead RRP Training	Marshall, MN	Midwest Environmental Consulting	2
Round Table Training	St. Cloud	State of MN	2
Advanced NEAT Training	Willmar	State of MN	3
Auditor training	Grand Rapids MN	KOOTASCA	4
ARRA Round Table	St Cloud, MN	State of MN	3
Auditor Certification Training/Test	St Paul, MN	Dunwoody Tech College	4
Best Practices Training	Grand Rapids, MN	Dunwoody Tech College	24
Testing Protocols and Performance Indicators	Civic Center St Cloud MN, February 25th 2010	State of Minnesota	2
Weatherization Assistant Basic Training	Willmar, MN	State staff	1
Auditor's Roundtable	St. Cloud, MN	State staff	2
Wa 101	Willmar, MN	Mark McLaughlin	3
Lead safe practices / Certification	Alexandria, MN	Sustainable Resource Center	1
Energy auditor course	Minneapolis, MN	Dunwoody	1
Remodeling in Today's Economy	Detroit Lakes Holiday Inn	Kaplan Professional Schools	1
Advanced Weatherization Assistant	Heartland Community Action	Mark McLaughlin	2
Basic Weatherization Assistant	Heartland Community Action	Mark McLaughlin	1
EPA Renovation Training	Arrowwood Conference Center	Sustainable Resources Center	3
Emerging Leaders	St. Cloud	MINNCAP	1
NCAF Concerence	Washington, DC	various speakers	2
Energy Auditor Course	Dunwoody	Dunwoody	1
Auditor Round Table	St. Cloud	DOC	4
Auditor Training	St. Cloud	Auditor Staff	2
Partnership Opportunities	Maple Grove	Great River Energy	1
WA Software Training	Mora	Auditor Staff	2
Mechanical/CO training	Wadena Technical College	Bob Dwyer/Al Lindal	5
Advanced Auditor training	Northwest Technical College	Andy Imig	4
Web Mapping	Beltrami County	Jane Mueller	1
Microsoft Excell training	Beltrami County		1
Auditor Roundtable	St. Cloud	Mark McLaughlin	1
Duluth Energy Design Conference	Civic Center Duluth MN	Minnesota Power and Light	2
Auditors Round Table	Civic Center St. Cloud MN	State of MN	1
From Ashes To Empire: Rehabbing Distressed Properties (In	Kaplan Professional Schools	Kaplan Professional School	2
Lead Certifications Courses (4/14 - 5/7/10)	Sustainable Resources Center Minneapolis MN	Steven Johnson	5
EPA Renovation, Repair and Painting (RRP) Refresher	Sustainable Resources Center, 1081 Tenth Ave SE,	SRC	10
Energy Design Conference	Duluth Entertainment Convention Center, Duluth, MN	MN Power	1
Residential Energy Auditor Training	Dunwoody College of Technology, Mpls, MN	Dunwoody	1
Computer Classes for Support Staff	St. Paul Science Museum	Science Museum	5
EPA Renovation, Repair and Painting (RRP) Refresher	Association of General Contractors, Savage, MN	Association of General Contractors	3
Duluth Energy Expo	DECC Duluth, Mn.	Mn Power	1
Energy Auditor Course	Minnkota Power, Grand Forks N.D.	Dunwoody	1
W.A. training, advanced	Heartland Com. Action Agency Inc.	Weatherization Training CO	2
Certified Energy Auditor Course	Dunwoody College of Technology	Dunwoody College of Technology	1
Mechanical Training	Wadena	MOES	4
Lead Renovator	Cosmos	Midwest Environmental	24
MWAG	St. Cloud	MWAG	1
Auditors Roundtable	St. Cloud	MOES	4
Auditor Roundtable	St. Cloud Civic Center	DOC	4
Contractor Continuing Education	St Cloud Civic Center	Central MN Builders Assoc.	1
Contractor Continuing Education	Alexandria, MN	Kaplan	1
Auditor Certification Course	Minneapolis	Dunwoody	5
Tri-CAP ARRA Contractor Update	St. Cloud Public Library	Tri-CAP	18
WA Advanced Training	Heartland Community Action	DOC--Mark M.	3
WA Basic Training	Heartland Community Action	DOC--Mark M.	1
MWAGS	St. Cloud		1
Lead Renovator Training	St. Cloud	Midwest Environmental Services	6
Contractor Code Training (License Renewal)	Granite Falls	City officials-Montevide/Granite	1
Duluth Energy & Design Expo	Duluth MN.	Duluth Energy & Design Expo	3
ACI	Austin, MN	Affordable Comfort	2
Duluth Energy & Design Expo	Duluth MN.	Duluth Energy & Design Expo	3
Air Duct Sizing	Wadena Technical College, Wadena, MN	Minnesota State Community Technical College	1
AREA Training	TCC Offices, Little Falls MN	Dunwoody	6
Diagnostic Test Training	St Cloud Civic Center	State Office	3
Diagnostic Test Training	Anoka Client House	Brian Foust	9
Energy Design Conference	DECC in Duluth	Mn Power	2
Weatherization Assistant Advanced Training	Heartland Community Action, Willmar	Mark McLaughlin	1
Davis Bacon	CA of Mpls	State Energy office	6
Mechanical Contractors	CA of Mpls	CA of Mpls	40
Weatherization Contractors	CA of Mpls	CA of Mpls	30
Energy Auditor	St Cloud	State Energy office	4

Attachment E - Training Courses

<u>Training Course Name / Opportunity</u>	<u>Training Course Location</u>	<u>Training Course Provider</u>	<u>Number of Trainees - ARRA Funded</u>
Adult/Child CPR, Blood Borne Pathogens, Back Injury Prevention	Rushford, MN	American Red Cross, Winona County Chapter	26
Auditor Roundtable	St. Cloud, MN	OES	3
Energy Auditor Course	NW Technical College Bemidji Mn	Dunwoody	7
Lead renovator training	Hibbing MN	UND Environmental Training Institute	30
Mechanical Training	MPLS Mn	COSA	8
Mechanical Training	Wadena Mn	COSA	6
Lead renovator training	Hermantown Mn	Arrowhead builders Assoc	30
Energy Auditor Course(advanced)	MPLS Mn	Dunwoody	3
Safety Training/Sensitivity	Duluth Mn	MCIT	34
Building Inspection Certification	St. Paul Mn	State of Mn	1
Duluth Energy Design Conference and Expo	Duluth	Minnesota Power	5
Certified Lead-Based Paint Renovator	Arrowwood Conference Center Alexandria, MN	Sustainable Resources Center, Inc/National Center for Healthy Housing	4
Advanced Weatherization Assistant Software Training	Heartland Community Action Willmar, MN	Department of Commerce	1
Energy Auditor Course	Bemidji	Dunwoody Auditor Course	2
		Weatherization Training Total	544
Webinar - lenders	In-house	MN Housing Staff	142
Classroom - lenders	In-house	MN Housing Staff	21
		SEP - Energy Saver Rebates Training Total	163

Minnesota Success Stories: *Jobs + Saving Energy = Success*

St. Paul Residence

Weatherization Improvements: Attic and sidewall insulation, air-sealing, weather stripping

Weatherization Service Provider: Community Action Partnership of Ramsey and Washington Counties

Working to weatherize homes

Daniel Orchard, an apprentice carpenter from South St. Paul, is one of many who can say the federal stimulus money for the low income weatherization program is hitting the mark: creating good jobs with benefits while improving energy efficiency in people's homes. Orchard has been working on homes that qualify for the state's



Daniel Orchard fills a blowing machine with cellulose insulation that is being dense-packed into the walls of a client's home in St. Paul.

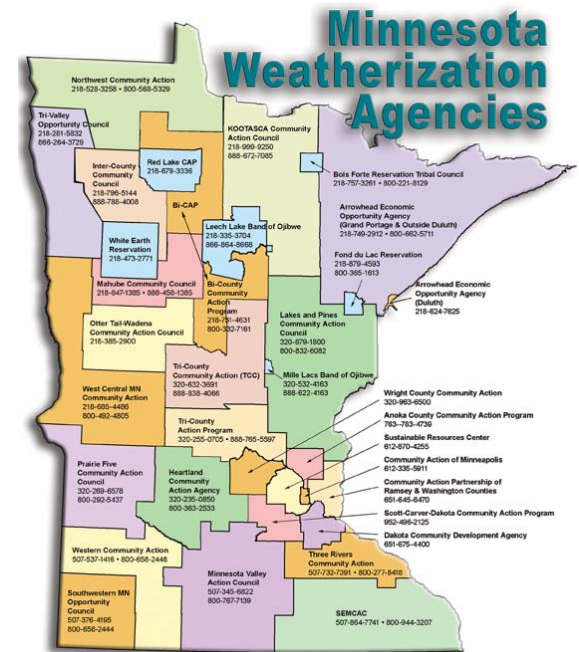
Weatherization Assistance Program (WAP). WAP provides low-income homeowners and renters with services such as energy education, energy audits, exterior wall and attic insulation, and air leak sealing. The program also does specific safety testing as well as repairs and replacement of mechanical equipment.

"I probably would not be working today if not for the stimulus funding," said Orchard, who weatherizes homes for the Community Action Partnership of Ramsey and Washington Counties (CAPRW). "I was out of work for five months before the union called me in May about this job. I'm very grateful for the work."

ARRA has provided a much-needed hiring boost to the depressed building and trades fields, said Jeff Fjeld, a journeyman carpenter and WAP crew leader for CAPRW. "There are so many carpenters who are laid off. I wish there was even more stimulus money."

More weatherized homes

The weatherization program has existed for more than 30 years, providing about 4,000 Minnesota households per year with services totaling about \$10 million. But in March 2009, the Office of Energy Security in Minnesota received \$131.9 million in federal funding for WAP from the American Recovery and Reinvestment Act (ARRA). The stimulus money (spread out over 18 months) represents a tenfold increase in weatherization program funding for Minnesota.



Marilou Cheple, Weatherization Supervisor in the Office of Energy Security for the state, explained that the program will be able to serve over 10,000 households this year. She stressed that the dramatically increased number is from combining both the regular Department of Energy funding that comes to Minnesota each year, along with this year's ARRA stimulus money—plus private sector resources from both gas and electric utilities.

Jobs across the state

Cheple also said over 340 new green jobs have been created thus far in Minnesota from the ARRA funding.

“We weatherized 343 low income homes during the past fiscal year,” says CAPRW Director Cindy Webster. “We will serve over four times that many homes this year.” That translates into many new jobs, including carpenters, auditors, and office staff—more than double (38) from the previous year. What's more, the agency sub-contracts some work to private contractors, which keeps additional weatherization contractors and workers employed. Similarly, other weatherization service providers across the state have greatly increased their weatherization work force—and contracted workers—to ramp up weatherization services.

Lower energy bills, more smiling faces

The ARRA funding has provided employment to those charged with overseeing and administering the program, as well. Weatherization energy auditors and agency



Florenda Cox explains program benefits to clients and schedules visits with weatherization auditors and crews. She is one of the new hires at CAPRW as a result of ARRA funding.

support staff count themselves among the benefactors of the stimulus funding.

Florenda Cox, energy conservation associate for CAPRW, was hired in August after working part-time: “My job is to help people understand how they can benefit from our program and to schedule their energy audits,” she said. “It’s a wonderful program for the community; it helps people afford energy upgrades. It’s gratifying to know I can put a smile on someone’s face, helping them lower their energy bills.”

Joy Graf is support services supervisor at CAPRW. She was laid off and did not work for five months before accepting her new job last May. “You hear on the news about all the people who have lost their jobs,” she said, “and some question the impact of the stimulus funding—they say it’s not helping. Well, we’ve hired 15 new people since I arrived, and most of those people had been out of work.”

The stimulus funding for the Weatherization Assistance Program is a “win-win” situation. It is doing what it set out to do: putting people to work, making lasting improvements and conserving energy in people’s homes—year after year.

To Learn More...

For information about Minnesota’s Weatherization Assistance Program, including service provider contacts and qualification requirements, go to www.energy.mn.gov or call 800-657-3710.



Joy Graf was unemployed for five months before accepting the position of support services supervisor at CAPRW.

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Minnesota Success Stories: *Weatherization Lowers Heat Costs*

Gretchen & Louis Wilson Residence

Location: Minneapolis

Weatherization Improvements: High efficiency furnace, attic insulation, air-sealing, weather stripping, ventilation fan

Weatherization Service Provider: Community Action of Minneapolis

Minneapolis couple's heat costs reduced through state's Weatherization Program

When Eric Boyd arrived to inspect the weatherization work conducted on a north Minneapolis home, he was overwhelmed by the reception.

“The homeowners greeted us with a big hug,” said Boyd, a weatherization monitor for the state’s Weatherization Assistance Program. “They were tremendously grateful and said it was one of the greatest things to ever happen to them.”

Boyd was recounting his visit in January to the Gretchen and Louis Wilson home. The Wilsons were all smiles because they had recently received a new high-efficiency furnace and significant energy upgrades to their 1950’s rambler-style home. All told, they received more than \$7,000 in energy-efficient improvements, thanks to the Weatherization Program. What’s more, they were beaming about their latest utility bill from CenterPoint Energy; it showed a \$232 credit from the savings.

“We couldn’t believe it when we saw our bill,” said Gretchen Wilson, a veteran on disability who lives on a fixed income with her husband. “We have been toasty warm this winter—no drafts, no icy windows—thanks to the weatherization work of Jack (Bethke) and his weatherization crew. What a great program! We’ve been telling everyone about it—friends, neighbors and fellow parishioners. We could never have afforded the work that was done.”

Gretchen Wilson heard about Weatherization Assistance, a program that increases energy efficiency for low-income households, through a VISTA contact at the Veteran’s Hospital. She applied first for Energy Assistance to help with their high energy bills. Over 160,000 Minnesota households get some financial assistance with their fuel bills each year. Energy Assistance, through Community Action of Minneapolis (CAMPLS), referred Gretchen to the Weatherization Program because the family had a disability status and was struggling with high heating costs.



Louis and Gretchen Wilson (right) were most grateful to Jack Bethke (left) and Community Action of Minneapolis for their new high-efficiency furnace and other energy-saving improvements made to their home.

Dangerous CO levels discovered

The energy auditor assigned to assess the Wilson home took one look at the couple’s energy bills and knew immediately that something was terribly wrong. The gas bill was about twice as high as it should have been for a house its size.

When assessing the home’s energy needs and doing safety tests, Minneapolis weatherization auditor, Juan Palacios, immediately “red tagged” the Wilson’s furnace as unsafe and inefficient. It was emitting dangerously high levels of carbon monoxide (CO) due to a cracked heat exchanger. What’s more, the house had significant air leaks, where heated air was escaping into the attic and eventually to the outside.

To seal up the home and retain heat, the energy auditor authorized workers to install attic insulation and plug the home's air leaks. Weather stripping was applied around doors, and air leaks were sealed; CO detectors and smoke alarms were installed, along with a bathroom exhaust fan. Those improvements and a new high-efficiency furnace combined to make for a tighter, far more energy-saving home. Work was completed in mid November, and the results were felt immediately. "A 200 percent difference—like night and day," said Gretchen Wilson.

All of the weatherization work on the Wilson home was coordinated by CAMPLS, which, in a regular year, would weatherize about 300 homes. But with the state receiving \$131 million in stimulus funding from the American Recovery and Reinvestment Act of 2009 (ARRA), "We're being asked to do seven times the number of homes over an 18- to 24-month period," said Jack Bethke, manager of weatherization for CAMPLS. "So, the stimulus funds are pushing us to dramatically expand

our services." Bethke said his agency and others across the state have ramped up hiring to meet the demands of the new funding.

Serving more with energy efficiency

According to Marilou Cheple, Weatherization Supervisor in the Office of Energy Security, 17,000 households overall in Minnesota are expected to receive weatherization work from the ARRA funds by March 2012. The majority of those will be completed by the end of 2010. In a normal year, the state's Weatherization Program serves about 4,000 homes.

Cheple said that weatherization assistance is available to homeowners and renters who are at or below 200 percent of the Federal Poverty Income Guidelines. Priority is given to households with at least one elderly or disabled member and to those with the highest heating costs.

Eligible households receive an energy audit to determine cost-effective measures to meet the needs of each home. Services that are typically provided include energy education, exterior wall and attic insulation, and air leak sealing. The energy audit also does efficiency testing and determines repairs or necessary replacements of home heating systems, ensuring energy efficiency and safety.

Cheple explained that with the increased federal funding, weatherization assistance is able to more thoroughly address the energy conservation needs of a home. "For instance, in cases where furnace upgrades are combined with insulation, air leak sealing, and new efficient appliances from the local utility, we can achieve household savings of over 30 percent in energy bills."

"We're very grateful to the Community Action staff and the fine job they did on our house," said Louis Wilson. "They came quickly and took really good care of us and we now have a warm house, and our gas bill is way down. We are very happy."

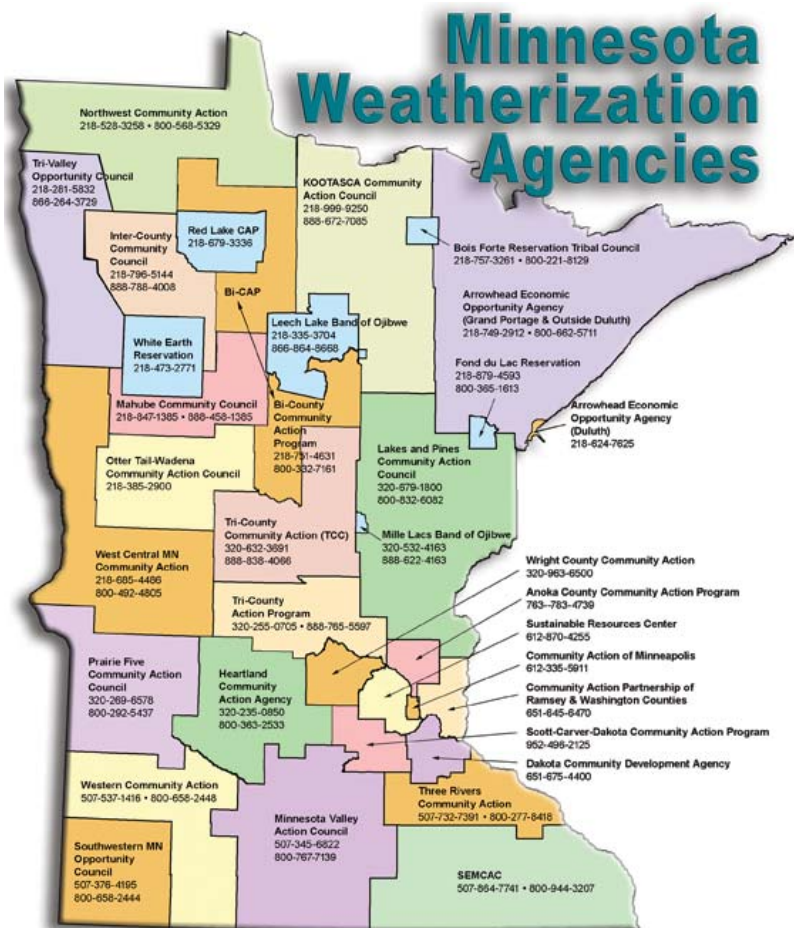
To Learn More...

For information about Minnesota's Weatherization Assistance Program, including service provider contacts and qualification requirements, go to www.energy.mn.gov or call 800-657-3710.

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Minnesota Success Stories: *Tribal Homes Receive Weatherization*

Suzanne Monahan Residence

Location: Fond du Lac Reservation

Weatherization Improvements: Attic and sidewall insulation, air sealing, weather stripping, furnace maintenance

Weatherization Service Providers: Fond du Lac Band of Lake Superior Chippewa and the Arrowhead Economic Opportunity Agency

Fond du Lac, Arrowhead agency partner to weatherize tribal homes

Thanks to the partnership of the Fond du Lac Band of Lake Superior Chippewa and the Arrowhead Economic Opportunity Agency (AEOA), many tribal households are enjoying more energy-efficient homes and significantly reduced heating bills. Tribal families are benefiting from the Weatherization Assistance Program, which provides low-income homeowners in Minnesota with audits and energy-saving measures to reduce home energy and utility bills. The program is administered by the Office of Energy Security, which partners with 32 local service providers to deliver energy conservation improvements. AEOA is the service provider for Fond du Lac and an extensive area across northeastern Minnesota.

Joan Markon, director of Community Services at Fond du Lac Reservation, identifies tribal members who qualify for weatherization work—people with high-energy costs who are eligible for Energy Assistance to help pay for their heating bills. She then connects the families with AEOA to schedule an energy audit of their home and determine cost-effective conservation work. Weatherization services may include energy education, exterior wall and attic insulation, and air leak sealing. Safety and efficiency testing determines necessary repairs or replacements to home heating systems, ensures carbon monoxide safety, and reduces fuel consumption.

Tighter home reduces heat loss

Tribal member Suzanne Monahan recently received weatherization assistance. An AEOA crew insulated her home's attic and walls, sealed air leaks, added a storm window, insulated and caulked windows, weather stripped doors, cleaned and tuned the furnace, and installed carbon monoxide detectors. The result was a much "tighter" home with significantly reduced heat losses.

"When a furnace upgrade, insulation, and attic air leak sealing is carefully done on



Suzanne Monahan (left), a Fond du Lac tribal member who received weatherization work on her home, and Joan Markon (right), director of Community Services at Fond du Lac, are pleased with the work provided by the Arrowhead Economic Opportunity Agency.

a home, we often see 30 to 40 percent energy savings for the homeowner," said Jon Tekautz, supervisor for the AEOA Weatherization Program.

"I'm very happy with the results," said Monahan. "The crew was here for two days and was very professional and efficient. The work made a huge difference. It used to feel chilly and drafty. Now the floor is warmer, and every part of our home feels more comfortable. I set the thermostat at 65 degrees and it feels like 70 in here. My heating bill is almost half what it was."

Stimulus funds expand weatherization

Monahan was a beneficiary of the American Recovery and Reinvestment Act of 2009, the federal stimulus package that has provided \$132 million to Minnesota's



AEOA crew member Brian Leppala installs attic insulation.

expanded weatherization efforts. The stimulus money, a tenfold increase in regular annual funding for weatherization, is intended to conserve energy and create jobs through March 2012.

In a normal year, Markon said Fond du Lac would receive enough funding to weatherize just three homes. But in 2009, about 20 tribal homes got energy upgrades, and by the end of 2010, 20 to 25 more will receive weatherization, thanks to the stimulus funding.

“We have more than 500 tribal members who qualify for Energy Assistance, and most of those qualify for weatherization as well,” said Markon. Many of those homes could be weatherized, but because of limited funding households are targeted that need the work the most: those with elderly, disabled, and families with children and those that have the highest energy bills.

Each reservation in Minnesota conducts weatherization a bit differently, said Daryl Sager, tribal weatherization field monitor. Some have their own auditors and contract the insulation work, while others have their own crews to do the work. “Our partnership with AEOA has worked extremely well,” said Markon. “Even as

weatherization opportunities have increased for our residents, AEOA has served our tribal community well.”

AEOA’s Tekautz agrees the partnership is strong. His agency has the ability to serve a high volume of homes. The stimulus funding created a six-fold increase in his agency’s services, which includes weatherization for residents of Duluth and surrounding counties. His team hired more than 50 new people—80 percent of whom were unemployed—to meet the energy conservation work demands.

Safe and healthy homes are critical

Safety is a primary goal, Tekautz said. “We pride ourselves on doing a complete analysis of the mechanical systems of a home, from the furnace to the water heater to the duct work,” he said. “All of our auditors carry carbon monoxide and gas leak detectors. Health and safety are critical in our energy auditing work.”

Blower-door testing is conducted to determine the air leakage in a dwelling and the overall duct leakage in heating distribution. The measure for the Monahan home was “about twice the average amount,” said Tekautz, meaning the home was experiencing huge heat losses from air leaks.

After sealing, the air leakage rate was reduced by half. This tightening of Monahan’s home creates a more energy-efficient dwelling. “Weatheriza-

tion work on the average decreases heating bills by 23 percent, but it can be much higher, depending on each home,” said Tekautz.

The energy savings translate to less reliance on fossil fuel consumption. “We’re doing our part to help as many tribal families achieve self-sufficiency, reduce energy consumption, and save money,” said Tekautz. “And we’re putting people to work at the same time—and at a good wage. That’s a win-win for the homeowner, the environment, and the Fond du Lac community.”

To Learn More...

For information about Minnesota’s Weatherization Assistance Program, including service provider contacts and qualification requirements, go to www.energy.mn.gov or call 800-657-3710.

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Minnesota Success Stories: *Tribe Combines Solar & Weatherization*

Daniel Stover Residence

Location: Fond du Lac Reservation

Weatherization Improvements: Insulation, air sealing, furnace tune-up, duct-leak sealing

Solar Air Heat System: Two 4- x 8-foot panels, complementing a propane heating unit (500-gallon tank)

Fond du Lac family receives energy combination—weatherization and solar air heat system

Daniel Stover said it used to take three to four 500-gallon propane tanks each year to heat his home on the Fond du Lac Indian Reservation. But after receiving weatherization assistance in 2007 and a solar air heat system in 2009, his home's fuel consumption decreased by more than 50 percent.

The Stover family, part of the Fond du Lac Band of Lake Superior Chippewa (about 20 miles from Duluth), qualified for Energy Assistance to help pay for their heating bills; subsequently they also qualified for weatherization and a special grant to install a solar air heat system. Two 4- x 8-foot, vertically mounted solar air heat panels were installed on the south-facing wall of the Stover house to produce heat. The result was what might be considered a model for incorporating energy efficiency improvements with emerging technologies in homes of low-income families.

"I'm very fortunate," Stover said. "A weatherization crew came in and plugged air leaks, blew in insulation, tuned up our furnace, and sealed duct leaks. That all made a big difference—and then we had the opportunity to add solar. Solar [air heat] panels became the main heating source for our upstairs." At about \$2 per gallon for propane, Stover said he saved more than \$2,000 on fuel costs for the past heating season.

Breaking the 'renewable energy divide'

The Stover household is a great example of breaking the "renewable energy divide," where the more affluent communities have greater access to solar energy than low-income people, said Mark McLaughlin, a senior energy



Daniel Stover, a Fond du Lac tribal member, says he's been pleased with the performance of his two 4- x 8-foot solar air heat panels.

specialist in the state's Weatherization Assistance Program. McLaughlin administered the Renewable Energy Equipment Grant Program that provided Stover's solar system. During 2008 and 2009, the \$190,000 state grant allowed for the installation of 38 solar air heat systems and four low-emission wood boilers for low-income households across Minnesota.

“We think often about reducing our carbon footprint. We’ve gotten a toe into [renewables] and now we’re looking at dipping a foot. . . .” —Karen Diver, Fond du Lac Tribal Chair

Making renewable forms of energy (such as solar) more accessible to low-income families was a goal of the grant, and that is the mission of the Rural Renewable Energy Alliance (RREAL), a nonprofit group based in Pine River, Minnesota. RREAL conducted the site visits and designed and installed most of the solar air heat systems in the grant program. RREAL also makes its own solar panels.

“By delivering solar heat to low-income families on public energy assistance, our goal is to make solar energy accessible to people of all income levels,” said Jason Edens, director of RREAL. “It is our lower-income communities that are most gravely affected by the energy crisis. When energy costs spike, they have to devote a larger percentage of personal income to the basics of heat and electricity. By mitigating the impact of energy cost volatility, solar energy can dramatically reduce one of the root causes of poverty.”

The process of expanding renewables

The Stover home was one of two Fond du Lac households to receive a grant for solar air heat systems. Tribal Chair Karen Diver said she welcomes more funding to expand renewable energy on the 100,000-acre reservation. Renewable energy development is a priority of the reservation, she said. Fond du Lac adopted the Kyoto Protocol in 2007 by pledging to obtain 20 percent of its electricity from renewable energy resources by 2020.

“We think often about reducing our carbon footprint,” said Diver. “We’ve gotten a toe into [renewables] and now we’re looking at dipping a foot. We’re

implementing renewable energy in several ways. We’ve retrofitted our school buses, and we have a small biomass unit in place and are looking at the feasibility of expanding it. We’re studying wind energy, and we’re also doing a feasibility study on solar panels.”

Diver lauded the Tribe's Environmental Program for helping to achieve sustainable energy goals. Converting to higher efficient light bulbs, conducting energy seminars, and performing energy audits are just a few program activities. Said Wayne Dupois, manager of the Environmental Program: “We need to protect our environment and use our resources in the wisest way.”

The Stover household took the energy-smart way to conserve energy, said McLaughlin. It initially invested in weatherization, a key first step in cost-effective energy efficiency. By having an energy audit and then making some basic energy upgrades first, a home can optimize the returns on a renewable energy system, said McLaughlin. “Reducing demand for energy through efficiency helps reduce the size and cost of a renewable energy system.”

To learn more...

For information about renewable forms of energy and funding sources, visit the State Energy Office Web site at www.energy.mn.gov and click on “renewables.” For more on Minnesota's Weatherization Assistance Program, including service provider contacts and qualification requirements, visit the Web site and click on “low income assistance.” Or call the Energy Office toll-free number: 800-657-3710.

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