

# STATE OF NEVADA

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## Audit Report

Office of the Governor  
Office of Energy

2012



Legislative Auditor  
Carson City, Nevada

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# Audit Highlights



Highlights of Legislative Auditor report on the Office of Energy issued on February 2, 2012.  
Report # LA12-13.

## Background

The Office of Energy (Office) is responsible for implementing the Governor's energy policy and serving as the State's point of contact with the U.S. Department of Energy (DOE). The Office administers grants and contracts that encourage conservation and energy efficiency, the development and utilization of Nevada's renewable energy resources, and the promotion of economic development. It facilitates cooperation between key stakeholders and leads initiatives to attract energy related businesses to Nevada. The Office is also involved in several activities including developing energy plans, energy policy development and implementation, technical assistance, education, and public information. The agency is part of the Office of the Governor, and is located in Carson City.

## Purpose of Audit

The purpose of this audit was to: (1) determine if the Office complied with State Energy Program (SEP) Formula and SEP ARRA grant requirements, (2) evaluate the Office's energy reduction planning and project selection processes, and (3) evaluate performance measures including the reliability of reported results. Our audit focused on grant compliance and energy reduction planning and project selection from July 2009 through December 2010, and included follow-up work on project selection and grant expenditures through August 2011. The audit also focused on performance measures and reported results for fiscal year 2010 and projections for 2011.

## Audit Recommendations

This audit report contains five recommendations to improve grant oversight including subrecipient reporting and on-site monitoring. In addition, five recommendations address energy reduction planning and project selection. Finally, four recommendations were made to improve the reliability and effectiveness of performance measures.

The Office accepted 12 recommendations and rejected 2 recommendations.

## Recommendation Status

The Office's 60-day plan for corrective action is due on April 26, 2012. In addition, the six-month report on the status of audit recommendations is due on October 29, 2012.

# Office of Energy

## Office of the Governor

## Summary

The Office can improve its oversight of energy grants. Periodic reports from subrecipients were infrequent and unsupported. When reports were provided, information was not always complete or reliable. In addition, the Office has not developed a site monitoring schedule to ensure projects comply with grant requirements. Furthermore, grant payments to subrecipients were not always managed according to federal regulations and guidance.

The Office's energy reduction planning and project selection processes can be improved. A plan to reduce grid-based energy consumption in Executive Branch agencies has not been prepared as required by statute. As a result, the State may have missed opportunities to further reduce energy costs in state buildings over the past 6 years. In addition, an energy plan would have been a useful tool when allocating ARRA funding. Finally, the Office needs to ensure that planned solar projects at state agency sites adequately protect State interests and result in lower energy costs.

The Office can take steps to improve the reliability and effectiveness of its performance measures. Current practices for developing and monitoring performance measures make it difficult to assess performance. Additionally, the Office has changed its measures in each of the last three Executive Budgets, making it difficult to assess performance over time. Finally, we could not verify the reliability of measures because documentation supporting reported results was not maintained.

## Key Findings

Grant subrecipients did not always provide the Office with required quarterly reports. We found only 10 of 78 required quarterly reports were submitted to the Office from June 2010 through March 2011. When subrecipients did provide information, it was not always adequately supported. As a result, information generated by the Office and reported to the federal government was not always reliable. (page 5)

The Office has not developed a site monitoring schedule for ARRA funded projects to define when monitoring visits should take place. Office staff visited 15 of 119 projects that were subject to inspection during our audit period. Aside from one series of site visits, conducted jointly with DOE staff, on-site monitoring was typically informal and not well documented. (page 7)

The Office complied with other grant requirements reviewed. In addition, the Office was timely at committing funds to qualified projects and promoting projects that leveraged grant funds. (page 9)

The Office has not prepared a plan requiring Executive Branch agencies to reduce grid-based energy purchases for state-owned buildings by 20% by 2015, as required by state law. Additionally, required biannual reports on the general progress toward energy reduction in state buildings have not been provided to the Legislative Commission. During our audit, the Office began taking some steps to develop a plan. (page 11)

The State recently contracted with a vendor to allow state agencies to enter into agreements to build vendor owned solar energy systems. The vendor will pay costs to construct, operate, and maintain solar energy systems, and sell energy generated from the solar panels to state agencies. Savings or losses will not be known for many years because the contracts to purchase power from the vendor may last 20 years or more. Therefore, careful review is needed before entering into agreements with the vendor. (page 18)

The Office can take steps to improve the process for evaluating Request For Proposals. We found a wide range in scores among evaluators when scoring the same proposal. Additionally, evaluators did not always score all evaluation criteria areas. As a result, weaknesses in the evaluation process could impact applicants selected. (page 22)

The Office's practices for developing and maintaining performance measures make it difficult to assess performance. Most goals lack corresponding performance measures to assess progress towards achieving goals. In addition, some measures are not worded clearly enough to understand what is being measured. Finally, the Office has frequently changed its measures, making it difficult to assess performance over time. (page 26)

The reported results for most performance measures were not reliable for two reasons. First, documentation supporting reported results was not always retained. Second, when the Office retained supporting documentation, results were not always reported accurately. (page 30)

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This report contains the findings, conclusions, and recommendations from our completed audit of the Office of Energy. This audit was conducted pursuant to the ongoing program of the Legislative Auditor as authorized by the Legislative Commission. The purpose of legislative audits is to improve state government by providing the Legislature, state officials, and Nevada citizens with independent and reliable information about the operations of state agencies, programs, activities, and functions.

This report includes 14 recommendations to improve the oversight of federal grants, energy reduction planning and project selection, and the reliability and effectiveness of performance measures. We are available to discuss these recommendations or any other items in the report with any legislative committees, individual legislators, or other state officials.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Paul V. Townsend".

Paul V. Townsend, CPA  
Legislative Auditor

January 23, 2012  
Carson City, Nevada

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# Introduction

## Background

The Office of Energy (Office) is responsible for implementing the Governor's energy policy and serving as the State's point of contact with the U.S. Department of Energy (DOE). The Office administers grants and contracts that encourage conservation and energy efficiency, the development and utilization of Nevada's renewable energy resources, and the promotion of economic development. It facilitates cooperation between key stakeholders and leads initiatives to attract energy related businesses to Nevada. The Office is also involved in several activities including the development of energy plans and policy, technical assistance, education, and public information.

The mission of the Office is to ensure the wise development of the state's energy resources in harmony with local community economic needs and Nevada's natural resources to lead the nation in renewable energy production, energy efficiency and conservation, and exportation. The agency is part of the Office of the Governor and is located in Carson City.

The Office administers and ensures that certain 2009 American Recovery and Reinvestment Act (ARRA) programs are implemented to support job creation, reduce carbon emissions, and promote renewable and energy efficiency projects. Since April 2009 the Office has received more than \$52 million in federal grant funds from the DOE, including about \$47 million in ARRA funding. Grants have funded energy efficient projects in state buildings, schools, cities, and counties; the development of energy plans; identifying transmission line routes; and rebates to homeowners purchasing more energy efficient appliances. Grant funds were also used to establish a revolving loan program to provide low interest loans to businesses and homeowners constructing renewable energy projects. More than \$11 million in

loans have funded wind, solar, hydroelectric, geothermal, and biomass projects.<sup>1</sup>

Exhibit 1 provides a listing of DOE grants administered by the Office, including the grant period to spend funds and funding amounts.

**U.S. Department of Energy Grant Funds Administered by the Office of Energy** **Exhibit 1**

Grant	Grant Period	Funding Amount
State Energy Program (SEP) – ARRA	Apr 2009 – Apr 2012	\$34,714,000
Energy Efficiency & Conservation Block Grant (EECBG) – ARRA	Sep 2009 – Sep 2012	9,593,500
Appliance Rebate – ARRA	Aug 2009 – Feb 2012	2,495,000
Energy Assurance Planning – ARRA	Aug 2009 – Aug 2012	438,573
<b>Total ARRA Grants</b>		<b>\$47,241,073</b>
SEP Formula Grant – Other Grant *	Ongoing	192,000
Nevada Retrofit Initiative (NRI) – Other Grant	Oct 2010 – Sep 2013	5,000,000
<b>Total Other Grants</b>		<b>\$ 5,192,000</b>
<b>Total DOE Grants</b>		<b>\$52,433,073</b>

Source: Office grant records.

\* Requires 20% state match. \$192,000 is fiscal year 2011 grant award.

Appendix A provides additional information on grants including approved funding by grant project, expenditures for fiscal years 2010 and 2011, and remaining funding.

ARRA funding has significantly increased the Office's responsibilities, staffing, and expenditures. Exhibit 2 shows Office staffing and expenditures for fiscal years 2009 to 2013.

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<sup>1</sup> NRS 701.030 defines biomass as organic matter available on a renewable basis including: agricultural crops, wastes, and residues; wood and wood wastes and residues; animal wastes; municipal wastes; and aquatic plants.

**Office Staffing and Expenditures  
Fiscal Years 2009 – 2013**

**Exhibit 2**

<b>Fiscal Year</b>	<b>Staffing</b>	<b>Expenditures</b>
2009	8	\$ 677,033
2010	14	11,781,049
2011	15	27,421,113
2012	16	5,055,210*
2013	10	\$ 4,389,401*

Source: Office and state financial records and Legislatively Approved Budget.

\* Budgeted expenditures less reserves.

Exhibit 2 shows staffing increased from 8 staff in fiscal year 2009 to 16 in 2012, and expenditures have increased from about \$700,000 to more than \$27 million in 2011. The Office will experience a decrease in staffing and expenditures as ARRA grant funding ends.

In January 2011 a new Office Director was appointed. In addition, Senate Bill 426 of the 2011 Legislative Session transferred additional responsibilities to the Office. Senate Bill 426 eliminated the Renewable Energy and Energy Efficiency Authority (REEEA) and the position of Nevada Energy Commissioner. As part of this change, the Office of Energy and its Director are required to assume the following duties and responsibilities of those entities including:

- Adopting the current version of the International Energy Conservation Code.
- Granting partial property sales and use tax abatements to qualifying renewable energy and transmission facilities.
- Managing the New Energy Industry Task Force and Local Government Panel on renewable energy and energy efficiency.
- Adopting regulations for energy efficient lighting sold in Nevada.

Senate Bill 426 also transferred responsibility for tracking energy usage in buildings occupied by state agencies from the Department of Administration's Buildings and Grounds Division to



the Office of Energy. These changes will centralize responsibility for developing energy plans and tracking usage within the Office.

## **Scope and Objectives**

This audit is part of the ongoing program of the Legislative Auditor as authorized by the Legislative Commission, and was made pursuant to the provisions of NRS 218G.010 to 218G.350. The Legislative Auditor conducts audits as part of the Legislature's oversight responsibility for public programs. The purpose of legislative audits is to improve state government by providing the Legislature, state officials, and Nevada citizens with independent and reliable information about the operations of state agencies, programs, activities, and functions.

Our audit focused on the Office of Energy's compliance with the State Energy Program (SEP) Formula grant (CDFA 81.041) and SEP ARRA grant (CDFA 81.041) requirements, and the energy reduction planning and project selection processes. Our testing focused on activities from July 2009 through December 2010, and included follow-up work on project selection and grant expenditures through August 2011. We also reviewed performance measures and reported results for fiscal year 2010 and projections for 2011. Our audit objectives were to:

- Determine if the Office complied with SEP Formula and SEP ARRA grant requirements.
- Evaluate the Office's energy reduction planning and project selection processes.
- Evaluate performance measures including the reliability of reported results.

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# Grant Oversight Can Be Improved

The Office can improve its oversight of energy grants. Periodic reports from subrecipients were infrequent and unsupported. For example, only 10 of 78 required quarterly reports were provided by subrecipients. When reports were provided, information was not always complete or reliable. In addition, the Office has not developed a site monitoring schedule to ensure projects comply with grant requirements. Site visits, other than those made with the U.S. Department of Energy's (DOE) staff, were informal, not always documented, and did not follow Office requirements. Furthermore, grant payments to subrecipients were not always managed according to federal regulations and guidance. Although grant oversight can be improved, we found several areas where the Office did a good job including obligating grant funds timely and establishing a revolving loan program.

## Grant Reporting Infrequent and Unsupported

The Office did not ensure grant subrecipients provided required quarterly reports. When subrecipients did provide information, it was not always adequately supported. As a result, information generated by the Office and reported to the federal government was not always reliable.

### Reports From Subrecipients Not Always Provided

Grant subrecipients did not always provide the Office with required quarterly reports. We found only 10 of 78 required reports were submitted to the Office for the quarterly time periods ending June 2010 through March 2011. These included 1 of 64 required reports from school districts, and 9 of 14 reports from cities and counties.

Policies, contracts, and grant provisions require subrecipients to provide the Office with quarterly reports on grant activities. The Office uses information from subrecipients to prepare reports to

the DOE on statewide activities. Subrecipient reports should include information on projects, funds expended, jobs created, and other ARRA requirements. In addition, supporting documentation should be submitted.

Office staff did not ensure subrecipients submitted quarterly reports on grant activities. In the absence of reports, staff obtained information from subrecipients through phone calls. Staff did not obtain supporting documentation from subrecipients for the information reported over the phone. Therefore, the Office did not have documentation available to verify the accuracy of subrecipient information.

**Program Information Generated by the Office Not Reliable**

Information generated by the Office to monitor progress toward meeting program objectives was not reliable for three reasons. First, the Office relied on unsupported information from subrecipients. Second, staff made data entry and math errors when computing information and preparing reports for DOE. Third, information was not reviewed for accuracy. We found information generated by the Office included the following weaknesses:

- Hours Worked on ARRA Projects Not Accurate: The Office did not report 1,840 hours worked on state building upgrades during the first three quarters of 2010. In addition, more than 6,000 hours worked on school building upgrades were reported in the wrong quarterly reporting period because school districts did not submit reports timely.
- Renewable Energy Generated Not Supported: The Office reported 6,636 megawatt hours of energy was generated from ARRA funded renewable energy projects (e.g., solar, wind). Staff could not provide documentation to support this figure.
- Reported Energy Savings Incomplete and Unsupported: Complete information on energy saved from ARRA renewable energy projects was not reported. For example, the Office did not report the amount of energy saved in megawatt hours from state buildings, schools, or traffic signals and lighting upgrade projects. The Office also did not report dollar savings from the revolving loan program

and school upgrades. In addition, for information reported to DOE, staff could not provide supporting documentation to verify its accuracy.

- Reported Per Capita Energy Consumption Figures Incorrect: The Office incorrectly used per capita population figures for the entire United States rather than Nevada figures when calculating the reduction in energy consumption. As a result, the Office reported energy consumption per capita was flat when consumption per capita in Nevada dropped by 15% from 1990 to 2008.

## **Grant Monitoring Not Adequate**

Office monitoring of grant projects is not adequate. Specifically, the Office has not developed a site monitoring schedule to define when monitoring visits should take place. Aside from one series of site visits conducted jointly with DOE staff, site monitoring was typically informal, not documented, and did not follow Office policy. In addition, information used to monitor progress toward meeting DOE objectives was not always reliable. Finally, grant payments did not always comply with federal regulations and guidance.

### **Monitoring Schedule Not Developed**

The Office has not developed a site monitoring schedule for ARRA funded projects to define when monitoring visits should take place. A monitoring schedule would help the Office more effectively and efficiently manage subgrant activities.

Federal regulations require the State to manage the day-to-day operations of grant and subgrant supported activities. This includes monitoring each program or activity to ensure compliance with federal requirements and the achievement of performance goals. Office policy requires monitoring activities to be in concert with a monitoring schedule developed by staff. Proper scheduling will help ensure that site visits target high risk projects and will be conducted early enough so the project can benefit from any suggested changes.

### **On-Site Monitoring Can Be Improved**

The Office of Energy can improve its monitoring visits to project sites. Aside from one series of site visits, conducted jointly with DOE staff, on-site monitoring was informal and not always

documented. Although policies have been developed to guide monitoring visits, staff did not always follow Office requirements.

Office staff visited 15 of 119 projects that were subject to inspection during our audit period. Of the 15 on-site visits, 13 were made jointly with DOE staff over a 4-day period in southern Nevada. The remaining two visits, conducted solely by Office staff, covered one small project. Although staff said they visited eight additional sites, they did not document when the visits took place, what areas were reviewed, and the results of the reviews.

The 13 joint visits, initiated by DOE, serve as a model for effective on-site monitoring. The visits were well planned to include a cross-section of projects, conducted in accordance with standard procedures using appropriate checklists, and resulted in the issuance of a written summary report. As a result of the visits, staff identified a solar project that did not comply with ARRA Buy American provisions. The finding resulted in the solar panels being replaced at no cost to the program.

Office policy requires staff to conduct on-site visits and provides tools to help guide staff and document work performed. These requirements include a monitoring schedule to plan and track site visits. In addition, policy requires a monitoring checklist be prepared that identifies areas for review including overall project management, personnel and procurement, and grant compliance. Finally, after the visit is completed staff should prepare a monitoring report to document the results of the visit. As the Office increases its monitoring focus, staff should follow Office policy and best practices learned through the DOE visits.

### **Grant Funds Can Be Better Managed**

Grant payments were not always managed according to federal regulations and guidance. We found some subrecipients received advance payments before the money was needed. Another subrecipient, who received reimbursements, did not request the funds timely.

- Advance Payments: Local governments received advance payments, some for as much as 100% of the project awards, even though they were not ready to spend the

funds. For example, in May 2010, the Office advanced \$358,600 to the City of North Las Vegas for energy efficiency projects. On August 1, 2011, the City of North Las Vegas reported that it had not spent the funds. We found other local governments did not spend funds timely. Federal regulations allow advance payments if the subrecipient maintains procedures to minimize the time between the transfer of the funds and their disbursement. In addition, subrecipients receiving advance payments may owe money to the federal government. Federal regulations require that subrecipients remit to the federal government interest earned on advances drawn in excess of disbursement needs.

- Payments for Reimbursement: One subrecipient, paid by reimbursement, did not submit claims timely. Clark County School District spent its entire project cost of \$1.4 million over a 1-year period before requesting reimbursement from the Office. DOE recommends, when making payments on a reimbursement basis, that subrecipients provide invoices every 2 weeks, at a minimum.

Following payment rules and guidelines helps ensure that grantees spend their project funds in accordance with the programs' payment targets and applicable laws and regulations. This can help accelerate projects, advance program goals, and meet ARRA objectives.

## **Office Complied With Other Grant Requirements**

The Office complied with other grant requirements we reviewed. These requirements included both mandatory and allowable grant activities. In addition, the Office was timely at committing funds to qualified projects. Finally, the Office was effective at promoting projects that leveraged grant funds.

### **Compliance With Grant Activities**

The Office complied with DOE requirements for mandatory and allowable grant activities. We compared Office grant activities to 6 mandatory and 16 allowable activities that promote energy efficiency programs. Some of these included establishing mandatory light efficiency standards for public buildings, incorporating energy efficiency criteria into procurement procedures, and educating the public on energy conservation measures. We also verified that grant funds were not spent on unallowable activities.

### **Committing Funds Timely**

The Office was recognized by DOE as among the best states at committing grant funds timely. Our review of ARRA funds showed that all funds were obligated by September 30, 2010, the date that the federal government required states to commit ARRA funds. Also, the Office was commended by DOE as the first state to fully expend their Revolving Loan Funds.

### **Leveraging Grant Funds**

The DOE encouraged projects that achieve a high level of leveraging or extend the impact of the funds. Among these is the \$11.4 million Revolving Loan Fund, which extends the impact of grant funds by using existing loan payments to fund new loans. In addition, several projects qualified for energy rebates that were used for renewable energy and energy efficient projects. Overall, grant projects generated several million dollars in rebates for additional energy projects.

### **Recommendations**

1. Ensure grant recipients provide required reports timely, including supporting documentation.
2. Implement controls to help ensure program information is reliable, including appropriate documentation, accurate and timely recording of transactions and events, and supervisory review.
3. Develop and implement a monitoring schedule for grant funded projects to help ensure compliance with grant requirements.
4. Ensure monitoring visits to project sites are adequately documented.
5. Follow federal regulations and guidance for grant payments, including advances, reimbursements, and remittance of interest.

# Energy Reduction Planning and Project Selection Processes Need Improvement

The Office's energy reduction planning and project selection processes can be improved. A plan to reduce grid-based (electricity) energy consumption in Executive Branch agencies has not been prepared as required by statute. As a result, the State may have missed opportunities to further reduce energy costs in state buildings over the past 6 years. In addition, an energy plan would have been a useful tool when allocating ARRA funding. A plan could have improved the allocation of ARRA funds for energy upgrades in state buildings. Finally, the Office needs to ensure that planned solar projects at state agency sites adequately protect State interests and result in lower energy costs.

## State Energy Plan to Reduce Grid-Based Energy Usage Not Prepared

The Office has not prepared a plan to reduce grid-based energy usage in Executive Branch agencies, or provided the Legislative Commission with required reports addressing energy usage. Recently, the Office began taking some steps to develop a plan. These efforts include working with a vendor and state agencies to identify energy usage in state buildings. In addition to developing a plan to reduce grid-based energy costs, the Office should address reducing other types of energy consumption such as heating buildings.

### State Law Requires Plan to Reduce Grid-Based Energy Usage

NRS 701.215 requires the Office Director to prepare a plan requiring Executive Branch agencies to reduce grid-based energy purchases for state-owned buildings by 20% by 2015.<sup>2</sup> Although this law became effective in 2005, staff indicated a plan was not developed because of a lack of resources. However, based on

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<sup>2</sup> The complete text of NRS 701.215 is presented in Appendix B.



our review of state budget documents and discussions with staff, the Office did not request additional resources in its 2007 and 2009 biennial budget requests.

During the 2009 Legislative Session, Office staff testified they lacked the resources and expertise to develop a plan. Therefore, the Legislature passed Senate Bill 358 to amend NRS 701.215. This amendment authorized the use of ARRA funding to assist with developing a plan including the use of independent consultants. Despite this amendment, an energy reduction plan has not been prepared.

In addition, Senate Bill 358 required the Office to file biannual reports with the Legislative Commission indicating the general progress towards energy reduction in state buildings. Also, to identify any state agency that fails to cooperate with the Office in the design and implementation of the plan. However, the Office has not filed biannual reports with the Legislative Commission. Providing biannual reports would be beneficial. Reports would provide the Office with the opportunity to update the Legislative Commission on progress made towards developing an energy reduction plan. The Office could also advise the Commission of challenges and potential obstacles to completing a plan.

### **Office Is Taking Steps to Reduce Grid-Based Energy Consumption**

Although a plan has not been prepared, the Office is taking steps to help state agencies reduce energy consumption. These steps include: (1) using ARRA funds to upgrade more than 100 state buildings with energy efficient lighting, and heating and air conditioning upgrades; (2) working with a vendor to construct solar energy systems at specific agency sites; and (3) working with a vendor to identify annual energy consumption in state buildings since 2005.

The Office allocated \$7 million in ARRA funding to provide energy efficient upgrades to state buildings. Working with the State Public Works Board (PWB) the Office identified 124 projects. These projects included 112 energy efficient lighting upgrades, 8

heating and air conditioning upgrades, and 4 solar energy systems.

The Office also solicited vendors to build renewable energy systems at state agency sites. The vendor selected will construct, operate, and maintain solar energy systems at no cost to the State. State agencies will contract with the solar company to purchase electricity generated from the solar panels. The Office indicated these projects would help the State meet a portion of its goal to reduce grid-based energy consumption by 20% by 2015.

The State has taken other steps to identify and reduce energy consumption. The Office received IFC approval for about \$204,000 in ARRA funding to contract with a vendor to develop a database to track energy usage and costs in state buildings. To assist the vendor, the Office requested a variety of data from state agencies in March 2011 on buildings, square footage, and utility information.

### **Comprehensive Plan to Reduce Energy Consumption in State Buildings Is Needed**

The Office should comply with NRS 701.215 by developing a comprehensive plan to reduce energy consumption. In addition to tracking grid-based electrical usage, the plan should include tracking natural gas and energy consumption from other fossil fuels such as propane and oil. The plan should also address tracking the energy usage from renewable sources.

The energy reduction plan should include a variety of strategies to reduce energy consumption in state buildings such as:

- **Behavioral Changes**: Including setting thermostats in state buildings at specific temperatures, adjusting thermostats when buildings are not occupied, and emphasizing turning off computers and lights when not in use.
- **Energy Performance Contracting**: Provides a method for state agencies to enter into a contract with a qualified vendor for an energy evaluation and recommendations to improve efficiency. The vendor would make installations to improve energy efficiency and be paid over time from energy savings.

- Energy Efficient Lights, Heating, and Air Conditioning: Including Light Emitting Diode (LED) lighting, and more efficient heating and air conditioning units.
- Energy From Renewable Sources: Energy generated by solar, wind, geothermal, waterpower, and biomass.
- Pursuing Sources of Funding: Rebates for energy efficient projects including lighting and solar energy systems, and federal grants.

## **Energy Plan Could Have Improved the Allocation of ARRA Funds**

An energy reduction plan could have helped the Office better allocate ARRA funding. Without an energy plan, the State focused on spreading ARRA funding around to many state agencies rather than targeting funds based on specific state priorities. As a result, some projects may take many years for savings from upgrades to recover costs.

The Office allocated \$7 million in ARRA funding for energy efficient upgrades in state buildings. Without a plan, several months were spent developing a list of projects. As a result, projects were not approved until 10 months into the 3-year grant period. In addition, the payback for some building projects will take many years to achieve. For example, 16 of 124 (13%) state building projects had an estimated payback period ranging from 10 to 120 years. Funding for some of these projects may have been better spent on other projects with a faster payback.

### **State Building Upgrades Delayed Until List of Projects Prepared**

State building upgrades were delayed several months until a list of projects was prepared. The DOE authorized the use of ARRA funding on April 30, 2009. In August 2009, the IFC approved the use of ARRA funding and the Public Works Board (PWB) was asked to assist the Office with the state building upgrades. On August 21, 2009, the Office director and PWB manager issued a memorandum briefly explaining the program and requesting agencies provide a listing of the three most energy inefficient buildings, or buildings agencies believed would be candidates for energy upgrades.

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Between August 2009 and February 2010, PWB staff and its consultant visited and assessed potential state buildings for upgrades. From the information collected on state buildings, agency requests, and discussion with the Office, the PWB assembled a list of 124 potential building upgrades. The list included 112 lighting upgrades, 8 heating and air conditioning upgrades, and 4 solar energy projects. The primary goal for the 124 projects was best or quickest payback. Other goals included using renewable resources, utilizing more efficient lighting, and upgrading heating and air conditioning systems. The Office director approved these projects on March 2, 2010.

About 6 months was spent developing a list of energy efficient upgrades and projects were approved 10 months into the 3-year grant period. As a result, projects may not be completed before the deadline to spend ARRA funding. An energy plan could have identified the most efficient projects, reduced the time spent developing a list of projects, and provided more time to complete projects.

In April 2011, the PWB estimated between \$500,000 and \$1 million of the original \$7 million allocated for building upgrades may be left over after the original 124 projects are completed. To spend the remaining funding PWB proposed an additional 129 projects, mostly lighting. The PWB estimated the time needed to complete these additional projects including design, contracting, construction, and contingency will take about 1 year. The Office approved these 129 projects on May 4, 2011. The deadline to spend ARRA funds is April 30, 2012.

In addition, the Office has contracted with a vendor to conduct an energy assessment on completed building upgrade projects. The purpose of the assessment is to verify energy savings achieved through building upgrades. Nearly \$84,000 in ARRA funding was allocated for the assessment. However, because of delays in selecting and completing projects the vendor may not have enough time to assess energy savings for all projects before the grant deadline.

### Projects Selected May Not Provide the Best Payback

Some projects selected for state building upgrades may not provide the best payback. The Office's primary goal for building upgrades was projects with the best payback. From the original 124 projects approved in March 2010, we identified 16 (13%) with payback times of 10 years or more. These projects were estimated to cost \$3.4 million, or 49% of the \$7 million allocated for building upgrades. Exhibit 3 shows the 16 projects along with the estimated cost, savings, and payback period.

### Estimated Payback Period for Selected Projects

### Exhibit 3

Agency	Project Name	Project Description	Estimated Cost	Estimated Saving Per Year	Payback Period in Years
1. Conservation	HQ Welding Shop	Lighting Upgrade	\$ 1,440	\$ 149	10
2. Governor	Mansion North Hallway	Lighting Upgrade	13,757	1,419	10
3. Cultural Affairs	Indian Hills Warehouse	Lighting Upgrade	30,655	3,159	10
4. Wildlife	Hatchery Raceway Shelter	Lighting Upgrade	105,720	10,793	10
5. Supreme Court	Parking Garage	Lighting Upgrade	267,540	21,865	12
6. Higher Education	Humanities Building – UNLV	HVAC Control System	200,000	14,115	14
7. Attorney General	Attorney General's Office	Lighting Upgrade	330,000	18,955	17
8. Administration	Motor Pool	Lighting Upgrade	12,000	552	22
9. Several	State Office Building	Lighting Upgrade	111,900	4,841	23
10. Several	State Office Building	Replace HVAC	218,040	8,175	27
11. Motor Vehicles	DMV – Henderson	Solar	300,000	7,653	39
12. Several	Sawyer Building	Solar	484,197	9,359	52
13. Cultural Affairs	Library and Archives	Solar	352,549	5,353	66
14. Supreme Court	Parking Garage	Solar	380,000	5,353	71
15. Higher Education	Applied Technology – TMCC	Replace HVAC	400,000	4,111	97*
16. Motor Vehicles	DMV – Henderson	Replace HVAC	225,000	1,868	120*
<b>Totals</b>			<b>\$3,432,798</b>	<b>\$117,720</b>	<b>29**</b>

Source: Public Works Board.

\* The decision to replace the HVAC systems was not based on the payback period. These HVAC systems were at the end of their useful life. The State was able to replace the systems using AARA funds instead of state funds.

\*\*  $\$3,432,798 / \$117,720 = 29$ .

Exhibit 3 shows the 16 projects with a payback ranging from 10 to 120 years, and an average of 29 years. Because of the long payback, it may have been more cost effective to spend ARRA funding on more beneficial projects. For example, many lighting upgrades cost considerably less money and have a payback of 5 years or less. However, in some cases, projects such as heating

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and air conditioning (HVAC) upgrades, it may have been in the State's best interest to use ARRA funds. HVAC units were at or beyond their service life and would eventually need replacement. ARRA funding provided the State with the opportunity to replace these units without using state monies.

As shown in Exhibit 3, the Office approved 4 solar energy projects among the 124 projects selected (numbers 11-14). A decision was made to pick two locations in both northern and southern Nevada visible to the public for solar panels. Solar projects were constructed at the Supreme Court parking garage<sup>3</sup> and State Library and Archives Building in Carson City, the Henderson DMV building, and the Sawyer Building in Las Vegas. Although solar projects comprised 4 of 124 (3%) projects, the estimated cost was about \$1.5 million or 22% of total funding for building upgrades.

Several changes were made to the solar projects after the original estimates made in February 2010. First, bids for both the Supreme Court parking garage and Henderson DMV building came in lower than originally estimated. Second, the Office decided to increase the number of solar panels for both the Sawyer Building and the State Library and Archives Building projects. Third, the State received rebates from the power company for constructing solar projects as part of the state's renewable energy program.

Revisions made to solar projects changed the cost and payback period for the projects. Although the payback period for each project was reduced, the payback time for some projects may exceed the life of the facility where the panels are located. In addition, cost calculations do not include maintenance and repair costs for panels and electrical components. Exhibit 4 shows the four solar projects with revised costs and payback period.

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<sup>3</sup> The parking garage located behind the Legislative Building is a Supreme Court facility and is referred to throughout this report as the Supreme Court parking garage.

**Solar Projects With Revised Cost From Project Changes****Exhibit 4**

Agency	Project Name	Estimated Cost	Revised Cost	Saved Per Year	Revised Payback Period in Years	Solar Rebate
Motor Vehicles	DMV – Henderson	\$ 300,000	\$ 244,141	\$ 7,653	32	\$142,325
Several	Sawyer Building	484,197	588,000	17,127	34	274,000
Cultural Affairs	Library and Archives	352,549	369,000	10,706	34	300,540
Supreme Court	Parking Garage	380,000	259,904	5,353	49	149,386
<b>Totals</b>		<b>\$1,516,746</b>	<b>\$1,461,045</b>	<b>\$40,839</b>	<b>36*</b>	<b>\$866,251</b>

Source: Auditor analysis of Office records.

\* Average payback for projects.

Exhibit 4 shows solar rebates totaling \$866,251. Rebates are paid for by ratepayers in their monthly electrical bills as renewable energy charges. Additionally, the Office retains rebates for future renewable energy or energy efficiency projects.

The lack of an energy plan may result in two separate solar projects constructed at the Sawyer Building in Las Vegas. The Office spent about \$588,000 in ARRA funds to construct a 60 kilowatt solar project at the Sawyer Building.<sup>4</sup> The payback for this project is 34 years. In addition to this project, the State has contracted with a vendor, GA SNC Solar, to construct solar energy systems at state agencies. The vendor has proposed to build a 1.211 megawatt system at the Sawyer Building, more than 20 times the size of the state project built with ARRA funds. The vendor will pay all costs to construct, operate, and maintain the system and then sell electricity to state agencies. If both projects are built, it may have been more cost effective to spend ARRA funds on more beneficial projects.

### **Vendor Owned Solar Projects Can Benefit the State but Greater Scrutiny Is Needed**

The State recently contracted with a vendor to allow state agencies to enter into agreements to build vendor owned solar energy systems. The primary benefits from these systems are to help the environment by reducing grid-based energy use, create jobs, and potentially reduce state energy costs. However, savings or losses will not be known for many years. Because the vendor owns the systems, agencies pay the vendor for electricity usage instead of the power company. The contracts to purchase power

<sup>4</sup> 1,000 watts equals a kilowatt and 1,000 kilowatts equals a megawatt.

from the vendor may last 20 years or more. Therefore, careful review is needed before entering into agreements with the vendor.

### **Solar Energy Systems Can Benefit the State**

On March 1, 2011, the State contracted with a vendor, GA SNC Solar, to allow the construction of solar energy systems at state agencies. The purpose of the contract is to reduce the State's dependence on grid-based electrical energy, help stimulate the renewable energy sector, and create jobs. The contract is available to all state agencies including the Nevada System of Higher Education, the Legislative and Judicial Branches, and political subdivisions. The 4-year contract gives the vendor the first opportunity to contract with state agencies to build solar energy systems at agency sites. If an agreement cannot be reached, state agencies may solicit contracts with other renewable energy companies.

The state's Request For Proposal (RFP) identified 40 potential state sites and 15 City of Las Vegas sites for solar panels. In its proposal, GA SNC Solar identified 24 of the 40 state proposed sites as currently feasible for solar energy systems. Exhibit 5 shows the number of sites by agency.

### **Number of Potential Solar Energy Sites by State Agency**

**Exhibit 5**

<b>Agency</b>	<b>Number of Sites</b>
Buildings and Grounds Division	6
University of Nevada, Las Vegas	5
Department of Corrections	4
Department of Health and Human Services	4
Department of Agriculture	2
Department of Motor Vehicles	2
Office of Veterans' Services	1
<b>Total Sites</b>	<b>24</b>

Source: State contract with GA SNC Solar.



GA SNC Solar has begun discussing potential sites, electricity costs, and feasibility with most state agencies with potential sites.<sup>5</sup> The solar company also plans to prepare a cost analysis based on past electricity usage for each site to help determine the size of the solar energy system needed and project viability.

The facility or state agency will pay for all power generated by the solar panels. The agency will enter into a Purchase Power Agreement (PPA) with the solar company, which is similar to a contract and identifies terms and conditions including cost. Construction of solar energy systems will not begin until a PPA is prepared and approved by the Board of Examiners and the Interim Finance Committee. In addition, the Attorney General's Bureau of Consumer Protection plans to review all PPAs to help ensure agreements are in the State's best interest. Finally, the Office of Energy plans to provide strategic and technical expertise to state agencies, monitor the solar company's work, and be a party to all contracts, PPAs, and lease agreements between state agencies and GA SNC Solar.

Agencies will also enter into "net metering" agreements with a power company. Net metering allows power generated by the solar panels in excess of facility needs (e.g., summer, weekends) to be placed on the power grid as a credit to the facility or building. The state agency can then draw electricity (credits) from the power grid at times when demand (e.g., nighttime, winter) exceeds electricity produced by the solar panels.

GA SNC Solar is responsible for all costs to construct, operate, and maintain solar energy systems at state agency sites. The plan is for these systems to provide 100% of the building or facility's electrical energy needs when feasible.

In addition to revenue from generating electricity, several incentives may be available for businesses constructing solar projects. Some of these include:

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<sup>5</sup> See Appendix D for a complete listing of the 24 potential state sites for solar energy systems.

- A 30% federal investment tax credit for construction and solar panel costs.
- A \$4.90 per watt renewable energy rebate from the power company. The \$4.90 per watt applies on systems up to 100 kilowatts for public buildings or \$490,000.<sup>6</sup>
- The solar company generates Portfolio Energy Credits (PECs) by generating electricity from a renewable energy source. The solar company can sell PECs to the power company. The power company uses these credits to help achieve statutory requirements to provide a specific percentage of electrical energy sold in Nevada from renewable sources.

Rebates and energy credits are paid for by ratepayers in their monthly electrical bills as renewable energy charges. Therefore, state agencies, businesses, and citizens pay for rebates and credits that help solar companies provide electricity at prices comparable with grid-based prices.

### **Solar Projects May Benefit State Agencies but Careful Review Is Needed Before Entering Into Agreements**

Contracting with a vendor to construct solar energy projects and sell electricity to state agencies may provide several benefits for the State. First, the cost of building, operating, and maintaining the system will be paid by the vendor. Second, the State should use less grid-based energy. Third, constructing and maintaining solar energy systems will create jobs and additional tax revenue. Fourth, electricity from the solar panels may be cheaper over time than from the grid.

The Nevada National Guard was the first state agency to contract for the development of vendor owned solar projects. Although the Office of Energy was not involved with these projects, the Office and the State can benefit from this past experience. During our audit, the National Guard was helpful in identifying ways to

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<sup>6</sup> Rebates are periodically offered by the utility company based on available funding. Therefore, rebates may not always be available for all projects. The \$4.90 per watt figure applies to fiscal year 2012. The amount paid per watt may change annually and is defined in Nevada Administrative Code 701B.150.

improve the process for other state agencies.<sup>7</sup> These improvements include the following issues that should be addressed before entering into contracts and agreements:

- A thorough cost benefit analysis should be prepared to provide reasonable assurance that solar power will not exceed the cost of grid-based energy over the contract term.
- Ensure planned energy efficiency projects are completed and the impact of these changes included in the cost benefit analysis before construction begins.
- Identify agency staff resources and other project costs the State will incur during the development and construction phases.
- Determine if the State will need the land occupied by the solar panels during the contract term.
- Determine if agencies will use all energy credits during the term of the net metering contract with the utility.

The Office of Energy should ensure the above issues are addressed before the State enters into a contract. The Office should also track energy usage and costs incurred by state agencies from purchasing solar energy and compare them with grid-based energy costs.

## **Process for Selecting Vendors Can Be Improved**

The Office can take steps to improve its process for evaluating Request For Proposals (RFP) information. We found a wide range in scores among evaluators when scoring the same proposal. Additionally, evaluators did not always score all evaluation criteria areas. As a result, weaknesses in the evaluation process could impact applicants selected. Developing policies and procedures along with additional instructions for evaluators should resolve these weaknesses.

The Office uses the RFP process to evaluate and select recipients for the revolving loan program. Although not required, using the RFP process to evaluate loan applicants can be an effective

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<sup>7</sup> See Appendix E for a summary of the National Guard projects.

method to evaluate and identify the best projects. Evaluators used the following factors when evaluating loan applications:

- Job creation as a result of the project.
- Renewable energy generation relative to the cost of the project.
- Reduction of the use of fossil fuels and emission of green house gases.
- Leveraging of additional financial resources and proposed repayment timeframe.
- Readiness of the project to proceed and be constructed within the prescribed timeframes.

Proposals were scored using a 1 to 10 scale, with 1 defined as poor and 10 as excellent. However, evaluators were not given further instructions, which led to inconsistencies when scoring proposals. Exhibit 6 shows the evaluation committee's scoring of project readiness from four revolving loan applications.

**Evaluator's Scores for Project Readiness** **Exhibit 6**  
**Revolving Loan Program Solicitation**

<b>Applicant</b>	<b>Evaluator 1</b>	<b>Evaluator 2</b>	<b>Evaluator 3</b>	<b>Evaluator 4</b>	<b>Range in Scores</b>
A	1	10	7	10	1 – 10
B	5	4	8	10	4 – 10
C	3	5	10	10	3 – 10
D	5	3	2	8	2 – 8

Source: Auditor analysis of evaluator's scores.

Exhibit 6 shows a wide range in scores among evaluators for all four applicants. For example, Applicant A received scores ranging from 1 to 10. Applicant D received scores ranging from 2 to 8. We also found a wide variance in scores for the other factors evaluated and for other loan applicants. In addition, evaluators were instructed to score proposals on a scale ranging from 1 to 10. However, we identified several examples where evaluators gave scores of zero.

Inconsistent scoring was also found on other proposals. The Office solicited proposals for a Portfolio Energy Manager to measure energy savings from state building upgrades. Exhibit 7 shows the scoring for cost on this proposal.

### Evaluator's Scores for Cost Portfolio Energy Manager Solicitation

Exhibit 7

Vendor	Cost	Evaluator 1	Evaluator 2	Evaluator 3
E	\$79,000	6	10	(no score)
F	\$81,000	8	10	(no score)
G	\$83,824	7	10	(no score)

Source: Auditor analysis of evaluator's scores for cost.

Exhibit 7 shows inconsistent scoring. Vendor E had the lowest cost proposal and should have received the highest number of points among the evaluators. However, Evaluator 1 gave vendor E the lowest score among the proposals. Evaluator 2 gave all proposals the same score, negating the differences in cost. Finally, evaluator 3 did not score cost.

We also found other proposals where some evaluators did not score all areas. In addition, the evaluation committee's consensus scoring sheet for one RFP was not retained. Therefore, it is unclear what process the committee followed to select the vendor.

The Office can improve its RFP evaluation process by developing policies and procedures and providing evaluators with additional instructions. Defining each scoring level from 1 to 10 would help avoid inconsistencies in scores. Procedures should also require evaluators to score all evaluation criteria, and consensus scoring sheets and other supporting documentation be retained.

### Recommendations

6. Develop a long-term plan requiring Executive Branch agencies to reduce energy consumption in state-owned buildings.
7. Provide biannual reports to the Legislative Commission as required by statute.

8. Develop a comprehensive solar project checklist including but not limited to the following items: preparing a financial analysis, completing energy conservation measures, verifying solar panel location will not be needed for other purposes during project life, and ensuring net metering credits will be used.
9. Track and record cost savings from solar energy projects by comparing solar costs to grid-based costs.
10. Develop policies, procedures, and instructions to ensure RFP evaluation committee members have clear guidance on the proposal evaluation process.

# Performance Measurement Process Can Be Strengthened

The Office can take steps to improve the reliability and effectiveness of its performance measures. Current practices for developing and monitoring performance measures make it difficult to assess performance. For example, most performance measures are not aligned with goals; therefore, it is unclear whether goals are achieved. Additionally, the Office has changed its measures in each of the last three Executive Budgets, making it difficult to assess performance over time. Finally, we could not verify the reliability of measures because documentation supporting reported results was not maintained. The Office can address these weaknesses by preparing written policies and procedures focusing on developing, monitoring, and reporting performance measures.

## **Current Practices Make It Difficult to Assess Performance**

The Office's practices for developing and maintaining performance measures make it difficult to assess performance. Most goals lack corresponding performance measures to assess progress towards achieving goals. In addition, some measures are not worded clearly enough to understand what is being measured. Finally, the Office has frequently changed its measures, making it difficult to assess performance over time.

### **Measures Are Not Aligned With Office Goals**

Most Office performance measures are not aligned with agency goals. We found seven of nine goals did not have corresponding performance measures. Exhibit 8 shows the Office's nine goals and the number of goals with a corresponding performance measure.

**Number of Office Goals With Corresponding Performance Measures****Exhibit 8**

<b>Goals</b>	<b>Corresponding Measures</b>
1. To expeditiously and effectively allocate ARRA funding to the maximum benefit of Nevada's citizenry and stakeholders.	No
2. To actively solicit and promote energy related industry and business development to improve the State's economy, increase the tax base, and create and retain jobs.	No
3. To promote renewable energy exports and increase build-out of both intrastate and interstate transmission lines.	Yes <sup>(1)</sup>
4. To promote programs and regulations that reduce energy consumption in our State.	No
5. To stimulate the development of the clean energy industry within the State by increasing distributive generation capacity.	No
6. To continue managing and improving the partial tax abatement program for Leadership in Energy Efficiency Design (LEED) Silver level certified buildings.	Yes <sup>(1)</sup>
7. To grant partial abatements of certain property taxes and local sales and use taxes for generation and transmission of renewable energy sources.	No
8. To establish a program that will provide standards for evaluating residential property energy consumption and offer information on improving energy conservation and energy efficiency in residential property.	No
9. To minimize the overall costs to consumers for general purpose energy efficient lighting.	No

Source: Office records.

<sup>(1)</sup> See Appendix F for a list of the Office's 12 performance measures. Measure 9 corresponds to goal 3, and measure 7 corresponds to goal 6.

Exhibit 8 shows only two goals have corresponding measures. Performance measures provide a means to determine whether an agency is achieving its goals. Developing measures for each goal would provide the Office with an effective method to evaluate goals.

The state's strategic planning guidance indicates performance measures provide a method of systemically and objectively tracking an agency's progress towards achieving its goals. In addition, the 2011 Legislature passed Assembly Bill 248 requiring state agencies develop performance measures for each agency goal and submit measures with its biennial budget request.



### Measures Are Not Clearly Worded

Most of the Office's 12 performance measures are not clearly worded.<sup>8</sup> We found measures lacked a clear descriptive title indicating what is being measured. Therefore, some results could be misunderstood and reviewers may not reach an accurate conclusion of Office performance. For example:

- "Dollars per megawatt": From the description it is unclear what specifically is being measured. Office staff indicated this measure addresses the U.S. Department of Energy's goal for ARRA funding to achieve specific energy savings for every \$1,000 spent. Without some explanation the reader would most likely not connect the measure as written with the definition provided by staff. A more descriptively worded measure might be "number of megawatts saved for every \$1,000 spent in ARRA funding."
- "Timely application processing": Office budget information indicates this measure addresses the percent of renewable energy tax abatement applications and related documents processed within the timeline defined in regulation. Regulation requires applications be reviewed not later than 5 days after receipt. A more descriptively worded measure could be "percent of renewable tax abatement applications processed not later than 5 days after receipt."
- "Certificates processed within 120 days of receipt": Office staff explained this measure addresses a requirement to process applications for Leadership in Energy and Environmental Design (LEED) tax abatements within 120 days of receipt. A more descriptive title could be "percent of LEED tax abatement certificates processed within 120 days of receipt," similar to language found in 2010-2011 Executive Budget.

The state's budget instructions recommend performance measures have descriptive titles. Developing more descriptive titles for performance measures would make it easier for managers and other decision makers to evaluate Office performance.

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<sup>8</sup> See Appendix F for a list of the Office's 12 performance measures.

### Performance Measures Frequently Change

The Office has changed its performance measures in each of the last three Executive Budgets. As a result, it is difficult for decision makers to evaluate the Office's performance over time. Exhibit 9 shows performance measures found in the last three Executive Budgets.

#### Office Performance Measures in Executive Budgets Fiscal Years 2008 – 2013

#### Exhibit 9

2008 – 2009	2010 – 2011	2012 – 2013
1. New installed residential & commercial solar photovoltaic capacity (in kilowatts).	Number of diesel oxidation catalyts and closed crankcase ventilations installed on rural school buses.	Recovery Act jobs created.
2. Gallons of displaced fossil (petroleum based) fuels through use of alternative fuel vehicles.	Percent of LEED property tax abatement applications processed within 120 days of receipt, as required by regulation.	Dollars per megawatt.
3. Value of energy grant awards received.	Percent of time quarterly grant progress and financial reports are submitted to grantors on or before due date.	Percent of renewable energy exported.
4. Value of renewable energy and energy efficiency and reliability projects.	Percent of time the Status of Energy in the State of Nevada report is prepared and submitted to the Governor (annually) and the Legislature (odd numbered years) before January 30 <sup>th</sup> .	Capacity of net metered.
5. Savings to building owners through the use of conservation and energy efficient building materials and retrofits.		Capacity of renewable energy generation delivered to Nevada customers (in MWh).
6.		Capacity of energy conserved through energy efficiency and conservation measurements (in MWh).

Source: Executive Budgets fiscal years 2008 – 2013.

Exhibit 9 shows the Office made significant changes to its performance measures in each of the last three Executive Budgets. Therefore, reported results are only available for 1 or 2 years before the measure changes. Frequent changes to

performance measures make it difficult for Office staff, the Governor, and the Legislature to evaluate performance beyond 1 year.

For example, the 2008 and 2009 Executive Budget included a performance measure addressing the new installation of residential and commercial solar photovoltaic capacity in kilowatts. Tracking the increase in solar photovoltaic capacity would be useful information and correlates with the Office's efforts to stimulate development and growth in clean energy. The Executive Budget provided actual results for fiscal year 2006 and projections for 2007, 2008, and 2009. However, the measure was dropped during the biennium and only 1 year of actual results was reported. We found the same was true for other performance measures. The Office would benefit from developing and retaining measures for several years in order to monitor trends, assess performance, and make adjustments to operations.

## **Reported Results Are Not Reliable**

The reported results for most performance measures were not reliable for two reasons. First, documentation supporting reported results was not always retained. Second, when the Office retained supporting documentation, results were not always reported accurately.

We could not verify the reliability of performance information reported in the Executive Budget because supporting documentation was not retained. The Office could not provide documentation supporting reported results for fiscal year 2010 or projected numbers for 2011. The State Administration Manual Section 2512 requires state agencies to retain supporting documentation for 3 fiscal years.

The Office also reported inaccurate information for some measures. For example, for the performance measure "percent of grant applications actually awarded," the Office reported 83% for fiscal year 2010. Supporting documentation provided by staff revealed the percent of grant applications awarded for fiscal year 2010 was 100%.

## **Policies and Procedures Are Not Adequate**

The Office's policies and procedures do not provide adequate guidance to assist staff with measuring performance. Additional procedures addressing developing, monitoring, and reporting performance information are needed to help prevent the problems identified above. The State has provided guidance to assist agencies with developing and managing performance measures.

The Office's policies and procedures manual includes a section on performance measures. However, the information in the manual does not provide enough guidance for staff to effectively monitor performance. The manual contains general information taken directly from the State's Self Assessment Questionnaire designed to assist agencies with preparing internal control procedures.

Although the Office's manual provides general policy statements, detailed procedures are needed to ensure staff have sufficient guidance for developing, monitoring, and reporting performance information. Procedures should include but not be limited to guidance addressing:

- Aligning measures with goals.
- Developing descriptive titles.
- Measuring performance over time.
- Verifying the accuracy of reported results.
- Retaining supporting documentation.

### **Recommendations**

11. Develop performance measures for each goal.
12. Ensure that all performance measures include a descriptive title that clearly indicates what is being measured.
13. Develop and maintain performance measures that can be used to assess performance over time and retain supporting documentation for reported results for at least 3 fiscal years.
14. Revise policies and procedures for performance measures to ensure staff receive adequate guidance and state requirements are followed.

# Appendix A

## Selected DOE Grants Administered by the Office of Energy

Grant	Approved Funding	Expenditures FY 2010	Expenditures FY 2011	Expenditures Totals	Remaining Funding at 6/30/11
<b>SEP ARRA</b>					
Personnel	\$ 1,424,758	\$ 248,185	\$ 351,878	\$ 600,063	\$ 824,695
Administration	1,105,145	110,798	183,568	294,366	810,779
State Buildings	7,000,000	582,694	3,824,958	4,407,652	2,592,348
Schools	9,264,000	-	7,134,220	7,134,220	2,129,780
Traffic Signals	1,500,000	390,600	751,620	1,142,220	357,780
Alternative Fuel	150,000	-	78,841	78,841	71,159
Revolving Loans	11,433,045	-	11,433,045	11,433,045	-
Engineering	1,647,052	-	849,300	849,300	797,752
Building Codes	1,190,000	5,742	219,947	225,689	964,311
<b>SEP ARRA Totals</b>	<b>\$34,714,000</b>	<b>\$ 1,338,019</b>	<b>\$24,827,377</b>	<b>\$26,165,396</b>	<b>\$ 8,548,604</b>
<b>EECBG</b>					
	\$ 9,593,500	\$ 8,350,296	\$ 574,270	\$ 8,924,566	\$ 668,934
<b>Appliance Rebate</b>					
	\$ 2,495,000	\$ 1,236,986	\$ 1,258,010	\$ 2,494,996	\$ 4
<b>Assurance Planning</b>					
	\$ 438,573	\$ 53,741	\$ 92,481	\$ 146,222	\$ 292,351
<b>NRI Grant</b>					
	\$ 5,000,000	N/A	\$ 130,242	\$ 130,242	\$ 4,869,758
<b>Totals</b>	<b>\$52,241,073</b>	<b>\$10,979,042</b>	<b>\$26,882,380</b>	<b>\$37,861,422</b>	<b>\$14,379,651</b>

Source: State financial records.

Note: SEP formula grant excluded.

N/A – Grant not awarded until FY 2011.

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# Appendix B

## NRS 701.215

### **NRS 701.215 Preparation of state energy reduction plan for certain state-owned buildings.**

1. The Director shall prepare a state energy reduction plan which requires state agencies, departments and other entities in the Executive Branch to reduce grid-based energy purchases for state-owned buildings by 20 percent by 2015.

2. In accordance with, and out of any money received pursuant to, the American Recovery and Reinvestment Act of 2009, Public Law 111-5, the Interim Finance Committee may determine an amount of money to be used by the Director to fulfill the requirements of subsection 1.

3. The Director:

(a) Shall use any amount of money provided pursuant to subsection 2 to fulfill the requirements of subsection 1;

(b) May fulfill the requirements of subsection 1 by contracting with one or more qualified independent consultants; and

(c) Shall biannually file reports with the Legislative Commission that:

(1) Indicate the general progress of energy reduction in state buildings; and

(2) Identify any state agency that fails to cooperate with the Director in the design or implementation of the plan prepared pursuant to subsection 1.

(Added to NRS by 2005, 22nd Special Session, 76; A 2009, 1375)

# Appendix C

## Energy Upgrades in State Buildings Number of Projects by Agency and Estimated Cost

<b>Agency</b>	<b>Number of Projects</b>	<b>Estimated Cost</b>
1. Department of Administration	9	\$ 392,295
2. Department of Agriculture	1	26,250
3. Office of the Attorney General	4	366,000
4. Department of Business and Industry	1	27,568
5. Department of Conservation and Natural Resources	11	125,409
6. State Office Building*	2	329,940
7. Department of Corrections	3	74,752
8. Department of Cultural Affairs	9	486,069
9. Department of Education	2	67,429
10. Department of Employment, Training and Rehabilitation	3	112,524
11. Sawyer Building*	4	947,447
12. Office of the Governor	3	110,190
13. Department of Health and Human Services	18	212,828
14. Office of Military	5	480,459
15. Department of Motor Vehicles	6	783,382
16. Nevada System of Higher Education	5	953,023
17. Department of Personnel	1	45,014
18. Peace Officers Standards and Training	2	51,227
19. Department of Public Safety	3	112,409
20. Office of the Supreme Court	4	937,540
21. Nevada Commission on Tourism	1	15,633
22. Department of Transportation	9	93,559
23. Office of Veterans' Services	1	66,846
24. Department of Wildlife	17	182,205
<b>Totals</b>	<b>124</b>	<b>\$6,999,998</b>

Source: Office records.

\* Occupied by several agencies.

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# Appendix D

## Potential State Sites for Solar Energy Projects

### Buildings and Grounds Division

1. Parking Lot for Public Works Board Building
2. Parking Lot for Kinkaid Building
3. Bradley Complex
4. Bryan Building
5. Land East of Bryan Building
6. Sawyer Building

### University of Nevada, Las Vegas

7. SU Canopy
8. Parking Lot West of SEB
9. Architecture Building
10. Lily Fong Building
11. Rogers Administrative Justice Building

### Department of Corrections

12. Lovelock Correctional Center
13. Southern Desert Correctional Center
14. High Desert State Prison
15. Florence McClure Women's Correctional Center

### Department of Health and Human Services

16. Lakes Crossing Center
17. Northern Nevada Adult Mental Health
18. Sierra Regional Center
19. Southern Nevada Adult Mental Health

### Department of Agriculture

20. Sparks Headquarters
21. Weights and Measures Building

### Department of Motor Vehicles

22. Decatur Building
23. Flamingo Building

### Office of Veterans' Services

24. Nevada State Veterans' Home

Source: State contract with GA SNC Solar.



## Appendix E

### Vendor Owned Solar Energy Systems Built at the National Guard

The Nevada National Guard was the first state agency to contract for the development of vendor owned solar projects. The Office of Energy was not involved with the projects; however, the State can benefit by ensuring future projects address areas we identified for improvement. Based on discussions with National Guard personnel, reducing grid-based energy usage was the primary reason for contracting with the solar company. National Guard personnel indicated the federal government encouraged them to develop an independent electrical source. During our audit, the National Guard was helpful in identifying ways to improve the process for other state agencies.

The National Guard entered into an agreement with a vendor, Sierra Solar 1, in September 2009.<sup>9</sup> Sierra Solar constructed panels at three National Guard sites including: 1.4 megawatt system at headquarters in Carson City, and a 600 kilowatt system at two sites in Las Vegas. All three solar energy systems began operating in December 2010. These systems are designed to provide 100% of the National Guard's electricity at the three sites. The National Guard is paying 15 cents a kilowatt hour for the next 20 years with an option to extend the contract for another 15 years.

Our review of the contract and discussions with the National Guard and solar company personnel identified several issues: (1) financial analyses may have overstated potential savings; (2) the National Guard implemented energy conservation steps after the solar project started; and (3) project completion time and staff time was underestimated.

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<sup>9</sup> GA SNC Solar and Sierra Solar 1 are both jointly owned by Gestamp Asetyn Solar (GA Solar) and Sierra Nevada Corporation (SNC).

- Financial Analyses May Overstate Potential Savings. In June 2009, the Department of Administration estimated the National Guard would save about \$2.3 million over 20 years by paying a fixed contract price of 15 cents per kilowatt hour. We identified several problems with the Department's analysis. First, the estimate assumed the solar project would provide 60% of the National Guard's electricity needs at the three facilities. However, the solar project was built to provide 100%. Second, the analysis contains a math error that overstates savings by about \$245,000. Third, when projecting grid-based electrical costs the analysis used a current cost of 14.75 cents per kilowatt hour with an annual increase of 2%. The 2% figure was used to be conservative. The National Guard could not provide support for the 14.75 cents figure.

Based on information in the solar company's proposal the National Guard may save about \$1,158,000 over 20 years, considerably less than the \$2.3 million estimated by the Department of Administration. The solar company reviewed electricity bills and indicated the National Guard was paying about 12 cents a kilowatt hour. Citing U.S. DOE data the solar company indicated grid-based energy prices could increase by 3.3 – 5% annually. Using 12 cents and a 3.3% increase annually over 20 years the National Guard would save about \$1,158,000.

Savings or losses on the National Guard solar project will not be known for many years and will depend on future changes in grid-based energy costs. An April 2011 DOE report indicated electricity prices may decline slightly over the next 25 years. If correct, the National Guard may pay more for solar energy than grid-based. Therefore, based on changes in grid-based energy prices, the National Guard could achieve savings of several million dollars or overpay by several million dollars over the next 20 years.

- Energy Conservation Steps Began After Solar Project Started. The National Guard solar project may be overbuilt because several energy conservation steps occurred after the project was started. The National Guard signed a contract with the solar company in September 2009. In August 2010 the National Guard began taking additional steps to conserve energy. These steps included: installing energy efficient and motion activated lighting, adjusting thermostats, heating and air conditioning upgrades, and placing staff on a 4-day work week. National Guard staff estimated these conservation steps may reduce energy consumption by 40%. Additionally, staff estimated that due to conservation steps the solar energy systems may be overbuilt, generating 10 to 20% more energy than the National Guard can use.

- Staff and Project Time Underestimated. The solar project took longer to complete and more staff time than anticipated. More than 1 year passed from the time contracts were signed until the solar panels were operational. National Guard staff indicated it took longer than anticipated to obtain various approvals and permits, to negotiate a net metering agreement with the power company, and construct and test the system. Additionally, the project took more staff time than expected. Staff indicated about 1.2 FTE positions were devoted to the project during the development and construction phases.

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# Appendix F

## Office Performance Measures

### Performance Measures in the Executive Budget

1. Recovery Act jobs created.
2. Dollars per megawatt.
3. Percent of renewable energy exported.
4. Capacity of net metered.
5. Capacity of renewable energy generation delivered to Nevada customers (in megawatt hours).
6. Capacity of energy conserved through energy efficiency and conservation measurements (in megawatt hours).

### Performance Measures in the Priorities and Performance Budget

7. Certificates processed within 120 days of receipt.
8. Megawatts of renewable energy delivered.
9. Generation and backbone transmission lines.
10. Timely application processing.
11. Loans funded.
12. Percent of grant applications actually awarded.

## Appendix G

### Audit Methodology

To gain an understanding of the Office of Energy, we interviewed staff and reviewed statutes, regulations, policies and procedures significant to the Office's operations. We reviewed financial information, budgets, legislative committee minutes, reports and statistics, performance measures and results, and other information describing Office activities. We also reviewed and monitored energy related legislation during the 2011 Legislative Session. In addition, we reviewed ARRA requirements and identified funding amounts awarded to Nevada and allocated to school districts, cities, counties, and other programs.

To determine if the Office complied with grant requirements, we reviewed and documented Office processes for monitoring progress toward achieving primary ARRA objectives. We verified the reliability of Office calculations and spreadsheets and that calculations conformed to federal guidance. We reviewed grant activities for compliance with 6 mandatory and 16 allowable activities. We also reviewed state accounting records to verify that funds were not expended for unallowable activities. We reviewed whether the Office was effective at selecting projects which leveraged ARRA funds through rebates and other methods. We also determined if the Office obligated ARRA grant funds within the allowable timeframe. Finally, we evaluated if the Office followed federal ARRA guidelines for estimating jobs created and retained.

To verify the Office and subrecipients filed required reports, we determined reporting requirements by reviewing federal regulations, Office policies and procedures, and subrecipient contracts. For the period July 1, 2009 through December 31, 2010, we obtained copies of quarterly reports submitted to the federal government. We then reviewed Office program files to verify that required subrecipient reports were received and

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documented. We met with Office staff to discuss information obtained during testing.

To determine if the Office properly monitored project sites, we reviewed federal guidance and Office policies and procedures to identify monitoring requirements. We then reviewed project files for checklists and other documentation supporting staff visits to project sites and the results. We also met with Office staff to discuss information collected.

To determine if the Office had prepared an energy reduction plan and provided the Legislative Commission with periodic reports, we reviewed statutory provisions and discussed these requirements with staff. We reviewed legislative minutes from 2005 and 2009 Legislative Sessions, and IFC and the IFC's Subcommittee for Federal Stimulus Oversight minutes from the 2009 – 2010 interim. We verified our understanding of these issues through written correspondence with Office management.

To review state building upgrades, we obtained the list of 124 projects and compared these projects with program goals. We examined the four solar projects, identified changes in project costs, savings, and rebates. We discussed the process for selecting projects and changes with Office and PWB staff, and rebate information with representatives of NV Energy. Additionally, we reviewed the progress made to assess energy savings from upgrades.

To evaluate potential benefits through solar projects, we reviewed the RFPs and contracts between the National Guard, the State, and solar company. We discussed solar projects with Office and National Guard staff, and representatives of the solar company. We also reviewed and discussed rebates and other renewable incentives with representatives of NV Energy. Additionally, we analyzed cost studies for the National Guard project and reviewed information on trends in electricity prices.

To evaluate the RFP process, we selected the three RFPs administered by the Office over the past 2 years. For each RFP we reviewed the RFP document, vendor proposals, and the

evaluator's scoring sheets. We reviewed scoring sheets for consistency and completeness. We also discussed evaluation committee scores and scoring criteria with Office staff.

To evaluate performance measures, we obtained copies of results for fiscal year 2010 and projections for 2011. We compared current goals with measures and identified those goals without a corresponding performance measure. We reviewed performance measures listed in the past three biennial budgets. We verified the reliability of performance measures by comparing reported results with supporting documentation. We also discussed goals, performance measures, methodologies, results, and discrepancies with Office staff. In addition, we verified our understanding through written correspondence with Office management.

Our audit work was conducted from November 2010 to September 2011. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

In accordance with NRS 218G.230, we furnished a copy of our preliminary report to the Governor and the Director of the Office of Energy. On December 22, 2011, we met with the Director to discuss the results of the audit and requested a written response to the preliminary report. That response is contained in Appendix H which begins on page 43.

Contributors to this report included:

Lee Pierson  
Deputy Legislative Auditor

Rocky Cooper, CPA  
Audit Supervisor

Gary Kulikowski, CPA  
Deputy Legislative Auditor

# Appendix H

## Response From the Office of Energy

Brian Sandoval  
Governor

STATE OF NEVADA



OFFICE OF THE GOVERNOR  
NEVADA STATE OFFICE OF ENERGY

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January 9, 2012

Paul Townsend  
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401 S Carson Street  
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**RE: Draft Response to LCB Audit Recommendations**

Below are the responses from the Nevada State Office of Energy (NSOE) of the fourteen recommendations made by the Legislative Auditor. The scope of the audit as stated in the report was from July 2009 through December 2010 and included follow up work on Project Selection and Grant Expenditures through August 2011. The report does not fully address actions in that time frame and has a blurry start and end date, so the reader of this response should realize that while the auditor was performing the audit, many of the suggested recommendations were already being implemented as a regular course of action.

**1. *Ensure grant recipients provide required reports timely, including supporting documentation.***

**Response:** Department of Energy (DOE) Project Officers have performed onsite monitoring visits on the NSOE's administration of the ARRA program during the weeks of September 20-24, 2010, February 22-25, 2011, and August 8-11, 2011. A fourth monitoring visit will be conducted in February 2012. During these monitoring visits, DOE Project Officers spend several days interviewing staff, reviewing files, and conducting project site visits. As the grantee of the funds to the NSOE, the DOE has been satisfied with the NSOE's reporting procedures and has not requested additional reports or supporting documentation.

It is important to note that the date of the testing period of July 2009 through December 2010 occurred during a critical phase in the NSOE. First, it wasn't until September 2010 that a significant portion of ARRA funds began to be subgranted. In fact, the majority of the ARRA funds were granted after this date. Second, the majority of the new staff, including the former director had only started working at the NSOE and coordinating with subgrantees after November 2010. The SEP ARRA Manager's first day at the NSOE was December 14, 2009. Due to the fact that the ARRA funds were subgranted and new staff were hired at the end of the reporting period it is to be expected that few, if any, reports would have been submitted or even necessary during this timeframe.

**2. *Implement controls to help ensure program information is reliable, including appropriate documentation, accurate and timely recording of transactions and events and supervisory review.***



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**Response:** Regarding the period ending June 2010 through March 2011 when quarterly reports were sampled by LCB, this is the same timeframe when DOE conducted two monitoring visits. In DOE's monitoring summary dated March 22, 2011, they stated, "*The monitoring files reviewed were complete and well-documented, all subgrantee information was present.*" Additionally they noted, "*no program initiatives, or activities are currently considered to be problematic or in non-compliance with Grantee responsibilities or grant regulations.*" Finally, they concluded, "*there were no findings and one concern noted.*" As pointed out in the LCB report, the one concern was a Buy American issue that has since been resolved to DOE's satisfaction. We find this DOE report dated March 2011 to be significant since it covered the same reporting period where the LCB report notes concerns that were not of concern to the DOE, grantor of the funds.

3. *Develop and implement a monitoring schedule for grant funded projects to help ensure compliance with grant requirements.*

**Response:** During DOE's monitoring visit between August 8 through 11, 2011 they noted some concerns with monitoring that have since been addressed to DOE's satisfaction. The NSOE had initiated a more formal monitoring schedule it was beginning to implement in the summer of 2011 when it lost the employee who was in charge of the State building and Schools ARRA programs. The position was not filled due to it having a sunset date and the duties of this position had to be reallocated to other staff. The reallocation caused delays in conducting onsite project monitoring. However, it is important to note that implementing a monitoring "schedule" is not the best way to ensure project monitoring in the case of most subgrantees. Close coordination with the subgrantees is critical because the project construction window typically falls within a two-week window, which does not lend itself to adequate advanced planning as many subgrantees cannot estimate with any degree of certainty the week a contractor may be available to be onsite. This means that oftentimes staff may need to fit monitoring visits into weeks around already previously scheduled meeting and events.

4. *Ensure monitoring visits to project sites are adequately documented.*

**Response:** The only concern noted during DOE's quarterly monitoring visit during August 8 through 11, 2011 was for the NSOE to improve their documentation of sub-recipient monitoring. This concern was addressed by the NSOE in a letter to DOE on September 8, 2011 stating that four members of the NSOE's staff had been designated with the responsibility of ensuring that well-documented onsite monitoring is occurring. Since that time several subgrantees have been monitored and a file with the monitoring documents has been created for the DOE to inspect on their next visit in February 2012.

5. *Follow federal regulations and guidance for grant payments, including advances, reimbursements, and remittance of interest.*

**Response:** Per DOE approval and 10CFR600.221, it is allowable to advance fund to subgrantees. The advancement of the \$358,600 to the City of North Las Vegas was done when there was a Federal push to get monies out the door. We will be collecting the interest

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earned from May 2010 to the date the funds were expended as program income and funds will be reported on the final close out of the grant.

**6. *Develop a long-term plan requiring Executive Branch agencies to reduce energy consumption in state-owned buildings.***

**Response:** In 2001, former Governor Kenny Guinn announced the publication of the State of Nevada Energy Conservation Plan ("NECP"). This plan considered state government measures to implement for the immediate, short term and long term. The plan also included training opportunities, coordination and outreach components. The State Office of Energy, which was under Business and Industry at the time, was responsible for coordinating the plan. There was a Statewide Energy Conservation Plan developed in 2001. This report was divided into public conservations programs and private conservation programs, which included residential measures. Additionally, in 2005 the then Director wrote a State Comprehensive Energy Plan. There was no state funding available so the plan contains only basic information. While technology has advanced, policies have been enhanced and public awareness has increased, the basic tenants of these plans are grounded in reasonable and prudent measures.

The preparation of an updated energy reduction plan and a plan to reduce grid-based energy purchases by 20% by 2015 is a high priority for the current Director and will be pursued, despite no allocation of state funding.

Although the current "plan" may be outdated, three simultaneous efforts are underway within NSOE to work towards meeting that goal; **1)** ARRA funds used to conduct energy efficient retrofits and solar PV projects on state buildings through SEP ARRA program; **2)** ARRA funds were provided to Department of Administrations Buildings and Grounds Division ("B&G") to help develop baseline tracking system for energy consumption of state buildings. This program, as of July 1, 2011 now resides at NSOE; and **3)** the State (through the Purchasing Department) signed on to a Master Services Agreement with contractor GA-SNC to review feasibility of 40 state owned or controlled sites (and 15 at the City of Las Vegas) for potential solar PV installations, at or below current electric rates. As of this response, 23 of the 55 sites are considered feasible and have the potential to move forward provided there continues to be rebates offered by the public utility.

ARRA grant funds were granted through NSOE to Department of Administration's Buildings and Grounds Division ("B&G") to comply with the tracking of energy consumption in state buildings. Prior to July 1, 2011, this was the responsibility of B&G. The auditor describes this portion of the audit as having a scope between July 2009 and December 2010, therefore, the bulk of these comments should be included in an audit of B&G during that time. However, as noted in response for #9, NSOE has assumed the responsibility of tracking energy consumption from B&G following passage of SB426 of the 2011 Legislature.

Regarding the concern noted that projects may not be completed before the deadline to spend ARRA funding, the NSOE has met with the SPWD and determined that all funds are scheduled to be spent on projects prior to the ARRA deadline of April 30, 2012. Additionally, the SPWD would be able to initiate more projects before the ARRA sunset if funding were made available to them early in 2012. In addition, the contract to provide energy assessment on state building projects is well under way and the auditors concern that the vendor may not have enough time to audit the energy savings was premature.

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Regarding the concern noted that a lack of an energy plan may result in two separate solar projects constructed at the Sawyer Building in Las Vegas, GA-SNC has stated that NV Energy rebates need to be made available to them in order for any project to be financially feasible. Rebate reservations are issued on a lottery system, so it is impossible to plan for any certain number of solar projects to be constructed on a specific state property. Regardless, if it is determined that a new solar facility would be beneficial on a site that has already installed a solar facility it is likely the two systems will not conflict as one could be ground mounted and the second could be installed as solar shaded parking structures or even rooftop solar. It is even possible that three separate systems may be installed at certain facilities to make use of all available surface areas.

7. *Provide biannual reports to the Legislative Commission as required by statute.*

**Response:** Please see comments above as they relate to the required reports. The staff at NSOE understands the importance of documenting the progress of its duties and will seek funding sources to provide the resources necessary to complete these tasks.

8. *Develop a comprehensive solar project checklist including but not limited to the following items: preparing a financial analysis, completing energy conservation measures, verifying solar panel location will not be needed for other purposes during project life, and ensuring net metering credit will be used.*

**Response:** The BOE approved the contract with GA-SNC in March 2011. It is the product of rigorous review by all parties, including the Bureau of Consumer Protection under the Attorney General, the Purchasing Department and the NSOE. The scope of work and resulting electricity costs would need to be "budget neutral or better" as stated in the contract. While the auditor had access to copies of the signed contract, the report failed to recognize the measures included in the contract that addressed most of the issues mentioned in the report.

Unlike what is stated on Page 18 paragraph 3 and again on Page 19 paragraph 1 of the audit, the State DID NOT contract to "build" anything. The Master Services Agreement ("MSA") allows for the careful process by which the selected vendor and each agency would determine the feasibility of certain solar PV projects on Project sites, and if deemed cost effective, the vendor and the agency would develop and implement Power Purchase Agreements ("PPA"). The PPA would be the contract "to construct" solar energy systems, not this MSA.

Again, unlike what is stated on Page 20 paragraph 4 of the audit, the systems ARE NOT intended to provide 100% of the power. In fact, systems are not typically sized to provide 100% of the power, unless the facility is off the grid completely, as there are opportunities for energy efficiency upgrades down the road and other variables that need to be considered.

A solar project "checklist", as suggested, would be best utilized by the SPWD and the agencies desiring to install a solar system on their sites. Only these agencies know whether their long-term budget plans include completing any conservation on buildings and whether land will be needed for other purposes during the life of a solar project. These agencies would take these factors into account prior to signing a Power Purchase Agreement with a contractor. Additionally, the Division of State Lands is required to sign any leases on properties where these projects may be located and are best suited to understand the future land needs for the state in consultation with the using agency and the SPWD. There are sufficient reviews and

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checks and balances in place to ensure the above concerns are addressed prior to the installation of a solar facility on any state site.

*9. Track and report cost savings from solar energy projects by comparing solar costs to grid-based costs.*

**Response:** The duty of tracking energy consumption of state owned buildings moved to NSOE as of July 1, 2011, without any associated funding beyond the ARRA grant. Regardless, NSOE will still need to coordinate with B&G which is the agency responsible for paying the majority of the power bills on behalf of the state agencies.

*10. Develop policies, procedures, and instructions to ensure RFP evaluation committee members have clear guidance on the proposal evaluation process.*

**Response:** The procedures followed are the same ones implemented by the Purchasing Division. The guidance score sheets and guidance are exactly the same despite it being a non-statutory procedure for the NSOE to follow. The variance noted in scores given by evaluators is common in all contract evaluations. The Purchasing Divisions' guidance is that individual evaluator's scores may vary so long as their application of their individual scoring methodology is consistent and does not demonstrate a bias.

*11. Develop performance measures for each goal.*

*12. Ensure that all performance measures include a descriptive title that clearly indicates what is being measured.*

*13. Develop and maintain performance measures that can be used to assess performance over time and retain supporting documentation for reported results for at least 3 fiscal years.*

*14. Revise policies and procedures for performance measures to ensure staff receives adequate guidance and state requirements are followed.*

**Response:** NSOE agrees with the recommendations 11-14 and is currently working with the Governor's cabinet on developing key performance measures that can be tied back to each agency. The statutory requirements set forth in NRS for NSOE have changed significantly in the last 10 years, which is the result of a growing and changing industry and new focus on clean energy goals for the state. NSOE intends to develop or refine goals and performance measures that will be relevant for the long term.

With regards to the attached Office of Energy's Response to Audit Recommendations checklist, I have described what our office means by "accepted" and that there are two general categories in our response.

Recommendations 1, 2, 3, 4, 5, and 10 – these recommendations are accepted because the office had worked on the issues noted in the report in natural course of the progression of the programs.

Recommendations 6, 7, 11 through 14 – these recommendations are accepted and the office will work to accomplish these as expediently as possible given resource constraints.

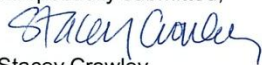
Recommendations 8 and 9 – these recommendations are rejected by NSOE. Recommendation #8 is rejected because first, the solar contract allows for significant feasibility review and cost benefit analysis. The auditor notes the signing of contract, but does not reflect the elements of the

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contract that address his concerns. Second, each agency is responsible for determining the cost benefit of any project on their facility. NSOE assisted the contractor and the agencies by facilitating the meetings and providing their recommendations. Recommendation #9 is rejected because B&G receives and approves payment of the energy bills and therefore has the first line of tracking available for cost savings. While NSOE will need to track energy consumption of state owned buildings it will need to receive any additional information about solar costs versus grid-based costs from each agency or B&G. Without or until an inter-agency agreement or associated funding, this recommendation will likely need to reside with B&G.

Please let us know if you have any questions regarding this information. We are happy to provide copies of items mentioned in our response or other information as necessary.

Respectfully submitted,



Stacey Crowley  
Director

Enclosure: LCB checklist – “The Office of Energy’s Response to Audit Recommendations”

Cc: Governor Brian Sandoval, Evan Dale, Dept of Administration

## The Office of Energy's Response to Audit Recommendations

<u>Recommendations</u>	<u>Accepted</u>	<u>Rejected</u>
1. Ensure grant recipients provide required reports timely, including supporting documentation .....	<u>X</u>	<u>          </u>
2. Implement controls to help ensure program information is reliable, including appropriate documentation, accurate and timely recording of transactions and events, and supervisory review.....	<u>X</u>	<u>          </u>
3. Develop and implement a monitoring schedule for grant funded projects to help ensure compliance with grant requirements .....	<u>X</u>	<u>          </u>
4. Ensure monitoring visits to project sites are adequately documented .....	<u>X</u>	<u>          </u>
5. Follow federal regulations and guidance for grant payments, including advances, reimbursements, and remittance of interest .....	<u>X</u>	<u>          </u>
6. Develop a long-term plan requiring Executive Branch agencies to reduce energy consumption in state-owned buildings.....	<u>X</u>	<u>          </u>
7. Provide biannual reports to the Legislative Commission as required by statute.....	<u>X</u>	<u>          </u>
8. Develop a comprehensive solar project checklist including but not limited to the following items: preparing a financial analysis, completing energy conservation measures, verifying solar panel location will not be needed for other purposes during project life, and ensuring net metering credits will be used .....	<u>          </u>	<u>X</u>
9. Track and record cost savings from solar energy projects by comparing solar costs to grid-based costs.....	<u>          </u>	<u>X</u>
10. Develop policies, procedures, and instructions to ensure RFP evaluation committee members have clear guidance on the proposal evaluation process .....	<u>X</u>	<u>          </u>
11. Develop performance measures for each goal .....	<u>X</u>	<u>          </u>
12. Ensure that all performance measures include a descriptive title that clearly indicates what is being measured .....	<u>X</u>	<u>          </u>
13. Develop and maintain performance measures that can be used to assess performance over time and retain supporting documentation for reported results for at least 3 fiscal years .....	<u>X</u>	<u>          </u>
14. Revise policies and procedures for performance measures to ensure staff receive adequate guidance and state requirements are followed. ....	<u>X</u>	<u>          </u>
TOTALS	<u>12</u>	<u>2</u>

# Appendix I

## Auditor's Comments on Agency Response

The Office of Energy, in its response, does not agree with several of our findings, conclusions, and recommendations. The following identifies areas where the Office has some concerns. We have provided our comments on the issues raised in the Office's response to assure the reader that we believe our findings, conclusions, and recommendations as stated in the report, are appropriate.

1. Recommendation 1 – Ensure grant recipients provide required reports timely, including supporting documentation.

The Office indicated in its response the audit testing period was between July 2009 and December 2010, during a critical phase for the agency. First, most ARRA funds were subgranted after September 2010. Second, the majority of new staff, including the former director had only started working at the Office and coordinating with subgrantees after November 2010. The Office also indicated due to the fact that the ARRA funds were subgranted and new staff hired at the end of the reporting period it is to be expected that few, if any, reports would have been submitted or even necessary during this timeframe. (see page 43)

### Legislative Auditor's Comments

The Office in its response implies that our testing period for quarterly reports was July 2009 through December 2010. As stated in our report on page 5, we found only 10 of 78 required reports were submitted to the Office for the quarterly time periods ending June 2010 through March 2011. Staff involved in the SEP ARRA grant were hired by December 2009, several months prior to the start of our timeframe for reviewing quarterly reports. The 78 quarterly reports should have been submitted by subrecipients to the Office based on reporting requirements found in Office policies, contracts, and grant provisions.

2. Recommendation 2 – Implement controls to help ensure program information is reliable, including appropriate documentation, accurate and timely recording of transactions and events, and supervisory review.

The Office in its response to Recommendation 2, indicated the US Department of Energy (DOE) conducted two monitoring visits during the audit period ending June 2010 through March 2011 when LCB sampled quarterly reports. The Office further quotes DOE's March 2011 monitoring report indicating files reviewed were complete, well-documented, all information was present, and no noncompliance with grantee responsibilities or regulations were found. The Office also indicated they found the March 2011 DOE report to be significant since it covered the same reporting period where the LCB report notes concerns that were not of concern to DOE, grantor of the funds. (see page 44)

### Legislative Auditor's Comments

The Office's comments above address information stated in our report on pages 5 and 8, and relate to Recommendations 1 and 3, not Recommendation 2. Recommendation 2 addresses the report section on page 6 under the heading "Program Information Generated by the Office Not Reliable." Therefore, the Office did not address Recommendation 2 in its response.

3. Recommendation 3 – Develop and implement a monitoring schedule for grant funded projects to help ensure compliance with grant requirements.

The Office indicated in its response that implementing a monitoring schedule is not the best way to ensure project monitoring. The Office also stated the need for close coordination with subgrantees, and staff may need to fit monitoring visits into weeks around already previously scheduled meetings and events. (see page 44)

Legislative Auditor's Comments

As stated in our report on page 7, Office policy requires that a monitoring schedule be developed by staff and used in concert with other monitoring activities. While it is important to coordinate with subgrantees and monitoring visits may need to be adjusted, we believe a monitoring schedule as required by the Office's policy would benefit the Office with overseeing subrecipients.

4. Recommendation 5 – Follow federal regulations and guidance for grant payments, including advances, reimbursements, and remittance of interest.

The Office in its response stated that advancing grant funds is allowable. Advancing \$358,600 to the City of North Las Vegas was done when there was a federal push to get monies out the door. In addition, the Office will be collecting interest earned on these funds and funds will be reported on the final close out of the grant. (see page 44)

Legislative Auditor's Comments

As indicated in our report on page 9, we are aware that federal regulations allow advance payments if subrecipients maintain procedures to minimize the time between the transfer of funds and their disbursement. Our concern is the Office advanced funding without ensuring that subrecipients were prepared to spend grant funds timely.

5. Recommendation 7 – Provide biannual reports to the Legislative Commission as required by statute.

The Office's response indicates it understands the importance of documenting the progress of its duties and will seek funding sources to provide the resources necessary to complete these tasks. (see page 46)

Legislative Auditor's Comments

Based on our review of NRS 701.215, included in Appendix B on page 33, we believe the reports to the Legislative Commission should not require significant resources. NRS 701.215(3)(c) requires the Director to biannually file reports with the Legislative Commission that: (1) indicate the general progress of energy reduction in state buildings; and (2) identify any state agency that fails to cooperate with the Director in the design or implementation of the state energy reduction plan.

6. Recommendation 8 – Develop a comprehensive solar project checklist including but not limited to the following items: preparing a financial analysis, completing energy conservation measures, verifying solar panel location will not be needed for other purposes during project life, and ensuring net metering credits be used. **(Rejected)**

The Office rejected recommendation 8 for the following reasons. First, the solar contract allows for significant feasibility review and cost benefit analysis. The auditor notes the signing of contract, but does not reflect the elements of the contract that address his concerns. Second, each agency is responsible for determining the cost benefit of any project on their facility. NSOE



assisted the contractor and the agencies by facilitating the meetings and providing their recommendations. (see page 47)

#### Legislative Auditor's Comments

We do not have concerns with the state's contract. Our recommendation addresses monitoring and oversight of agency solar projects to ensure contract requirements, such as a cost benefit analysis, are adequately addressed. The contract elements are complex, and state agencies may not have expertise in preparing a cost benefit analysis for their solar projects. A checklist or procedures would help to ensure that contract requirements and other important areas are adequately addressed by state agencies.

This recommendation was made based on our review of the Nevada National Guard solar projects, the first state agency to contract for the development of vendor owned solar projects. As indicated on page 21, the Office of Energy was not involved with these projects; however, the Office and State can benefit from this past experience. Our review of these projects (Appendix E, page 36 to 38) identified several issues. For example, we identified several errors in the financial analysis for these projects.

On page 22, the report lists several areas that should be addressed before state agencies seek approval of their projects. We believe the Office is the appropriate state agency to ensure these areas are addressed. The contract identifies the Director of the State Office of Energy as the State representative for all matters pertaining to the contract. In addition, the contract indicates the Office will continue to provide services to the agencies throughout the term of the contract by monitoring the awarded vendor's progress. Furthermore, the Office will be a party to the Master Agreement, contracts between the agencies and awarded vendor, and all Purchase Power Agreements (PPA's). As such, we believe the Office could utilize a checklist to assist agencies with their solar projects. The Office states on page 46 that a solar project "checklist", as suggested, would best be utilized by the State Public Works Board and the agencies desiring to install a solar system on their sites. However, since the Office has expertise and will be a party to all contracts, the Office is the proper agency to monitor solar projects. A checklist would help the Office assist state agencies with their projects and help ensure the Bureau of Consumer Protection, Board of Examiners, and Interim Finance Committee receive complete and accurate information.

7. The Office's response is also critical of the wording of three sentences that provide background information on the state's contract with GA SNC Solar.

The Office states: Unlike what is stated on Page 18 paragraph 3 and again on Page 19 paragraph 1 of the audit, the State DID NOT contract to "build" anything. The Master Services Agreement ("MSA") allows for the careful process by which the selected vendor and each agency would determine the feasibility of certain solar PV projects on Project sites, and if deemed cost effective, the vendor and the agency would develop and implement Power Purchase Agreements ("PPA"). The PPA would be the contract "to construct" solar energy systems, not this MSA. (see page 46)

The Office also states: Unlike what is stated on Page 20 paragraph 4 of the audit, the systems ARE NOT intended to provide 100% of the power. (see page 46)

#### Legislative Auditor's Comments

We understand the contract between the State and GA SNC Solar is an agreement that allows state agencies to contract for the construction of solar energy systems. As stated in the report on page 19, the contract is available to all state agencies including the Nevada System of Higher Education, the Legislative and Judicial Branches, and political subdivisions. The 4-year contract

gives the vendor the first opportunity to contract with state agencies to build solar energy systems at agency sites. If an agreement cannot be reached, state agencies may solicit contracts with other renewable energy companies. Further, as stated on page 20, the agency will enter into a Purchase Power Agreement (PPA) with the solar company. Construction of solar energy systems will not begin until a PPA is prepared and approved by the Board of Examiners and the Interim Finance Committee.

To improve clarity, we have reworded the sentence on page 18 from:

The State recently contracted to build vendor owned solar energy systems at state agencies; to

The State recently contracted with a vendor to allow state agencies to enter into agreements to build vendor owned solar energy systems.

To improve clarity, we have also reworded the sentence on page 19 from:

On March 1, 2011, the State contracted with a vendor, GA SNC Solar, to construct solar energy systems at state agencies; to

On March 1, 2011, the State contracted with a vendor, GA SNC Solar, to allow the construction of solar energy systems at state agencies.

Regarding the Office's concern that "the systems ARE NOT intended to provide 100% of the power," the Office did not refer to the sentence in the report in its entirety. As stated in the report on page 20, the plan is for these systems to provide 100% of the building or facility's electrical needs "when feasible." We used the term "when feasible" because there will be situations where land use, and other factors, will limit the size of the system. The proposal by GA SNC Solar states "where land use does not limit the size of the system, the generation system is designed to match the annual kilowatt-hour consumption of the facility over a twelve-month period."

8. Recommendation 9 – Track and record cost savings from solar energy projects by comparing solar costs to grid-based costs. **(Rejected)**

In its response, the Office indicated the duty of tracking energy consumption of state owned buildings moved to the Office as of July 1, 2011, without any associated funding beyond the ARRA grant. The Office rejected the recommendation because B&G receives and approves payment of energy bills and therefore has the first line of tracking available for cost savings. While the Office will need to track energy consumption of state owned buildings it will need to receive additional information about solar costs versus grid-based costs from each agency or B&G. Without or until an inter-agency agreement or associated funding, this recommendation will likely need to reside with B&G. (see page 47 and 48)

#### Legislative Auditor's Comments

We do not believe this recommendation should reside with B&G as suggested by the Office. The Office is the proper state agency to track energy savings. On page 3 we report that Senate Bill 426, of the 2011 Legislative Session, transferred responsibility for establishing a program to track energy consumption in state buildings from B&G to the Office. Statutes require the program record utility bills for each building for each month and preserve those records indefinitely, compare utility bills for a building from month to month and year to year, compare utility bills between buildings, and identify energy and costs savings associated with conservation efforts. Therefore, the Office will need to work with B&G and other state agencies to obtain utility information. Collecting utility information required by statutes should provide the Office with sufficient information to comply with our recommendation. Furthermore, this information should

help the Office assess the State's progress towards achieving a 20% reduction in grid-based energy in state buildings.

In its response on page 47, the Office indicated tracking energy consumption in state buildings was transferred without funding other than the ARRA grant. However, statutes indicate B&G shall provide such assistance to the Office as is necessary to carry out provisions of the program. In addition, statutes require when there is not sufficient money to support the program, agencies occupying state buildings shall reimburse the Office for the agency's proportionate share of unfunded program costs.

9. Recommendation 10 – Develop policies, procedures, and instructions to ensure RFP evaluation committee members have clear guidance on the proposal evaluation process.

The Office indicated in its response the procedures followed are the same ones implemented by the Purchasing Division. The guidance score sheets and guidance are exactly the same despite it being a non-statutory procedure for the NSOE to follow. The variance noted in scores given by evaluators is common in all contract evaluations. The Purchasing Divisions' guidance is that individual evaluator's scores may vary so long as their application of their individual scoring methodology is consistent and does not demonstrate a bias. (see page 47)

#### Legislative Auditor's Comments

As stated in our report on page 24, the Office can improve its RFP evaluation process by developing policies and procedures and providing evaluators with additional instructions.

Exhibit 6 on page 23 shows a wide range in scores among evaluators. For example, the proposal from Applicant A received scores ranging from 1 (poor) to 10 (excellent). In addition, evaluators did not always score all proposals as shown in Exhibit 7 on page 24. Typically, these problems with scoring proposals result because evaluators were not given adequate instructions or one or more evaluators did not understand the instructions provided.