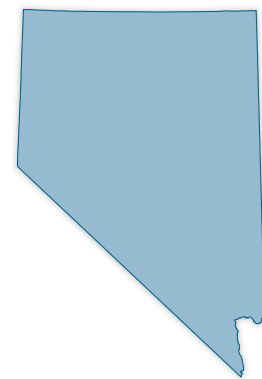




# Department of Energy Recovery Act State Memos

## Nevada



For questions about DOE's Recovery Act activities, please contact the DOE Recovery Act Clearinghouse:  
1-888-DOE-RCVY (888-363-7289), Monday through Friday, 9 a.m. to 7 p.m. Eastern Time  
<https://recoveryclearinghouse.energy.gov/contactUs.htm>.

*All numbers and projects listed as of June 1, 2010*



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# American Recovery and Reinvestment Act



## U.S. DEPARTMENT OF ENERGY • NEVADA RECOVERY ACT SNAPSHOT

Funding for selected DOE projects: \$440.4 million

DOE Recovery Act projects in Nevada: 80

Clean energy tax credits and grants: 5

For total Recovery Act jobs numbers in Nevada go to [www.recovery.gov](http://www.recovery.gov)

Nevada has substantial natural resources, including geothermal, solar, wind, and hydroelectric power. **The American Recovery & Reinvestment Act (ARRA)** is making a meaningful down payment on the nation's energy and environmental future. The Recovery Act investments in Nevada are supporting a broad range of clean energy projects from energy efficiency and the smart grid to geothermal, advanced battery manufacturing, and environmental cleanup. Through these investments, Nevada's businesses, non-profits, and local governments are creating quality jobs today and positioning Nevada to play an important role in the new energy economy of the future.

### EXAMPLES OF NEVADA FORMULA GRANTS

Program

State Energy Program

Weatherization Assistance Program

Energy Efficiency Conservation Block Grants

Energy Efficiency Appliance Rebate Program

Award (in millions)

**\$34.7**

The State of Nevada has been granted \$34.7 million in State Energy Program funds to invest in state-level energy efficiency and renewable energy priorities.

**\$37.3**

The State of Nevada has been granted \$37.3 million in Weatherization Assistance Program funds to scale-up existing weatherization efforts in the state, creating jobs, reducing carbon emissions, and saving money for Nevada's low-income families. Over the course of the Recovery Act, Nevada expects to weatherize more than 5,500 homes. The program also includes workforce training and education as part of the state's efforts to develop a green workforce.

**\$32.3**

Forty-one communities in Nevada were granted a total of \$32.3 million for Energy Efficiency and Conservation Block Grants (EECBG) to develop, promote, implement, and manage local energy efficiency programs.

**\$2.5**

The State of Nevada has been granted \$2.5 million for the Energy Efficient Appliance Rebate Program, which offers consumer rebates for purchasing certain ENERGY STAR® appliances. These energy efficient appliances reduce energy use and save money for families, while helping the environment and supporting the local economy.

### EXAMPLES OF NEVADA COMPETITIVE GRANTS, TAX CREDITS AND LOANS

Award **\$137.9 million**

**NV Energy** in Las Vegas has been awarded **\$137.9 million** to rapidly modernize Nevada's electricity infrastructure and implement smart grid technologies including 1.3 million smart meters.

**\$122.3 million**

Nevada received **four 1603 payments for renewable energy generation totaling \$122.3 million**, which include solar and geothermal projects. For example, **NGP Blue Mountain I LLC** received \$57.9 million for a geothermal project.

**\$98.5 million**

**Nevada Geothermal Power Company** was offered a conditional commitment to provide a partial guarantee for a **\$98.5 million loan** for a 49.5 megawatt **Blue Mountain** geothermal project in Humboldt County in northwestern Nevada.

**\$44.3 million**

**National Security Technologies, LLC, Navarro Nevada Environmental Services, and Stoller Navarro Joint Venture** have been granted a total of **\$44.3 million** for environmental cleanup at the Nevada Test Site (NTS) in Las Vegas and North Las Vegas.

## Funding Allocation Table (Figure 1)

Total dollar amounts in this document are accurate as of June 1, 2010. Please note that Recovery Act Programs are ongoing and the dollar amounts are subject to change. Recipient locations are based on project sites rather than recipients' headquarters locations.

Recovery Act Pillar	Flagship Program Names & Funding Type <sup>1</sup>	Number of Selections	Selected Amount (in millions) <sup>2</sup>
Energy Efficiency	<i>Weatherization Assistance Program (F)</i>	1	\$37.3
	<i>State Energy Program (F)</i>	1	\$34.7
	<i>Energy Efficiency and Conservation Block Grant (F)</i>	41	\$32.3
	<i>Energy Efficient Appliance Rebate (F)</i>	1	\$2.5
	<b>TOTAL Energy Efficiency</b>	44	\$106.8
Renewable Energy	<i>Geothermal (CM)</i>	18	\$67.8
	<b>TOTAL Renewable Energy</b>	18	\$67.8
Electric Grid	<i>Smart Grid Investment and Demonstrations Project (CM)<sup>3</sup></i>	2	\$143.6
	<i>State and Local Energy Assurance and Regulatory Assistance (F)</i>	2	\$1.3
	<b>TOTAL Electric Grid</b>	4	\$144.9
Transportation	<i>Advanced Battery Manufacturing (CM)</i>	1	\$28.4
	<b>TOTAL Transportation</b>	1	\$28.4
Environmental Cleanup	<i>Environmental Management Contracts (C)</i>	11	\$92.2
	<b>TOTAL Environmental Cleanup</b>	11	\$92.2
Science and Innovation	<i>Small Business Research (SBIR/STTR) (CM)</i>	1	\$0.1
	<i>National Laboratory Facilities (C)</i>	1	\$0.2
	<b>TOTAL Science and Innovation</b>	2	\$0.3
<b>TOTAL - DOE Programs<sup>4</sup></b>		<b>80</b>	<b>\$440.4</b>
Tax Credits/ Payments <sup>5</sup>	<i>Payments for Renewable Energy Generation in Lieu of Tax Credits (1603)</i>	4	\$122.3
	<i>Clean Energy Manufacturing Tax Credits (48C)</i>	1	\$5.9
	<b>TOTAL Tax Incentives</b>	5	\$128.2
<b>TOTAL - DOE/Treasury + DOE</b>		<b>85</b>	<b>\$568.6</b>
<sup>1</sup> F=Formula Grant, CM=Competitive Grant, C=Contract			
<sup>2</sup> "Selected" indicates DOE has selected a potential funding recipient, which begins the process of negotiating an agreement. This does not necessarily indicate that a final agreement has been reached.			
<sup>3</sup> Projects may cross state boundaries, signifies HQ location.			
<sup>4</sup> Total does not include administrative funds.			
<sup>5</sup> Jointly administered by DOE and U.S. Department of Treasury.			

## **ENERGY EFFICIENCY – 44 projects totaling \$106.8 million**

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*Helping millions of American families cut utility bills by making homes and appliances more energy efficient, expanding the home efficiency industry in sales and manufacturing. For more information, visit <http://www.energy.gov/recovery/energyefficiency.htm>.*

### **Award(s): \$37.3 million, Weatherization Assistance Program (WAP)**

#### **Location: Statewide**

Nevada received \$37.3 million in Weatherization Assistance Program funds to increase existing weatherization efforts in the state, create jobs, reduce carbon emissions and save money for Nevada's low-income families. Over the course of the Recovery Act, Nevada's goal is to weatherize more than 5,500 homes. The program also includes workforce training and education as part of the state's efforts to develop a green workforce.

### **Award(s): \$34.7 million, State Energy Program (SEP)**

#### **Location: Statewide**

The State of Nevada received \$34.7 million in State Energy Program funds to invest in state-level energy efficiency and renewable energy priorities. These funds are producing jobs and sustainable energy benefits through energy efficiency and renewable energy projects at state buildings and schools, the installation of energy efficient traffic signals and street lights, the development of alternative fuel fueling infrastructure and the capitalization and implementation of a Revolving Loan Program. As of mid-February 2010, the state had spent \$264,520. Through ongoing coordination, DOE and Nevada are making progress toward increasing the rate of spending. Nevada has contracted \$1.25 million and these funds are on a clear pathway to expenditure.

### **Award(s): 41 totaling \$32.3 million, Energy Efficiency and Conservation Block Grant Program (EECBG)**

#### **Location: Statewide**

**Recipients:** Boulder City, Churchill, Churchill, Carson City, City Of Sparks Public Works, Clark, Douglas, Humboldt, Nye, Washoe, Duckwater Shoshone Tribe, Ely Shoshone Tribe, Fallon Paiute Shoshone Tribes Of The Fallon Reservation & Colony, Fernley, Fort McDermitt Paiute, Henderson, Las Vegas Paiute Tribe, Las Vegas, Mesquite, Moapa Band Paiute, State of Nevada, North Las Vegas, Washoe, Elko, Elko, Lyon, Pyramid Lake Paiute Tribe Of The Pyramid Lake Reservation, Summit Lake Paiute Tribe Of Nevada, Tribe Pershing, Pyramid Lake Paiute Tribe, Reno, Reno-Sparks Indian Colony Inc, Shoshone-Paiute Tribes, Te-Moak Tribe Of Western Shoshone, Walker River Paiute Tribe, Washoe Tribe Of Nevada & California, White Pine, Yerington Paiute Tribe, Yomba Tribal Council

Forty-one communities in Nevada received a total of \$32.3 million for the Energy Efficiency and Conservation Block Grants Program (EECBG) to develop, promote, implement and manage local energy efficiency programs.

Nevada is using its Recovery Act EECBG funding to undertake a variety of projects to enhance energy efficiency and expand the use of renewable energy statewide. These projects reduce the state's energy consumption and fossil fuel emissions, saving Nevadans money in energy costs and creating green jobs across the state. Sixty percent of the funds Nevada receives are going to local governments to implement community efficiency projects. EECBG funds are allowing Nevada to retrofit 200 emergency vehicles throughout the state with idle-reduction technologies, thus lowering

fossil fuel emissions. Remaining Recovery Act funds are being used to install energy management systems in state buildings, replace inefficient traffic signals and street lighting throughout rural Nevada and provide energy management training for government officials. An example of EECBGs is:

- **Clark County - \$7.7 million**

Clark County received \$7.7 million in funds to perform energy audits on up to 25 buildings and make energy-efficiency retrofits on buildings and streetlights. Additionally, the county is installing two solar power arrays and is retrofitting streetlights with energy-efficient fixtures.<sup>1</sup>

**Award(s): \$2.5 million, Energy Efficient Appliance Rebate Programs**

**Location: Statewide**

The State of Nevada received \$2.5 million for the Energy Efficient Appliance Rebate Program, which offers consumer rebates for purchasing certain ENERGY STAR® appliances. These energy efficient appliances reduce energy use and save money for families, while supporting the local economy. The NSOE received a grant for the EE Appliance Rebate Program. This program allows Nevada residents to receive rebates when purchasing energy efficient appliances after. The rebates are available to Nevada residents who replace used appliance with ENERGY STAR-qualified refrigerators, freezers, washing machines or dishwashers from a Nevada retailer.

## **RENEWABLE ENERGY – 23 projects totaling \$196 million**

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*Developing the clean renewable resources in order to double our supply of renewable energy and boost domestic renewable manufacturing capacity. For more information, visit <http://www.energy.gov/recovery/renewableenergy.htm>.*

**Award(s): 4 payments totaling \$122.3 million from DOE / Treasury, 1603 Payments for Renewable Energy Generation**

**Location: Winnemucca, Fallon, Boulder City**

\*For current number of 1603 awards, see the weekly update at <http://www.treas.gov/recovery/1603.shtml>

- **NGP Blue Mountain I, LLC, Winnemucca - \$57.9 million**

NGP Blue Mountain I, LLC, in Winnemucca received \$57.9 million for a geothermal electricity project.

- **Enel Stillwater, LLC, Fallon - \$40.3 million**

Enel Stillwater, LLC, in Fallon received \$40.3 million for a geothermal electricity project.

- **Enel Salt Wells, LLC, Fallon - \$21.2 million**

The Enel Salt Wells, LLC, in Fallon received \$21.2 million for a geothermal electricity project.

- **Nevada Solar One, LLC, Boulder City - \$2.9 million**

Nevada Solar One, LLC, in Boulder City received \$2.9 million for a solar electricity project.

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<sup>1</sup> <http://www.accessclarkcounty.com/recovery/pages/projectlist.aspx?categoryname=Energy>



**Award(s): \$5.9 million from DOE / Treasury, Clean Energy Manufacturing Tax Credit (48C)**

**Location: Las Vegas**

Amonix, Inc., in Las Vegas received \$5.9 million to manufacture low-cost solar electricity systems using inexpensive plastic lenses that concentrate sunlight. The systems generate 500 times more solar electric power from small, high efficiency solar cells.

**Award(s): \$98.5 billion from DOE / Treasury, Loan Guarantee Program**

**Location: Statewide**

Nevada Geothermal Power Company was offered a conditional commitment to provide a partial guarantee for a \$98.5 million loan for a 49.5 megawatt Blue Mountain geothermal project in Humboldt County in northwestern Nevada.

**Award(s): 2 totaling \$2.2 million, Enhanced Geothermal Systems (EGS) Technology R&D**

**Location: Reno**

- **Board of Regents, NSHE, on behalf of UNR, Reno - \$1.3 million**  
The Board of Regents, NSHE, on behalf of UNR, in Reno received \$1.3 million to develop an in depth model of EGS systems allowing researchers to more accurately predict how new fluid technologies work in a reservoir.
- **Board of Regents, NSHE, on behalf of UNR, Reno - \$936,000**  
The Board of Regents, NSHE, on behalf of UNR, in Reno received \$936,000 to develop comprehensive structural analysis of the Great Basin and adjacent regions.

**Award(s): 3 totaling \$14.4 million, Geothermal Demonstrations**

**Location: Statewide**

- **TGP Development Company, LLC, Reno - \$10.4 million**  
TGP Development Company, LLC, received \$10.4 million to demonstrate the commercial application of EGS techniques at the New York City site in a way that minimizes cost and maximizes opportunities for repeat applications in Nevada.
- **Terra-Gen Sierra Holdings, LLC, Reno - \$2 million**  
Terra-Gen Sierra Holdings, LLC, received \$2 million to facilitate the installation of a low temperature binary unit that will add to power generation from the existing 60 MW Dixie Valley power plant.
- **Beowawe Power, LLC, Reno - \$2 million**  
Beowawe Power, LLC, in Reno received \$2 million to install a new low-temperature binary unit to be attached to an existing plant in order to provide 10 percent additional power.

**Award(s): 13 totaling \$51.1 million, Validation of Innovative Exploration Technologies**

**Location: Statewide**

- **Sierra Geothermal Power, Inc., Alum - \$5 million**  
Sierra Geothermal Power, Inc., in Alum received \$5 million to test a combination of geological techniques for effectively locating geothermal resources in and around Alum.
- **Sierra Geothermal Power, Inc., Silver Peak - \$5 million**  
Sierra Geothermal Power, Inc., in Silver Peak received \$5 million for the development of a combination of tools to reduce costs and time in identifying geothermal reservoirs in Silver Peak.
- **Magma Energy Corporation, Reno - \$5 million**  
Magma Energy Corporation in Reno received \$5 million to use oil and gas technology to discover geothermal resources in Soda Lake.
- **Pyramid Lake Paiute Tribe, Nixon - \$4.8 million**  
The Pyramid Lake Paiute Tribe in Nixon received \$4.8 million to use a combination of exploration technologies to assess the geothermal resources on their reservation in Nevada.
- **Magma Energy Corporation, Reno - \$4.5 million**  
Magma Energy Corporation in Reno received \$4.5 million to test new exploration technologies in McCoy.
- **ORMAT Nevada, Inc., Reno - \$4.9 million**  
ORMAT Nevada, Inc., in Reno received \$4.9 million to use a combination of technologies to locate fault zones within geothermal reservoirs, with initial tests in Maui, HI.
- **ORMAT Nevada, Inc., Reno - \$4.5 million**  
ORMAT Nevada, Inc., in Reno received \$4.5 million to utilize advanced geological techniques to find fractures in geothermal reservoirs.
- **ORMAT Nevada, Inc., Reno - \$4.4 million**  
ORMAT Nevada, Inc., received \$4.4 million to use a combination of advanced geological techniques to identify faults in geothermal reservoirs.
- **OSKI Energy, LLC, Reno - \$4.2 million**  
OSKI Energy, LLC, in Reno received \$4.2 million to work to create new and improved methods for imaging and understanding geothermal reservoirs, testing their methods in Hot Pot.
- **Vulcan Power Company, Colado - \$3.8 million**  
Vulcan Power Company in Colado received \$3.8 million to use multiple exploration technologies to locate hidden resources in the area surrounding Colado.
- **Nevada Geothermal Power Company, Reno - \$1.8 million**  
Nevada Geothermal Power Company in Reno received \$1.8 million to test a new low- impact drilling technique and create a method to model the movement of fluid in the reservoir.

- **Geothermal Technical Partners, Inc., Reno - \$1.6 million**  
Geothermal Technical Partners, Inc., in Reno received \$1.6 million to measure subsurface temperatures at McGee Mountain using a low cost surveying technique.
- **Nevada Geothermal Power Company, Reno - \$1.6 million**  
Nevada Geothermal Power Company in Reno received \$1.2 million to test a simple and cost-effective geological technique to locate hidden geothermal reservoirs.

## **MODERNIZING THE ELECTRIC GRID – 4 projects totaling \$144.9 million**

*Harnessing clean energy sources and integrating them onto a modernized electric grid, while giving consumers better choices and more control over their energy use. For more information, visit <http://www.energy.gov/recovery/smartgrid.htm>.*

### **Award(s): \$439,000, Enhancing State and Local Governments' Energy Assurance**

#### **Location: Statewide**

The State of Nevada received \$439,000 for State Energy Assurance Planning. This project focuses on building regional energy assurance capability by enhancing inter- and intra- state coordination and cooperation during energy emergencies. The project funds states to update or develop State Energy Assurance Plans incorporating new energy portfolios such as wind, renewables and biofuels. The project also funds cities to update or develop Local Energy Assurance Plans. The two sets of funding are used to hire or retrain staff to build in-house expertise in dealing with Smart Grid technologies, critical energy infrastructure interdependencies and cyber-security.

### **Award(s): \$137.9 million, Smart Grid Investment Grant Program (EISA 1306)**

#### **Location: Las Vegas**

NV Energy, Inc., in Las Vegas received \$137.9 million to rapidly modernize Nevada's electricity infrastructure and promote investment in the state's economy. The statewide project links 1.5 million electric and gas meters across 54,600 square miles of service territory, benefitting 2.4 million Nevadans. The Smart Grid will be a foundation for an open model for the utility industry, sharing how customers take ownership of their energy usage. The program accommodates distributed generation and storage capabilities, enables new products, services and markets and operates resiliently in the face of attacks. The modernized infrastructure will deliver more than \$65 million in annualized benefits to the entire state.

### **Award(s): \$5.7 million, Smart Grid Regional and Energy Storage Demonstration Project (EISA 1304)**

#### **Location: Las Vegas**

The Nevada System of Higher Education in Las Vegas received \$5.7 million to apply distributed generation and detailed energy accounting and control for a large residential development. A new "GREEN" community of homes will provide a laboratory atmosphere which can be used to apply cost benefit analysis and "GREEN" approaches to achieve energy conserving designs of the residence. These include roof-top-voltaic, energy management of individual residences and substation peak reduction strategies.

**Award(s): \$816,000, State Assistance on Electricity Policies**

**Location: Carson City**

The Public Utilities Commission of Nevada in Carson City received \$816,000 to address Recovery Act electricity workload. This project funds states and their Public Utility Commissions (PUCs) to hire staff trained to facilitate the review of time-sensitive requests approving electric utility expenditures undertaken as part of the Recovery Act.

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**TRANSPORTATION – 1 project totaling \$28.4 million**

*Investing in a new generation of advanced fuels and vehicles to reduce our dependence on foreign oil and revitalize domestic manufacturing. For more information, visit <http://www.energy.gov/recovery/vehicles.htm>.*

**Award(s): \$28.4 million, Advanced Battery Manufacturing**

**Location: Silver Peak**

Chemetall Foote Corporation in Silver Peak received \$28.4 million to expand American facilities and meet the growing demand for advanced lithium-ion batteries. Chemetall is upgrading its lithium-hydroxide manufacturing plant in Silver Peak. Powering the electric-drive vehicles of the future, this emerging industry is critical to reducing the nation's dependence on oil and re-gaining control of the nation's energy future.

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**ENVIRONMENTAL CLEANUP – 11 projects totaling \$92.2 million**

*Creating jobs and reducing the Cold War footprint of the Department of Energy and cleaning up the polluted land and water resources in communities. For more information, visit <http://www.energy.gov/recovery/cleanup.htm>.*

**Award(s): \$38.3 million, ETEC Recovery Act Project**

**Location: Las Vegas**

The Environmental Protection Agency in Las Vegas received \$38.3 million to conduct a joint comprehensive radioactive site characterization of Area IV of the SSFL in accordance with the Comprehensive, Environmental, Response, Compensation and Liability Act (CERCLA). FY2008 DOE Appropriations law directed DOE to use a portion of their funding for the Santa Susana Field Lab (SSFL) site to enter into an interagency agreement with the Environmental Protection Agency (EPA). The agreement stipulates that EPA would perform the survey and DOE would fund it. This project and funding provides the resources for the EPA to complete this required characterization survey. When the survey is finished, DOE will then complete the Environmental Impact Statement for Remediation of Area IV of the Santa Susana Field Laboratory. Completion of the EIS allows for the remaining facilities to be demolished and soil and groundwater clean-up to be completed. Project completion eliminates approximately 88,000 sq. ft. of abandoned buildings and allows the site to be returned to Boeing.

**Award(s): \$298,000, Hanford Central Plateau D&D Recovery Act Project**

**Location: North Las Vegas**

National Security Technologies, LLC, in North Las Vegas received \$298,000 for a ten day aerial radiological verification survey to be performed over the BC Controlled Area (BCCA) of the Hanford Reservation. The aerial survey was conducted as part of the remediation work being performed by

the DOE Richland CH2M Hill Contractor. After the survey was completed, preliminary data was provided of the aerial verification survey.

**Award(s): \$700,000, INL Buried Waste Recovery Act Project**

**Location: Las Vegas**

National Security Technologies, LLC, in Las Vegas received \$700,000 to perform Recovery waste disposal operations for the Oak Ridge, Portsmouth, Paducah, Idaho and Savannah River. These sites are the top five EM waste generators, thus waste disposal funding was transferred via AFP and placed on the Nevada's NSTec contract. The transfer ensures the transparency required for sites to track how funding was applied to their waste disposal.

**Award(s): 3 totaling \$44.3 million, Nevada Test Site (NTS) Recovery Act Project**

**Location: Las Vegas**

The Environmental Management objective on the Nevada Test Site includes assessing the degree of contamination of support facilities, soils and groundwater resulting from the historic nuclear weapons testing program and performing corrective actions required by federal and state regulations. The goal is implementing appropriate corrective actions and establishing institutional controls to ensure the protection of human health and the environment. Recovery Act funding accelerates remediation of soil and groundwater contamination and accelerates demolition of excess facilities from the nation's historic nuclear weapons testing program.

- **National Security Technologies, LLC, Las Vegas - \$33.9 million**  
National Security Technologies, LLC, in Las Vegas received \$33.9 million for the installation of two groundwater characterization / monitoring wells in Pahute Mesa for the Underground Test Area (UGTA) project.
- **Navarro Nevada Environmental Services, Las Vegas - \$8.9 million**  
Navarro Nevada Environmental Services in Las Vegas received \$8.9 million to conduct characterization and remediation activities for seven known areas where bomblet testing was done at the Tonopah Test Range.
- **Stoller Navarro Joint Venture, North Las Vegas - \$1.5 million**  
Stoller Navarro Joint Venture in North Las Vegas received \$1.5 million to provide support for the accelerated installation of one groundwater monitoring well in corrective action unit (CAU) 102, Western Pahute Mesa, for the Underground Test Area project. Funds are being used to conduct activities at two Soils corrective action units. Funds are also being used to provide pre-field planning, mobilization and investigation of geophysical anomalies including remediation, if necessary, for CAU 408 Bomblet Target Area (TTR).

**Award(s): \$2 million, Oak Ridge Defense TRU Waste Recovery Act Project**

**Location: Las Vegas**

National Security Technologies in Las Vegas received \$2 million to perform Recovery waste disposal operations for Oak Ridge, Portsmouth, Paducah, Idaho and Savannah River. These sites are the top five EM waste generators, thus waste disposal funding was transferred via AFP and placed on the Nevada's NSTec contract. The transfer ensures the transparency required for sites to track how their funding was applied to their waste disposal.

**Award(s): \$2 million, Oak Ridge Defense Y-12 D&D Recovery Act Project**

**Location: Las Vegas**

National Security Technologies in Las Vegas received \$2 million to perform Recovery waste disposal operations for Oak Ridge, Portsmouth, Paducah, Idaho and Savannah River. These sites are the top five EM waste generators, thus waste disposal funding was transferred via AFP and placed on the Nevada's NSTec contract. The transfer ensures the transparency required for sites to track how their funding was being applied to their waste disposal.

**Award(s): \$1.6 million, Paducah Recovery Act Project**

**Location: Las Vegas**

National Security Technologies in Las Vegas received \$1.6 million to perform Recovery waste disposal operations for Oak Ridge, Portsmouth, Paducah, Idaho and Savannah River. These sites are the top five EM waste generators, thus waste disposal funding was transferred via AFP and placed on the Nevada's NSTec contract. The transfer ensures the transparency required for sites to track how their funding was being applied to their waste disposal.

**Award(s): \$1.6 million, Portsmouth Recovery Act Project**

**Location: Las Vegas**

National Security Technologies in Las Vegas received \$1.6 million to perform Recovery waste disposal operations for Oak Ridge, Portsmouth, Paducah, Idaho and Savannah River. These sites are the top five EM waste generators, thus waste disposal funding was transferred via AFP and placed on the Nevada's NSTec contract. The transfer ensures the transparency required for sites to track how their funding was being applied to their waste disposal.

**Award(s): \$1.4 million, SRS Transuranic (TRU) & Solid Waste Recovery Act Project**

**Location: Las Vegas**

National Security Technologies in Las Vegas received \$1.4 million to maintain the capability to safely and compliantly receive and dispose of low-level waste at the Area 5 Radioactive Waste Management Site.

**SCIENCE AND INNOVATION – 2 projects totaling \$349,000**

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*Renewing our commitment to science and innovation to ensure global competitiveness in the future. For more information, visit <http://www.energy.gov/recovery/innovation.htm>.*

**Award(s): \$200,000, Advanced Technology R&D Augmentation**

**Location: Reno**

Nevada System of Higher Education in Reno received \$200,000 to produce large diameter niobium (Nb) single crystal tubes for particle collider accelerator cavities.

**Award(s): \$149,000, Small Business Innovation Research (SBIR) / Small Business Technology Transfer (STTR) Round 1**

**Location: Boulder City**

Rocky Research in Boulder City received \$149,000 to develop appliances for cost-effective solar-powered building cooling. These appliances combine low-cost medium-temperature solar collectors with advanced high-efficiency heat-driven cooling systems, resulting in a truly cost-effective means

for utilizing solar heat to provide building air conditioning. The company's laboratories are used for chemical analyses, physical property measurements and prototype development, as well as for the assembly and testing of thermal equipment and prototype machines.

ENERGYEMPOWERS.GOV

# Recovery Act Success Stories

Energy Empowers is a U.S. Department of Energy clean energy information service. Our team produces stories featuring the people and businesses that are fueling the energy transformation and economic recovery in America. For more stories from your state, go to [energyempowers.gov/Nevada](http://energyempowers.gov/Nevada)

HUMBOLDT COUNTY

## Nevada's natural resources put to work

Americans are seeing renewable energy sources put to use all around the country, and now some power plants are taking advantage of one source that rests deep within the Earth — geothermal energy. Just a short distance down the dusty Winnemucca road in Humboldt County, Nev., rests a power plant at Blue Mountain. And nearby residents are ecstatic.

“These are the types of operations that should receive funding, as they provide for eventual cost saving through renewable energy that benefits everyone,” Di An Putnam, Winnemucca’s mayor, says. “There is also an immediate economic benefit to the area.”

Nevada Geothermal Power placed its Faulkner 1 geothermal power plant in service last autumn, thanks in part to a \$57.9 million grant under the Recovery Act, which will help offset construction costs and fund additional drilling efforts to increase the plant’s output.

The plant will help Nevada meet its renewable energy portfolio standard requirements while also creating 14 green jobs to help with its operation. Additionally, it helps supply the area with clean, domestic renewable energy while reducing reliance on fossil fuels and associated carbon emissions. Reservoir tests indicate that the resource potential at the site could be enough to eventually have an output of 100 MW.

“Nevada Geothermal Power ... has been a great addition to [Winnemucca’s] industrial makeup,” Di An says. “They have provided diversity to our job base, which is a key element in our community’s growth. Even more so, they have put our area on the green energy map.”



The Faulkner 1 geothermal power plant sits atop Blue Mountain, just outside Winnemucca, Nev. | Photo courtesy NPG

The U.S. Department of Energy cost shared the exploration of the Blue Mountain site under its Geothermal Resources Exploration and Definition program.



Caliente, Nev.'s, city hall, a former railroad depot built in 1923, is receiving a new HVAC system. | Photo courtesy of Caliente

CALIENTE

## Grant improves comfort for Nevada city's employees

Caliente, Nev., has a unique city hall: a historic railroad depot. Built in 1923 as a maintenance center halfway between Salt Lake City and Los Angeles, the depot is known far outside southeastern Nevada for its role in railway history and its Mission Revival architecture. There was just one problem: it was built before central heating or air-conditioning.

“When the information on the grant came through, I was, to be perfectly honest, singing hallelujah, because I was sitting in my office with two space heaters going and a blanket over my legs,” says Stana Hurlburt, grant writer for the city of Caliente.

So Hurlburt and her colleagues applied for, and received, a grant of \$265,000 to install a modern HVAC system in the depot. The money comes from the U.S. Department of Energy’s Energy Efficiency Conservation Block Grant program, through the American Recovery and Reinvestment Act.

Caliente is in the northeastern Mojave Desert, where temperatures get into the 100s in the summer and as low as -5 degrees in the winter. That means climate control is mandatory for the offices located in the depot, which also includes the city’s library, an art gallery and private businesses that lease space. But the evaporative cooler system stopped working 12 to 14 years ago, so workers make do with electric window air-conditioning units and space heaters. Replacing these with a modern HVAC system will mean big savings in energy and money.

“Not only is it expensive, but the [energy] efficiency is way down,” says Ken Dixon, building manager for the city.

The project is currently being designed by Sunrise Engineering in



St. George, Utah. Dixon says the building already has some central ducts that will probably be revamped, and some of the ceilings may be lowered to install new ductwork. Fortunately, most of the depot's ceilings are ten to 14 feet high; standard modern ceilings are about eight feet high. When the design is ready, Dixon plans to take bids from local contractors to finish the work. He expects the bidding to be done by late summer.

"[There's] nothing complicated about it," says Hurlburt. "It's a historic building, and they weren't built with all of the amenities back in the 1920s."

#### CHURCHILL COUNTY

### Geothermal training prepares Nevadans for jobs

When geothermal power companies began moving to northwestern Nevada's Churchill County, each one seemed to bring an out of state workforce with them.

"It's not that the companies didn't want to hire locals," says Michal Hewitt of Churchill County Social Services. "They just weren't trained to do this type of work."

Armed with advice from power companies and Recovery Act funding, social services partnered with the nearby Fallon campus of Western Nevada College and created an entry-level geothermal class to prepare local workers for jobs in the geothermal industry. The class spends three 40-hour weeks learning their way around geothermal safety, equipment and power plant management.

A lot of people are interested in participating in the class, says Michal. Some students even waited three months on the waiting list before securing a spot. The funding provided enough money for three sessions of the class, which will allow 40 students to complete the course in 2010.

"It's a really big deal," says Michal. "The geothermal industry is growing so much here. All of these people are just looking to get

into the industry and see where they can go from there."

While the majority of students are in their 20s and 30s, ages range from 18 to 55, with most having a few years of construction experience. Western Nevada College's Fallon Campus Dean Bus Scharmann says regardless of age and experience, the students are eager to learn the training techniques.

"When they're told to be here at 8 a.m., they show up at 7:30. A lot of these students are used to hard work, they take right to this and have caught on very quickly," said Bus. "For most of them, the transition has been very smooth."

The first week of the course is spent in classroom, where students complete certification for seven different Occupational Safety and Health Administration categories.

For the next seven days of class, students are taken to nearby Vulcan Power Company, where they complete the bulk of their geothermal training in an equipment yard learning the specifics of geothermal machinery and practicing maintenance techniques. The training is designed to prepare workers for the drilling industry. Some of the tasks required are hand tool identification and use, drill rig components, spill prevention plans and work station responsibilities.

The last three days are spent studying power plant operations and debriefing students on their experience.

"We designed this program to fill the need of geothermal companies out here," says Michal. "These jobs pay well for a starting position, and they're a lot better than a lot of the alternatives out there."

The geothermal program is more than just three weeks of training in the field. There's also a two-day seminar before the training even begins where students learn the importance of teamwork, decision making and leadership. After the three weeks of geothermal training is complete, the students then participate in a three-week job club, where they learn about resume writing and interview techniques.