



OFFICE OF THE GOVERNOR  
NEVADA STATE OFFICE OF ENERGY

Revision No. 86

# NSOE MILESTONE MINDER

## An Overview of the NSOE's Programs

Updated 1/26/12

The Nevada State Office of Energy (NSOE) is the recipient agency for the U.S. Department of Energy (DOE) Office of Energy Efficiency and Renewable Energy grants for the State Energy Program (SEP), the SEP ARRA (American Reinvestment & Recovery Act), the Energy Efficiency and Conservation Block Grant, and the Appliance Rebate and Energy Assurance Planning programs in Nevada. The NSOE received four awards under the provisions of the ARRA, launched a Statewide Renewable Energy Project, and received a \$5 million grant for the Nevada Home Energy Fitness Campaign. Following are timelines, milestones, updates and jobs created/retained for each of the NSOE's programs.

The accomplishments of the NSOE have been recognized several times by the DOE:

- March 2011: Recognized "pace-setting achievements of NSOE SEP team" and highlighted the Revolving Loan Program as the first of more than 50 similar funds in U.S. to fully loan out their funding.
- January 2011: Stated NSOE ranked #1 in the U.S. in percent of EECBG funds expended with 91%. The next state was Kentucky at 59% and the national average was 18%.
- October 2010: Reviewed the EECBG Program's progress favorably.
- September 2010: Pleased with SEP ARRA progress, stated "Nevada is picking up slack for other states."
- May 2010: Applaud Nevada for being in small group of states with 75% of SEP ARRA funds obligated.
- July 2010: Commended NSOE on hard work ensuring that 90% of EECBG funds obligated by June 30.

### RFP 1902: Business Development through Renewable Energy - (Program Manager – Tom Wilczek)

This RFP is administrated jointly by the NSOE and the Nevada Commission on Economic Development (NCED). To help unify the statewide effort to rebuild and diversify Nevada's economy, the NSOE awarded the Nevada Institute for Renewable Energy Commercialization (NIREC) a contract to support the statewide growth of renewable energy industry clusters. Bringing together Nevada's future and existing renewable energy suppliers, NIREC and the NCED will work together to promote Nevada's expansive clean and renewable energy industries to potential customers and partners through the delivery of certain projects required by the RFP. Download the first edition of the Nevada Clean & Renewable Energy Product & Service Directory or submit a company for the list at <http://nirec.org/directory.html>.

#### Timeline












IMPLEMENTATION STEPS	TARGET DATE	COMPLETE
1. Create Nevada Clean & Renewable Energy Product & Services Directory, identify key attraction renewable energy targets, and perform outreach to regional development authorities seeking renewable energy companies	2nd Quarter, 2011	✓
2. Provide list of potential renewable energy companies to NCED and list of Nevada renewable energy workforce training programs	2nd Quarter, 2011	✓
3. Generate list of potential Nevada government partners	TBD	
4. Identify six potential target companies	TBD	
5. Institute permanent web-based placement renewable energy directory	4 <sup>th</sup> Quarter, 2011	✓

## I. Statewide Renewable Energy Project – (Program Manager – Robert Nellis)

This RFP was created to develop renewable energy systems on multiple State agency sites to substantially offset the amount the agencies pay for electrical power. It will solicit 100% private sector investor funding from a company that will design, build, own and operate the projects through long-term power purchase agreements. Upon final approval of signed contracts, construction will be well underway in 8-12 months.

The result will be a good of the state contract with the selected contractor on 55 sites made up of 10 state agencies and the City of Las Vegas. This will allow individual agencies to negotiate agency specific contracts containing site specific terms required by the agencies, with the exception of the price per kWh per site, which will be proposed by the contractor in their response to the RFP. The intent is to allow for other State agencies, colleges, schools, and other public entities to join onto the contract even if they do not have sites that were submitted as part of the RFP.

### Timeline

IMPLEMENTATION STEPS	TARGET DATE	COMPLETE
1. NSOE invites state agencies and the Nevada System of Higher Education to participate in an RFP.	May 2010	
2. Agencies approve of sites to be included in the RFP and submit each site's electrical usage data, rates being paid, and number of meters.	June 2010	
3. Agencies meet for a pre-RFP conference with State Purchasing and NSOE to answer agency questions and provide comments on RFP.	June 2010	
4. NSOE issues news release on RFP. Potential pre-bidder conference held by Purchasing and NSOE for developers to provide comments.	June 2010	
5. Pre-bidders conference hosted by State Purchasing and NSOE for developers to provide comments on RFP.	June 2010	
6. RFP released and site tours conducted.	August 2010	
7. Deadline for submission and opening of RFP respondent's bids.	Sept. 2010	
8. Contractor selected by evaluation committee made up of participating State agencies. Letter of Intent award issued.	October 2010	
9. Final negotiations and signatures of the master services contract. Contract submitted to Budget Office for Board of Examiners review.	November 2010	
10. BOE meeting for approval of the master services contract.	March 2011	
11. The awarded vendor will meet with State agencies and present site specific proposals for their approval.	January 2012	

### Milestones

State Purchasing issued a Letter of Award to GA-SNC Solar LLC and the MSA was approved by the BOE. An independent evaluation committee composed of 12 members from various State agencies, the Nevada System of Higher Education, and the City of Las Vegas selected GA-SNC after independently ranking eight proposals. GA-SNC has met with 12 agencies and is analyzing their utility data to determine the feasibility of constructing solar facilities on the sites. GA-SNC has made initial system size determinations for most of the participating agencies based on their historical consumption. GA-SNC has determined that NV Energy RenewableGenerations rebates are necessary in order to make a project feasible on any of the sites. GA-SNC will apply for rebate reservations on the state sites included in the contract when NV Energy opens their program to accept applications.






### Estimated Job Metrics

Construction-related Jobs 235	Long-term Jobs 70	Total Jobs 305
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## II. Nevada Home Energy Fitness Campaign – (Project Manager – Kevin Hill)

The NSOE received a \$5 million grant for the Nevada Home Energy Fitness Campaign (formerly the Nevada Retrofit Initiative or NRI) which will strengthen Nevada's residential building retrofit market. The goal is to implement Home Performance with Energy Star ("HPwES") and ultimately retrofit at least 5% of all single family residences in Nevada by 2021. This project will enable Nevada to demonstrate innovative and impactful project models that are highly transferable, both statewide and nationally. The innovations of this project will generate more than 2,000,000 MMBtu in annual energy savings by 2021.

### Timeline

IMPLEMENTATION STEPS	TARGET DATE	COMPLETE
1. Work program approved by Interim Finance Committee.	December 2010	
2. Create revised program/strategy plan.	January 2011	
3. Commence soft launch of rebate program.	June 2011	
4. Establish rebate criteria and conditions. Start issuing home energy upgrade rebates.	October 2011	
5. Finalize program implementation plan and process map.	December 2011	
6. Finalize program marketing and outreach plan.	February 2012	
7. Launch new website and advertising campaign.	March 2012	
8. Complete program evaluation.	October 2012	

### Milestones

Regular strategic partner meetings are being held with the University of Nevada, Reno; University of Nevada, Las Vegas; Home Free Nevada, Truckee Meadows Community College, and the City of Las Vegas. Soft launch press conferences were held in June 2011 in Reno and Las Vegas, resulting in positive media coverage and 150 inquiries being fielded by Home Free Nevada. An all-day marketing charrette was conducted in October facilitated by two marketing consultants, Purdue Marion and Kickstand-Sustineo, and resulted in direction in developing an advertising campaign. Kickstand presented marketing research and developed three advertising concepts to present to the partners on December 22. The NSOE and program partners attended a Better Buildings Workshop in Vermont and gathered information from other states on what's working for their programs.

Jan 24, 2012: The NSOE is working with the DOE Technical Assistance Team to revise the implementation plan, create process maps, and utilize lessons learned from other states with similar programs. The NSOE has already processed 25 energy upgrade rebates and 10 more homeowners have signed up for the program.

## III. STATE ENERGY PROGRAM (SEP ARRA)










The State Energy Program is a formula grant program which funds energy offices in states and territories. The base program is supplemented through the addition of an ARRA component to foster energy efficient projects in several sectors. The total SEP ARRA award to Nevada is \$34,714,000. The NSOE reported to DOE that 242 new positions are anticipated to be created and 175 existing positions (that could have been eliminated) are anticipated to be retained as a result of the following programs through April 2012.\*

### A. Revolving Loan Program (Principal Investigator – Robert Nellis)

#### Overview

\$8,224,097 (plus administrative costs) has been budgeted to provide short-term, low-cost loans to developers of renewable energy projects in Nevada. These loans will serve as a bridge financing option to provide necessary funding for various startup costs associated with these projects. Once projects reach a mature level and when the total financing is in place, the loans will be repaid. Projects that fall under the categorically exempt size requirements for NEPA will be given a higher priority in order to avoid the potential for lengthy delays due to environmental reviews. An RFP evaluation committee independently scores and ranks the applications.

#### Timeline

IMPLEMENTATION STEPS	TARGET DATE	COMPLETE
1. The NSOE will develop the revolving loan criteria and a request for proposal for renewable energy projects that meet the loan program criteria.	February 2010	
2. NEPA forms (EF-1) will be submitted to DOE for approval for each project prior to expenditure of funds.	April 2010	
3. The NSOE will evaluate proposals with a third-party professional qualified to conduct project due diligence and/or the USDA. RFP awardees will be notified of final decision.	June 2010	
4. Loans will be granted and the NSOE will inform the public by posting project description and awardees on the NSOE website.	July 2010	
5. Projects will be initiated.	August 2010	
6. Project managers will begin project quarterly reports.	November 2010	
7. Mid-project physical reviews will be conducted.	Mid-Project	
8. An RFP for the second phase will be released	October 2011	
9. Projects will be completed and metrics will be verified.	January 2012	

#### Milestones

According to DOE, Nevada is the first state to have 100 percent of their ARRA Revolving Loan funds allocated. The IFC approved a work program to loan excess administrative funds on previously approved renewable energy projects. The NSOE received approval from the DOE to transfer additional ARRA funds to the program for additional projects. The original fund of \$8.2 million was built up to more than \$11 million.

The NSOE has released a second RFA to accept applications for the second phase, which will include energy efficiency, energy conservation, and energy manufacturing projects, as well as renewable energy. Available funds are expected to be between \$2-4 million.

January 12, 2012: A public hearing was held to adopt the amended Revolving Loan regulations.

#### Estimated Job Metrics

Jobs Expected to be Created 58	Jobs Expected to be Retained 29	Total Jobs 87
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## **B. State Buildings (Principal Investigator – Robert Nellis)**

#### Overview

\$7,000,000 (plus administrative costs) was budgeted as a part of the grant award to be used to provide energy efficiency and renewable energy upgrades to existing State-owned buildings. Projects include lighting replacement to more efficient T-8 fluorescent lights and LED lights; lighting control systems; energy saving window treatments; HVAC system

upgrades to more efficient systems; photovoltaic installations (four locations); and similar projects that are designed to save the State significant energy costs. All projects will strive to meet ARRA SEP goals of annual energy savings of at least 10 MBtu for each \$1,000 of total investment.

### Timeline

IMPLEMENTATION STEPS	TARGET DATE	COMPLETE
1. Cabinet members, NSHE representatives, the Legislative Counsel Bureau and the Office of Veterans who occupy and/or operate State-owned buildings will receive a request from the NSOE to identify their most inefficient buildings.	February 2010	
2. The NSOE will evaluate the proposals in consultation with the state's utilities, State Buildings and Grounds, State Purchasing and the State Public Works Board to determine and prioritize a list of buildings and projects to include in the program.	February 2010	
3. Following the evaluation, the NSOE will hold meetings with the applicants to discuss the priorities, engage the public, and provide them with an opportunity to comment. Building owners will be notified of final decisions.	February 2010	
4. NEPA forms (EF-1) will be submitted to the DOE for approval for each required project prior to expenditure of funds.	February 2010	
5. Competitive bids, interagency transfers and other purchasing mechanisms will be issued to initiate the projects. The NSOE will inform the public by posting project description and awardees on the NSOE website and the project will be initiated.	May 2010	
6. Project managers will begin quarterly project reports. Building managers will be required to use EPA ENERGYSTAR Portfolio Manager to track their energy use before and after the installation of any lighting, window performance or renewable energy system.	December 2010	
7. The NSOE will conduct mid-project physical reviews.	Mid-Project	
8. Upon completion of the project, NSOE will verify all metrics, milestones and energy savings.	January 2012	

### Milestones

124 projects are in the engineering/construction process or complete, including solar at the Henderson DMV, a solar and lighting retrofit at the LCB Parking Garage, and solar at the Grant Sawyer Building. Contracts are coming in under bid estimates and there is an additional \$1 million to be spent. Public Works has provided a list of more buildings to be retrofitted. A list of buildings and the current status of each project can be viewed at <http://energy.state.nv.us/energy-efficiency/programs/state-buildings.html>.

### Estimated Job Metrics

Jobs Expected to be Created 50	Jobs Expected to be Retained 25	Total Jobs 75
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### Energy Savings Metrics on Projects Funded

Project Recipient	Renewable Technology	Funds Allocated	Estimated Energy Savings
State Buildings	Solar, Lighting Retrofits, HVAC Upgrades, Window	\$7,000,000	5,700,000 kWh









	Treatments		
	Totals	\$7,000,000	5,700,000 kWh

### C. Schools (Principal Investigator – Kevin Johnson)

#### Overview

\$9,500,000 (plus administrative costs) was budgeted to provide \$441,176 to each of Nevada's 17 school districts to assist with energy efficient lighting, HVAC system upgrades, window treatments, lighting control systems, and renewable energy installations. Larger per capita counties (Washoe and Clark) received an additional \$1 million each and Mineral County rejected their funding. Projects strive to meet ARRA SEP goals of annual energy savings of at least 10 MBtu for each \$1,000 of total investment. The program communicates leadership and best practices through a public education campaign and a partnership with the NSOE, Nevada's K-12 schools, and utilities to implement energy efficiency and renewable energy projects.

#### Timeline

IMPLEMENTATION STEPS	TARGET DATE	COMPLETE
1. School districts will receive a request from the NSOE to identify their most inefficient buildings.	April 2010	
2. The NSOE will evaluate the proposals, in conjunction with the state's utilities and the Nevada Department of Education, to determine and prioritize a list of buildings and projects to be retrofitted.	April 2010	
3. The NSOE will hold meetings with the applicants to discuss the priorities and to engage the public and provide them with an opportunity to comment.	April 2010	
4. Districts will be notified of final decisions. NEPA forms (EF-1) will be submitted to DOE for approval for each required project prior to expenditure of funds.	April 2010	
5. Competitive bids and other purchasing mechanisms will be issued to initiate the projects. The NSOE will inform the public by posting project description and awardees on the NSOE website.	June 2010	
6. Projects will be initiated.	July 2010	
7. Project managers will begin quarterly project reports. Building managers will be required to use ENERGYSSTAR Portfolio Manager to track their energy use before and after the installation of any lighting, window performance or renewable energy system.	November 2010	
8. The NSOE will conduct mid-project physical reviews.	Mid-Project	
9. Upon completion of the project, NSOE will verify all metrics, milestones and energy savings.	January 2012	

#### Milestones

Contracts have been awarded, work is underway, and 10 districts are complete. A free Energy Star Portfolio benchmark tool on energy savings, reporting before and after installation of RE/EE projects, is being sponsored by NV Energy for those districts that fall within their service area. Esmeralda and Elko County received more funds than requested because Mineral County's funds were not used. Carson City, Clark, Douglas, Elko, Esmeralda, Humboldt, Lander, Lincoln, Pershing, and Washoe Counties are complete. White Pine, Churchill, Lyon, Eureka, Nye and Storey Counties are in various stages of construction and will be complete by January. Visit <http://energy.state.nv.us/documents/recovery/EnergyEfficientSchoolsProjectDescriptionandAwardees.pdf> for project descriptions and awardees.

#### Estimated Job Metrics

Jobs Expected to be Created 50	Jobs Expected to be Retained 25	Total Jobs 75
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#### Energy Savings Metrics on Projects Funded








Project Recipient	Renewable Technology	Funds Allocated	Estimated Energy Savings (kWh)
Carson City	Lighting Retrofit	\$441,176	1,364,311
Churchill	Solar	\$441,176	140,000
Clark	Solar	\$1,441,176	700,000
Douglas	Boiler Replacement	\$441,176	553,470
Elko	Lighting Retrofit	\$441,176	1,461,285
Esmeralda	Solar	\$441,176	146,000
Eureka	HVAC Upgrade	\$441,176	TBD
Humboldt	HVAC, Boiler Replacement	\$441,176	260,700
Lander	Solar	\$441,176	200,000
Lincoln	Lighting Retrofit	\$441,176	162,284
Lyon	Lighting Retrofit	\$441,176	TBD
Nye	Lighting Retrofit	\$441,176	1,300,356
Pershing	Solar	\$441,176	280,000
Storey	Solar	\$441,176	280,000
Washoe	Solar	\$1,441,176	560,000
White Pine	Lighting Retrofit, Insulation & Window Upgrades	\$441,176	313,042
Totals		\$9,500,000	7,721,448

#### D. Energy Efficient Street Lighting & Traffic Signals (Principal Investigator – Pete Konesky)

##### Overview

\$1,500,000 (plus administrative costs) has been budgeted to make street lighting and traffic signals more energy efficient in Nevada, which will allow regional transportation commissions and the various Nevada communities to work together in replacing street lights and traffic signals with more energy efficient LED lighting. The lighting will not only boost energy savings, but also increase safety at intersections by increasing visibility.

##### Timeline

IMPLEMENTATION STEPS	TARGET DATE	COMPLETE
1. The NSOE, in coordination with the Department of Transportation and Department of Public Safety, will request information from regional transportation commissions on intersections with traffic signals and/or street lights that are energy inefficient and would reduce traffic accidents if better illuminated.	April 2010	
2. The NSOE will evaluate the lists in consultation with the Department of Public Safety and state's utilities to determine and prioritize a list of intersections and streets to be included in the program.	April 2010	
3. The NSOE will hold a public meeting, or meetings, with the Department of Transportation and regional transportation commissions.	April 2010	
4. The awardees will be notified of final decisions. Competitive bids, interagency transfers and other purchasing mechanisms will be issued to initiate projects. The NSOE will inform the public by posting project description and awardees on the NSOE website.	June 2010	
5. Projects will be initiated.	September 2010	
6. Project managers will begin quarterly reports.	October 2010	
7. Mid-project physical reviews will be held.	Mid-Project	

8. Complete projects, conduct final project verification which includes site monitoring visits (selected projects).	January 2012	
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#### Milestones

Allocations were \$38,000 for Carson City, \$301,240 for Clark County, \$411,600 for Henderson, \$394,800 for Las Vegas, \$358,600 for North Las Vegas, and \$10,600 for Washoe County RTC. All projects are either complete or under construction. The NSOE received permission from the DOE to transfer surplus funding from the Alternative Fuel Infrastructure to Street Lights for additional lighting projects in Carson City, and Clark County. Carson City received \$6,000 to light an additional intersection and Washoe County RTC received \$10,600 for retrofitting three intersections from the Alternative Fuel Infrastructure Program and returned funding.

Washoe County RTC, Carson City and Las Vegas have completed their installations. North Las Vegas has installed 80% of their lighting. Clark County has ordered LED street signs with their additional funding and is supplementing this funding with county funds. The City of Las Vegas has replaced all LED lights along Charleston and Jones Boulevards and Henderson has ordered their lighting. Carson City has installed all of the lighting purchased with their additional funding.

#### Estimated Job Metrics

Jobs Expected to be Created 9	Jobs Expected to be Retained 3	Total Jobs 12
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#### Energy Savings Metrics on Projects Funded





Project Recipient	Renewable Technology	Funds Allocated	Annual Energy Savings	Lights	Signals
Carson City	LED Lighting Retrofit	\$38,000	\$2,112	43	0
Clark County	LED Lighting Retrofit	\$301,240	\$45,070	79 intersections	
Henderson	LED Lighting Retrofit	\$411,600	\$31,000	686	154
Las Vegas	LED Lighting Retrofit	\$394,800	\$29,072	987	0
North Las Vegas	LED Lighting Retrofit	\$358,600	\$21,100	550	0
Washoe County RTC	LED Lighting Retrofit	\$10,600	\$600	0	46
Carson City Revision	LED Lighting Retrofit	\$30,580	\$63,850	34	0
Add'l Clark County	LED Lighting Retrofit	\$25,739	TBD	TBD	TBD
	Totals	\$1,556,319	\$128,954		

### **E. Alternative Fuel Infrastructure (Principal Investigator - Pete Konesky)**




#### Overview

\$150,000 (plus administrative costs) has been budgeted to replace a fuel tank at the Nevada State Motor Pool in Las Vegas with a dual capacity tank that allows Ethanol fuel (E85) to be stored and dispensed into flexible fuel vehicles in the state inventory. This will allow additional flexible fueled vehicles to be ordered as a future strategy aimed at reducing the use of petroleum fuels in Nevada.

#### Timeline

IMPLEMENTATION STEPS	TARGET DATE	COMPLETE
1. The NSOE will request information from the State Motor Pool on the necessary actions to replace the existing gasoline tank with the divided fuel tank.	April 2010	
2. Interagency agreements and other purchasing mechanisms will be issued to initiate the project.	April 2010	
3. NEPA forms (EF-1) will be submitted to DOE for approval for each required project prior to expenditure of funds.	June 2010	
4. Project will be initiated.	July 2010	



5. Project managers will begin project quarterly reports.	November 2010	
6. Mid-project physical reviews will be held.	Mid-Project	
7. Project will be completed and project metrics will be verified by the NSOE.	January 2012	

#### Milestones

The system was completed, inspected, and is in operation. Funding left over from this project was used for additional street lights and traffic signals for Carson City (\$6,000) and Washoe County RTC (\$8,840). Remaining funds will be used for transportation systems, such as additional street lighting.

#### Estimated Job Metrics





Jobs Expected to be Created 1	Jobs Expected to be Retained 1	Total Jobs 2
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## **F. Engineering, Feasibility, Permitting, EIS and Project Implementation (Principal Investigator – Thomas Wilczek)**

#### Overview

\$1,500,000 (plus administrative costs) has been budgeted to provide funds to perform feasibility studies and accelerate energy projects that will provide energy savings or develop renewable energy sources in Nevada. All underlying projects funded under this market sector need to be completed within ARRA timeframes.

#### Timeline

IMPLEMENTATION STEPS	TARGET DATE	COMPLETE
1. The NSOE will investigate the feasibility of award mechanisms.	May 2010	
2. Grants will be awarded.	June 2010	
3. Projects will be initiated.	March 2011	
4. Project manager will begin quarterly reports.	November 2011	
5. Projects will be completed and metrics verified.	February 2012	

#### Milestones

The NSOE signed a contract with the nonprofit Nevada Energy Assistance Corporation (NEAC) for an acting feasibility study clearinghouse. NEAC is planning for the appropriate engineering studies and the first installment of \$750,000 was transferred to NEAC for their efforts in awarding electrical transmission engineering and feasibility projects. The NEAC Board of Directors voted to approve a \$1.2 million transmission line mapping contract with a Tri-Sage Consulting, a Nevada firm. NEAC entered in to a contract with NIREC (<\$10k) for support to commence a California outreach initiative designed to begin establishing joint NV relationships with CA energy regulators. NEAC reports that Tri-Sage is making significant progress on the identification of renewable energy transmission corridors. \$1.5 million of the original \$3 million was transferred to the Revolving Loan Program.

Dec. 22, 2011: The Draft Renewable Energy Transmission Corridor Plan was presented to the NEAC Board of Directors for comment. The Board has until mid-January 2012 to provide their comments back to Tri-Sage Consulting for inclusion into the final report. It is anticipated that the final plan will be ready for issuance in February 2012.

#### Estimated Job Metrics





Jobs Expected to be Created 18	Jobs Expected to be Retained 9	Total Jobs 27
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## G. Energy Related Codes (Principal Investigator – Emily Nunez)

### Overview

\$1,190,650 (plus administrative costs) has been budgeted to secure the adoption of international building codes in Nevada cities and counties. The 2009 International Energy Conservation Code ("IECC") has been adopted by many state and municipal U.S. governments for establishment of minimum design and construction requirements for energy efficiency. The funds may also be used to promote and train personnel on the codes and assist in its implementation.

### Timeline

IMPLEMENTATION STEPS	TARGET DATE	COMPLETE
1. Sponsor training sessions to assist jurisdictions on code training and implementation of the ARRA 90 percent compliance requirement within eight years. Sessions will be complete by April 2011.	April 2011	
2. Develop a five-year strategic plan for implementation and compliance verification of the 2009 IECC. Conduct a gap analysis, outreach and marketing, and additional stakeholder meetings to the building industry. The strategic plan is anticipated to be developed by June 2011.	June 2011	
3. Conduct face-to-face meetings in rural Nevada with building officials, building industry design and construction owners/managers, and elected officials.	August 2011	
4. Adopt any necessary regulations. Due to Executive Order # 2011-01, regulation workshops were tentatively postponed. Regulation workshops and hearings for the 2009 IECC will now begin May 26, 2011, following the IECC training sessions. The regulations were adopted as amended on November 10, 2011, at the final hearing conducted in Elko, Nevada.	December 2011	
5. Anticipate starting the initial sampling for 90% compliance in October 2011, which will provide NSOE with needed data while working toward 90 percent compliance by 2017.	February 2012	

### Milestones

The 2009 IECC has been adopted as the minimum standard on a statewide basis and is scheduled to go into effect on July 1, 2012, pending final legislative review. A copy of the final regulation will be posted on the NSOE website as soon as it has been approved and returned from the legislative committee. Copies of hearing notices, draft regulations (LCB File No. R024-11), and comments received can be found at <http://energy.state.nv.us/energy-efficiency/programs/energy-related-codes.html> under Laws, Regulations and Rulemaking.

The NSOE is currently sponsoring additional trainings, including scholarships to the 2012 Educodes Conference in Las Vegas, and advanced training for Nevada's Energy Code Ambassadors and the building industry. CEUs will be provided to engineers, architects and International Code Council (ICC) members. Scholarships to Educodes have been extended to the building industry (builders, contractors, engineers and architects). To register for an Educodes scholarship, go to: <http://educodes.us/scholarships/>. To register for all other trainings on the 2009 IECC, go to: [https://www.cisweb1.unr.edu/cxs/Heading.asp?heading\\_id=231](https://www.cisweb1.unr.edu/cxs/Heading.asp?heading_id=231).

### Estimated Job Metrics

Jobs Expected to be Created 2	Jobs Expected to be Retained 10	Total Jobs 12
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## IV. ARRA GRANTS (Not SEP)

### A. Appliance Rebate (ARRA) (Principal Investigator – Tom Wilczek)

### Overview

The NSOE received \$2,495,000 to be used for a State Energy Efficient Appliance Rebate Program. This program allowed Nevada residents to receive rebates when they purchased energy efficient appliances. The rebates were available to Nevada residents who replace a used appliance with an Energy Star qualified refrigerator (\$200), freezer (\$150), washing machine (\$150) or dishwasher (\$100) from a Nevada retailer.

#### Timeline

IMPLEMENTATION STEPS	TARGET DATE	COMPLETE
1. DOE will award grant to NSOE.	December 2009	
2. NSOE will begin negotiations with retailers and issue RFQ for rebate processing company.	December 2009	
3. NSOE will sign contracts with retailers and rebate processing company.	February 2010	
4. NSOE will coordinate with retailers and utilities for advertising, develop the program website and promote the program.	March 2010	
5. Program will commence.	April 17, 2010	
6. Rebate processing company will begin paying rebates.	June 2010	
7. Launch phase two of the program.	Sept 2010	
8. Rebate processing company will track program providing updates to NSOE and pay rebates until program funds are depleted.	March 2012	
9. Project closeout approval issued by DOE.	March 2012	

#### Milestones

The first phase of the State Energy Efficient Appliance Rebate Program (SEEARP) was launched on April 17 and a total of 7,471 reservations were redeemed as of June 30 including 1,999 for washing machines, 2,279 for dishwashers, 308 for freezers, and 2,885 for refrigerators for a total of \$1,151,050. Approximately \$1,240,000 was left, so the NSOE modified the program to a buy/reserve format and a second phase of rebates began September 1. All remaining money was allocated in 40 days. Customers can go to [www.nevadaappliancerebate.com](http://www.nevadaappliancerebate.com) to check on the status of their rebate.

Final results of the program indicate that 15,287 rebates were successfully issued, which equates to \$2,386,200 in rebates made available to Nevadans. The final grant closeout documentation was forwarded to the DOE for review and approval. The NSOE is currently waiting to receive DOE approval for grant closeout.






Note: SEEARP is not required to track jobs created/retained.

## **B. Energy Assurance (ARRA) (Principal Investigator – Thomas Wilczek)**

#### Overview

The NSOE was granted \$312,844 (plus administrative costs) to update and implement the state's Energy Assurance Plan, which outlines the structure for monitoring and overseeing energy demand and supply. The plan provides the ability to intervene, when directed, to ensure a reliable supply of electricity, natural gas, motor vehicle fuel, propane and other heating products are available to the citizens of Nevada. A detailed work plan includes developing new energy use and disruption tracking systems, incorporating "smart grid" technology (including tracking systems) as the technology matures and comes into use in Nevada, as well as outfitting a room capable of handling the personnel required to respond to any energy contingency that may develop through implementation of the plan.

### Timeline

IMPLEMENTATION STEPS	TARGET DATE	COMPLETE
1. Submit Project Management Plan to DOE.	September 2009	
2. Submit Workforce Development Plan to DOE.	October 2009	
3. Submit Energy Supply Disruption Tracking Plan to DOE.	August 2010	
4. Complete required Intrastate exercise.	November 2011	
5. Complete required Interstate exercise.	February 2012	
6. Complete draft EA Plan edits based on exercise results and report to DOE.	May 2012	

### Milestones

The energy contingency center is being configured with visual and connective technologies that will enhance the NSOE's effectiveness in responding to energy contingencies. The NSOE completed preparation of a process for tracking the duration, response, restoration and recovery time of energy supply disruption events and notified all Nevada energy-supplying entities of the energy disruption tracking process and requested their participation. The NSOE received comments from the DOE on the Draft Energy Assurance Plan noting that the initial EAP sufficiently documents guidelines for responding to an energy emergency.

The Intrastate Energy Assurance Exercise was successfully conducted on July 28, 2011. The UNR Seismology Laboratory provided a customized run of the HAZUS earthquake simulation program for use in the exercise. The simulation assumed a 7.5 magnitude earthquake along the Genoa fault located in western Nevada. A California/Nevada joint exercise, held at South Lake Tahoe, dealt with a major fuel outage. Both Nevada and California received excellent feedback relating to their EA and fuel rationing plans.

Jan. 5, 2012: NSOE and NDEM personnel represented Nevada at the DOE Interstate Western Regional EA exercise in Phoenix on November 29-30, 2011. Nevada personnel was very active in the event and with the issuance of the upcoming after-action report, the deliverables for the grant will be achieved.

### Estimated Job Metrics

Jobs Expected to be Created 2	Jobs Expected to be Retained 3	Total Jobs 5
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## **V. Energy Efficiency & Conservation Block Grant (EECBG)**

The NSOE was awarded this \$9,593,500 grant and immediately sent letters to all included cities and counties, who subsequently submitted their projects for approval. The NSOE worked with the DOE to get the projects approved, to lift funding restrictions, and approve sub-grants. The DOE gave final NEPA approval to move ahead with all projects.

### Estimated Job Metrics

Jobs Expected to be Created 34	Jobs Expected to be Retained 61	Total Jobs 95
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### **A. Cities and Counties (Principal Investigator – Thomas Wilczek)**

#### Overview

\$4,073,040 (plus administrative costs) was allotted to Nevada cities and \$2,104,161 to Nevada counties that were not directly funded by the DOE by using per capita numbers as the formula to determine the amount of funding to be allotted to each jurisdiction. These funds may be used for energy efficiency and energy conservation projects and renewable

energy systems. The ten largest counties and ten largest cities in Nevada by population were awarded funding directly by the DOE, independent from any NSOE grants, and report directly to the DOE and the Government Accounting Office.

#### Timeline

IMPLEMENTATION STEPS	TARGET DATE	COMPLETE
1. Establish budgets, criteria, identify counties.	October 2009	
2. Notify counties of eligibility, budgets, project parameters and program requirements.	January 2010	
3. Identify projects and establish budgets.	February 2010	
4. Complete sub-grant process, notify counties.	March 2010	
5. Initiate projects and outreach.	June 2010	
6. Hold mid-project reviews.	November 2011	
7. Complete projects.	January 2012	
8. Conduct verification.	January 2012	

#### Milestones

All projects have been approved by the DOE, sub-grants have been sent to the cities and counties and NEPA restrictions have been lifted on all projects. The NSOE has allocated a portion of the funds originally designated for Lander County to Lincoln County (increasing their funding from \$375,000 to \$675,000), Mineral County (\$481,989 to \$507,989), Storey County (\$485,000 to \$510,000) and Eureka County (\$188,000 to \$400,000). All sub-grantees are making significant progress and Caliente, Carlin, Wendover, Wells, and Storey and Esmeralda Counties are complete. The NSOE is initiating an internal review of EECBG-funded projects which may impact historic properties in order to determine the applicability of NHPA and/or SHPO review.



Nov. 9, 2011: Yerington is now complete with its City Hall retrofit work and energy efficient LED electric community sign. The solar PV array behind the firehouse in Ely is now complete and a net metering agreement with the local power company is pending.




## **B. Nevada Emergency Vehicle Idle Reduction (Principal Investigator – Thomas Wilczek)**

#### Overview

\$712,800 (plus administrative costs) was allocated for approximately 200 battery devices that will allow emergency personnel to shut off their engines and provide up to four hours of power for operation of computers, radios, light bars and other vehicle equipment. Requests for vehicle monitoring and heating systems to be incorporated into the system will reduce the number of devices that will be ordered resulting in a more operator-friendly system that is more apt to be used for longer periods of time. The reporting system will have concrete data for energy savings and greenhouse gas reductions.

#### Timeline

IMPLEMENTATION STEPS	TARGET DATE	COMPLETE
1. Request information.	January 2010	
2. Notify departments/agencies of eligibility, budgets, project parameters and program requirements.	January 2010	

3. Identify projects and establish budgets. Contact DOE for project approval.	February 2010	
4. Initiate projects and outreach.	June 2010	
5. Hold mid-project reviews.	November 2011	
6. Complete projects.	January 2012	
7. Conduct verification.	January 2012	

#### Milestones

Sub-grants were issued to the Washoe County Sheriff, Henderson Police Department, Las Vegas Metro Police Department, and the Nevada Highway Patrol for \$178,200 each. The City of Henderson noticed the NSOE that it was willing to accept \$50,000 of the \$178,200 allotted to them for purchase of the units. The NSOE reallocated the remaining \$128,200 to the North Las Vegas Police Department. All law enforcement grantees are now under contract and the funds have been obligated.



Las Vegas Metro (41 units) and Henderson (12 units) have completed installation of all their battery units. The remaining three agencies have installed the majority (43) of the units they have ordered. The vendor of the battery units is now offering a smaller-sized model which will allow them to be more readily used in smaller patrol vehicles. They are also offering a unit with remote uploading technology which will allow data to be conveyed wirelessly to a data-collection point, increasing the amount of time the vehicles can remain on duty. The North Las Vegas Police Department and the Washoe County Sheriff's Office are purchasing units with this feature.

### **C. Natural Gas & Electricity Monitoring for State Owned Buildings (Principal Investigator – Thomas Wilczek)**

#### Overview

\$203,908 (plus administrative costs) has been allocated for the acquisition of services for monitoring energy consumption in State buildings. The subcontract amount is \$203,908 with LPB Energy Management Services who is monitoring all State-owned buildings, establishing baselines, reporting on results, reviewing utility bills for errors, and negotiating rebates on behalf of the NSOE.

#### Timeline

IMPLEMENTATION STEPS	TARGET DATE	COMPLETE
1. Initiate monitoring.	June 2010	
2. Hold mid-project reviews.	November 2011	
3. Complete projects.	January 2012	
4. Conduct verification.	January 2012	

#### Milestones

LPB initiated the data capture process and NV Energy and Southwest Gas reported that savings to the State had been realized. In some cases, the incorrect utility rate schedule was assessed and errors were corrected.

### **D. Traffic Signals and Street Lighting (Principal Investigator – Thomas Wilczek)**





#### Overview

This project provided \$1,477,457 in funding (plus administrative costs) to install street lighting and traffic signals in Nevada cities and counties. In some cases, energy efficient lighting is being installed in county or municipally-owned sports complexes such as tennis courts and baseball fields.

#### Timeline

IMPLEMENTATION STEPS	TARGET DATE	COMPLETE
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1. Establish budgets, criteria, identify cities and counties. Notify appropriate entities of eligibility, budgets, project parameters & program requirements. Identify projects and establish budgets.	February 2010	
2. Complete sub-grant process.	March 2010	
3. Initiate projects and outreach.	August 2010	
4. Hold mid-project reviews.	November 2011	
5. Complete projects and conduct verification.	January 2012	

#### Milestones

All projects have been approved and funds were sent to the sub-grantees: Fallon \$275,000, Ely \$100,000, Lyon County \$125,000, Douglas County \$42,000 and Washoe RTC \$977,457. Washoe RTC is nearing completion on their LED retrofit of streetlights in major areas within county-controlled intersections of the greater Reno-Sparks metropolitan area. The City of Fallon and Lyon County are complete and so is Douglas County, who completed installation of LED streetlights and LED-lighted street signs at major county intersections near the Stateline area at Lake Tahoe. Ely has commenced with their projects.

All projects funded by all ARRA grants are considered to be federally funded and, with the exception of the Appliance Rebate program, are required to meet all federally required National Environmental Policy Act restrictions, Davis-Bacon Act provisions on wages, and Buy American provisions of the ARRA. Wherever appropriate, projects may also be required to comply with Historical Preservation provisions.

## **VI. SEP Formula Grant (Principal Investigator – Pete Konesky)**

The SEP Formula Grant (the funding source that kept the NSOE open prior to the stimulus funding) for program year 2011 was received in the amount of \$349,000, plus a match of \$69,800. The carryover of \$32,330 will require a match of \$6,470. This is a grant and not a gift to the state as there are some mandatory activities required to receive the funding. Mandatory activities include lighting efficiency standards for public buildings; promotion of carpools, vanpools & public transportation; incorporation of energy efficiency criteria into procurement procedures; implementation of mandatory thermal efficiency standards for new & renovated buildings; permitting right turns at red traffic signals and left turns from a one-way street onto a one-way street at a red light after stopping; ensuring coordination among various local, state, and federal agencies on energy efficiency, renewable energy and alternative transportation fuel programs within the state, and maintaining a current energy emergency response plan. The following categories identify the optional activities selected by the office that support state mandated functions.

### **A. Renewable Energy, Conservation & Use (Principal Investigator – Pete Konesky)**

This program will promote the use of renewable energy and energy conservation; review energy trends for five, 10 and 20 year periods; determine how and what type of energy will meet the needs of Nevada; work with other federal and State agencies to reduce energy costs; and use the energy segment of the state to improve Nevada's economy.

### **B. Buildings (Principal Investigator – Lorayn Walser)**

This program will update the energy codes used in Nevada to the 2009 IECC version for use in city and county regulations by holding workshops and seminars for architects, builders, contractors, and city and county governments. The NSOE will continue to administer the LEED green building tax abatement programs along with supporting the renewable energy producer's tax abatement program.

### **C. Transportation Fuel (Principal Investigator – Pete Konesky)**

This program is designed to decrease Nevada's dependence on imported fossil fuels in order to improve urban air quality and decrease risk to the state economy in the event of pipeline supply disruptions. Additional objectives include promoting increased availability and use of alternative fuels, and to increase market demand of alternative transportation fuels that can be produced domestically or within Nevada. The NSOE has a conference call monthly with the California Energy Commission on fuel-related issues.

Jan. 4, 2012: The NSOE is supporting the NGA memorandum of understanding for the use of natural gas for transportation fuel.

#### **D. Administration (Principal Investigator – Pete Konesky)**

This program allows for the preparation of a comprehensive status of energy report for the governor and Nevada Legislature, as well as an energy emergency plan. The NSOE also coordinates with federal agencies on energy and environmental issues relating to energy uses reduction, energy conservation and renewable energy, and works with the USDA and EPA on energy and environmental issues.

#### **VI. SEP Special Projects (Principal Investigator – Pete Konesky)**

An “Industries of the Future” grant that dealt with mining had some funding remaining and the NSOE received an extension to the grant to spend the funds. This will be a mining-related program featuring efficiencies of operation. The NSOE received a request for information that will extend an expired grant dealing with geothermal.

#### **VII. School Bus USA (Principal Investigator – Pete Konesky)**

This \$496,000 EPA grant was received by the NSOE in 2006. Initial work and contacts were made by the office, but due to staff availability, the program was curtailed. The program end date is December 31, 2011. When NDEP received a DERA grant from the EPA, the NRS said NDEP was responsible for working on school buses and an inter-local agreement was made between NDEP and the NSOE that basically transferred most of the funds to NDEP for the installation of oxidation catalysts (OC) and closed crank case ventilation (CCV) systems. The combined funding will cover all school buses in Nevada. The BOE approved an inter-local agreement with NDEP that will complete the project. The OC and CCV systems order for the remaining buses was cancelled. The remaining funds were used to purchase coolant heaters that can warm the buses prior to starting the engines, thus reducing engine idle time. Churchill, Elko and Douglas County received this funding and delivery of equipment and installation is complete.

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\* The NSOE acknowledges that the number of jobs anticipated to be created prior to the start of a project and what is actually created will differ because the formulas used to derive the data are different. For instance, the number of jobs anticipated to be created and/or retained under the EECBG grant is a metric solely derived from the mandated U.S. DOE formula which uses the amount of funding allocated to a specific activity. However, this formula is used solely as a predictive tool and does not provide a guarantee of the actual number jobs that will be created or retained. Conversely, the U.S. DOE requires the number of jobs created and/or retained after the activity commences to be a function of the number of hours worked on the specific activity as reported to the NSOE by the sub-grantees. The NSOE will be reporting the number of jobs created and/or retained as the field activity period for the projects continues through April 2012.