

**MINUTES OF THE
SENATE COMMITTEE ON ENERGY, INFRASTRUCTURE AND
TRANSPORTATION**

**Seventy-fifth Session
February 6, 2009**

The Senate Committee on Energy, Infrastructure and Transportation was called to order by Chair Michael A. Schneider at 8:10 a.m. on Friday, February 6, 2009, in Room 2135 of the Legislative Building, Carson City, Nevada. The meeting was videoconferenced to the Grant Sawyer State Office Building, Room 4401, 555 East Washington Avenue, Las Vegas, Nevada. [Exhibit A](#) is the Agenda. [Exhibit B](#) is the Attendance Roster. All exhibits are available and on file in the Research Library of the Legislative Counsel Bureau.

COMMITTEE MEMBERS PRESENT:

Senator Michael A. Schneider, Chair
Senator Maggie Carlton, Vice Chair
Senator John J. Lee
Senator Shirley A. Breeden
Senator Randolph Townsend
Senator Barbara K. Cegavske

COMMITTEE MEMBERS ABSENT:

Senator Dennis Nolan (Excused)

STAFF MEMBERS PRESENT:

Matt Nichols, Committee Counsel
Scott Young, Committee Policy Analyst
Sandra Hudgens, Committee Secretary

OTHERS PRESENT:

Patrick M. McInnis, P.E., Chief Engineer, Division of Buildings and Grounds,
Department of Administration
Leo M. Drozdoff, P.E., Administrator, Division of Environmental Protection,
State Department of Conservation and Natural Resources
Sig Jaunarajs, Bicycle Advisory Board, Nevada Department of Transportation
Keith Wells, Administrator, Motor Pool Division, Department of Administration

Bruce Mullin, Fleet Manager, City of Reno
David Gonzales, Fleet Manager, Washoe County Public Works
Dan Hyde, Fleet and Transportation Services Manager, City of Las Vegas
Dennis Ransel, Air Quality Planning Manager, Clark County Department of Air
Quality and Environmental Management
Nick Vander Poel, Deputy Director, Nevada State Office of Energy
Hatice Gecol, Ph.D., Energy and Science Advisor, Director, Nevada State Office
of Energy
Steve Waclo

CHAIR SCHNEIDER:

The Committee will look at selected programs to see how well they are performing, if they should continue or if improvements can be made. Our purpose in reviewing these programs is not to find fault, rather to ensure the programs accomplish their goals. Copies of all pertinent statutes and regulations are contained in the green packet ([Exhibit C](#)).

PATRICK M. MCINNIS, P.E. (Chief Engineer, Division of Buildings and Grounds, Department of Administration):

I will present an overview of our energy tracking program ([Exhibit D](#), original is on file in the Research Library). The Division of Buildings and Grounds (B&G) is run by chapter 331 of *Nevada Revised Statutes* (NRS). In 1993, NRS 331.095 was set up to track the energy use in buildings owned or occupied by a state agency. We also participate in chapter 333A of NRS which is a performance contract for energy-saving measures. We are also involved in the plan addressed in NRS 701.215 to reduce the energy consumption from the grid by 20 percent by fiscal year (FY) 2015. The B&G owns, maintains, operates and manages about 10 percent of the State's buildings, about 1.5 million square feet. A list of those buildings is found in [Exhibit D](#). We lease 1.5 million square feet for other agencies. Our funding is for operations of the mail room and B&G in general. The agencies pay us rent, and we conduct our maintenance and repairs out of the "red funds." The Marlette Water System and Enterprise Fund are paid for by the water we sell to Virginia City and Carson City. It is run more like a regular business than a government business. Utilities are the major budget function that B&G is involved in. It is projected to be \$4.7 million for FY 2010 and \$4.9 million for FY 2011.

Under NRS 331.095, we operated a utility tracking program starting in 1993/1994. A software program called Faser was used to track power, water,

gas, sewer and garbage. This enabled us to identify buildings for energy retrofits in order to do performance-based contracts with the State. We have 175 meters we read on our facilities, while the State has about 5,000 meters. It became a major logistics problem to locate these meters. The B&G has no way to match meters to facilities. The Nevada Department of Transportation (NDOT) has meters in the middle of nowhere running stoplights. In 1999, we wrote a letter to Interim Finance Committee (IFC) reporting that we would continue tracking our own facilities but were unable to access the whole State. At that time, Sierra Pacific Power and Nevada Power merged into NV Energy and changed all the meter numbers in the entire State. Faser software was used until 2005 when it was bought by the Enron Corporation. Then we switched to an Excel spreadsheet. We entered into a contract with LPB Energy Management (LPB) to track energy usage. We are also connected to the Environmental Protection Agency (EPA) ENERGY STAR program aimed at tracking pollutants. The B&G is planning to convert to other ENERGY STAR programs this year. The LPB offers to process utility bills for \$5 versus \$25 and will audit previous bills back to four years at no cost. The EPA ENERGY STAR tracking is a federal database that allows any government agency to load data at no cost. It allows benchmarking against other facilities countrywide. The B&G uses the data to generate projects while working closely with the State Public Works Board to define capital improvement projects (CIP) that replace end-of-life equipment with modern energy-efficient equipment. A list of these projects is found in [Exhibit D](#). Maintenance employees have completed focus courses on energy savings and efficiency sponsored by NV Energy.

We negotiated rents with owners of leased buildings to cut utility costs but have no way to force them to share their utility costs with us in order to track that consumption. Under NRS 338.1906, B&G was the "test pilot" for performance-based contracting doing major lighting retrofits in the Capitol complex and the Stewart Facility. Both contracts met the guaranteed savings goals. The B&G has a representative on the committee that qualifies energy service contractors and third-party consultants. Under NRS 701.215, we have added one-half a position to the engineering staff with duties related to energy. During the National Governors Conference in 2008, Wal-Mart offered to make available their energy people to evaluate state capitols. We took advantage of that, and a final report is currently being generated.

CHAIR SCHNEIDER:

The Department of Motor Vehicles (DMV) building on West Flamingo Road in Las Vegas was poorly sited on that location. The windows facing west create a glare. Has anything been done to shade those windows such as planting trees?

MR. MCINNIS:

We looked at window tinting; we should address the idea of trees.

CHAIR SCHNEIDER:

Which goals and compliances have you met under NRS 331.095, which ones are you trying to work on and what phase are you in?

MR. MCINNIS:

We are tracking all the energy use in the buildings we are responsible for. We have met the goals of that program. The problem is tracking the other 90 percent of the buildings in the State that are owned and occupied by non-State employees.

CHAIR SCHNEIDER:

What about subsection 2, paragraph (b) ?

MR. MCINNIS:

The ENERGY STAR program allows us to compare our energy usage to others throughout the world. We can rank our buildings by square footage. That information is valuable when you are trying to privatize projects. The concept of this law, from an accounting perspective, allows for prioritizing the budget for each agency.

CHAIR SCHNEIDER:

What about the facilitated identification of errors in utility bills and meter readings?

MR. MCINNIS:

We do not have the automatic ability to do that with our spreadsheet. We can catch the ones that do not make sense. We check the bills each month against the previous month and year. We caught an error on the water bill at the Richard H. Bryan Building when the reading was ten times higher than the month before.

SENATOR TOWNSEND:

What about identifying energy and cost savings associated with efforts to conserve energy?

MR. MCINNIS:

As part of the Governor's Energy Program, every department head had to write down how they were planning to conserve energy in their entire system. We can measure if things are working. We have a guarantee on the energy retrofit. We send a third-party auditor who verifies whether they are actually saving the energy that was promised with the energy retrofit. We also track changes to make sure the change is not costing us more for custodial work than the energy savings.

SENATOR TOWNSEND:

Can you address subsection 4?

MR. MCINNIS:

We never had the ability to view the other entities' budgets and bills in order to do the accounting. ENERGY STAR or the LPB contract would allow overview of the whole State.

CHAIR SCHNEIDER:

What do you do with old buildings like the Bradley Building in Las Vegas? Do you upgrade them or recommend bringing them down?

MR. MCINNIS:

The Public Works Board has a facility conditioning analysis group that looks into buildings on a five-year cycle and does a cost study on whether to fix or to replace them. In 2001, new air-conditioning controls were installed in the Bradley Building, which are now outdated, and would require a major refurbishment or replacement.

SENATOR CEGAVSKE:

Where does the money go when they sell the buildings or property? Does that money go to the agency or to the General Fund?

CHAIR SCHNEIDER:

We can ask the Fiscal Analysis Division. The NRS 486A.150 directs the State Environmental Commission to adopt regulations concerning alternative fuels and

alternative-fuel vehicles. The NRS 486A.160 requires the State Department of Conservation and Natural Resources to enforce those regulations. The provisions were enacted in 1991 from the Assembly Committee on Transportation. The major regulations of *Nevada Administrative Code* (NAC) 486A.160 and NAC 486A.180 are in the green book, [Exhibit C](#). The legislative finding for NRS chapter 486A as contained in NRS 486A.010 finds that protection of the State's environment, in particular the quality of its air, requires a reduction, especially in metropolitan areas, of the contaminants coming from the combustion of conventional fuels in motor vehicles. A large part of these contaminants result from burning liquid and gaseous fuels to operate trucks and buses, many of which are operated in fleets. Each fuel can be evaluated for the air pollution it causes when burned in motor vehicles. Conversion of these fleets to use cleaner burning alternative fuels can reduce contaminants sufficiently to permit the continued use of conventional fuels in individually owned motor vehicles. A news article, [Exhibit C](#), regarding a study by Brigham Young University (BYU) researchers, published in January 2009 in the *New England Journal of Medicine*, indicates that air pollution declined between 1980 and 2000 and five months have been added to the average American's life span. Some cities, like Pittsburgh, that did the best job of cleaning its air added as much as ten months to the life span of their citizens.

LEO M. DROZDOFF, P.E. (Administrator, Division of Environmental Protection, State Department of Conservation and Natural Resources):

The testimony I am submitting will present to you the Alternative Fuels Program for government fleets ([Exhibit E](#), original is on file in the Research Library). In addition to that testimony is a handout ([Exhibit F](#)) to guide the Committee through my presentation.

SENATOR LEE:

Maybe you have outlived your usefulness. Maybe with or without you, we are going to have better emissions and better cars through federal requirements in light of budgetary problems. What are your thoughts?

MR. DROZDOFF:

When the alternate-fuels program was set up, the goal was to demonstrate leadership for a positive environmental impact which would lead to a greater use of these fuels. That has occurred to some extent. The issues have changed. If the issues were stagnant and like what we were dealing with in the 1990s, then I would partially agree with you. There are substantive changes that need

to occur if this program is to continue to have benefits. Clark County is dealing with the issue of ozone attainment because the federal standard for ozone has changed. The tools we have to address those requirements may not be the best for that issue since this program was set up in 1991 and it is now 2009. There are issues that were not foreseen in 1991.

SENATOR LEE:

Part of your testimony stated that you wanted to remove yourself from the smaller groups and concentrate on the bigger groups. If you do not have your own station to get your own fuel, you are working against yourself because you are spending time, effort and labor to get over to the fueling sites. There is an enhancement only to the large groups that can afford to do this.

MR. DROZDOFF:

I agree. We have spent a lot of time discussing perverse things that have happened as a result of having a small group of ten in a fleet. There has been a benefit from this program, but there could be more with significant changes. Increasing the size of the fleets would support their infrastructure.

SENATOR TOWNSEND:

Are the 1,169 vehicles from the Clark County School District labeled "reconstituted" in the formula because of air emissions or fuel efficiency?

SIG JAUNARAJIS (Bicycle Advisory Board, Nevada Department of Transportation):
They are using reformulated gasoline (RFG). They are running that fuel in their pickup trucks, cars and police vehicles used at the schools.

SENATOR TOWNSEND:

Are they doing it for purposes of cleaner environment or fuel efficiency?

MR. JAUNARAJIS:

They are doing it for purposes of meeting the program requirements. The RFG is more expensive than regular gasoline.

SENATOR TOWNSEND:

It is more expensive, and it is not any more fuel efficient relative to total usage. Forget what it emits; it does not.

MR. JAUNARAJA:
No, it does not.

SENATOR TOWNSEND:
These efforts are based on the problem in southern Nevada regarding non-attainment? Does this have anything to do with fuel efficiency?

MR. JAUNARAJA:
No.

SENATOR TOWNSEND:
From the *Environmental Leader* ([Exhibit G](#)), November 30, 2008, the federal government's vehicles were sent to locations far from any alternative-fuel site resulting in standard gasoline still representing 92 percent of the fuel used in their alternative-fuel fleet. Investments are being made at every level of government; however, at the federal level 92 percent of vehicles are still running on regular gasoline. Fleet managers searched for vehicles that would meet EPA requirements. They found the most affordable models were big flex-fuel sedans and sport utility vehicles (SUVs). They were bigger, they ran on gas and they were not fuel efficient. Are you finding that we are running headlong into the choice between fuel efficiency and reaching the attainment standards?

MR. JAUNARAJA:
A State fleet in Las Vegas wanted a small fuel-efficient Ford Escape hybrid which would have complied with our program, but under the federal program, hybrids are not allowed. The only ones available that met the federal program and our program were a Dodge Durango V8 or a Chevrolet Tahoe with a V8 engine.

SENATOR TOWNSEND:
Are you asking us to create legislation to avoid the problem with the federal requirement or some combination?

MR. DROZDOFF:
Yes, and to address the practical issues Mr. Jaunaraja just talked about.

SENATOR TOWNSEND:

Due to the growth in southern Nevada, it will become more dominant. The challenges there become unique. One of the options available to reduce emissions as well as consumption is light-rail travel. We are trying to find the largest group of fleet users in Clark County to address the efficiency issue. When is the best time for utilities to provide the cheapest energy to us for electric vehicles? The best time would be when everybody else is not using the grid. That can be done through technology. Did you find that all electric vehicles were beneficial to what you were attempting to do, or did they fall outside the alternatives like hybrid vehicles?

MR. DROZDOFF:

They fall outside the federal Energy Policy Act of 1992 (EPA Act) program, but not our program.

SENATOR TOWNSEND:

Is that another reason to get out from underneath this?

MR. DROZDOFF:

Yes, and change who is in and who is out.

SENATOR TOWNSEND:

It is unfair to the public. There is a misconception about what alternative vehicles do. A study out of Arizona State University, W. P. Carey School of Business and the Communications Institute, talks about choices and trade-offs of electricity policy. The public should know that it is about air quality and not about saving gasoline.

SENATOR CEGAVSKE:

A car is usually replaced at 100,000 miles. Is there a difference in the efficiency or pollutant emissions of the fuel if we drive the car 150,000 miles?

MR. JAUNARAJ:

The EPA knows that older vehicles produce more pollutants. The EPA has standards that show exactly how much cars can pollute at 50,000 miles and at 100,000 miles.

SENATOR CEGAVSKE:

Is that even if you maintain it?

MR. JAUNARAJ:

Yes, because the components, the oxygen sensors and the engine wears out.

SENATOR CEGAVSKE:

That is why you replace them at 100,000 miles. Would we be any better off if employees drove their own vehicles and got reimbursed rather than using the fleets? Has that been looked at?

MR. DROZDOFF:

That is not an issue we have looked at to date.

SENATOR CEGAVSKE:

Maybe you need to look at that. Is the RFG for larger trucks and the B5 and B20 fuels for the passenger vehicles?

MR. JAUNARAJ:

The B5 and B20 are a clear form of biodiesel fuel and can only be used in diesel vehicles. They are limited to large pickup trucks and some expensive European models. The RFG is a reformulated gas and can be used in any gas vehicle.

SENATOR CEGAVSKE:

Is there a cost saving to what we are doing in the State? Should we buy fleets or require employees to use their own vehicles?

CHAIR SCHNEIDER:

Can you draw up a detailed list that we can turn into a bill draft request (BDR)?

MR. DROZDOFF:

Yes.

KEITH WELLS (Administrator, Motor Pool Division, Department of Administration):
The Motor Pool Division (MPD) is in compliance with chapter 486A of NRS. We are required to meet the federal alternate-fuels program. The EPA does not recognize hybrid vehicles as an alternative-fuel vehicle. The Motor Pool advocates alternate fuels. We use biodiesel, ethanol, compressed natural gas (CNG), propane and hybrids. The NRS 486A needs to be more flexible as technology advances. The automotive industry changes every six months. We need to adapt to those changes as soon as possible. The MPD needs to work with fleets more to find funding sources to build infrastructure, to provide

vehicles and educate the public on what we are doing. Right now MPD, NDOT and other fleets have to work on their own to find grants. If we could get the Nevada Division of Environmental Protection (NDEP) to educate the public on what needs to be done and search for funding sources through public and private partnerships or from federal grants that would help all the fleets in the State. The program may have what it originally was intended to do, but today we are still way behind. Technology will change in the next ten years, and hydrogen vehicles will be available. The more infrastructure the states commit to, the more technology will advance with it as cars are developed. Manufacturers commit certain levels of resources to fleets because it is a big share of the market.

Vehicles are classified from 0 to 26,000 pounds in one class. That does not work for a fleet because there are two types of vehicles. A passenger sedan is under 8,500 pounds gross vehicle weight (GVW), and there are many resources to buy flex-fuel vehicles, hybrids and CNG in that class. Many cities have light trucks that can be over 8,500 pounds GVW. The only choice for them is biodiesel or propane, and they must buy the propane kits to be installed. You could classify 8,500 pounds GVW and below as tier 1 vehicles and 8,500 pounds GVW and above as tier 2 vehicles with programs in place for both tiers. The EPA Act program is more challenging for my compliance.

CHAIR SCHNEIDER:

Is the federal government doing everything it can with hybrids to make it qualify for EPA Act?

MR. WELLS:

There is movement for the federal government to accept hybrids; however, EPA's goal is to reduce the dependence on fossil fuels through alternative fuels. They are forgetting that when a hybrid vehicle gets 45 miles per gallon (mpg) and does not operate when it is idling, it reduces the country's dependency on fossil fuel. There is no market except for the fleets for propane vehicles. Hybrids are here to stay and will eventually move into fleets on EPA Act.

CHAIR SCHNEIDER:

We will send a letter to U.S. Senator Harry Reid regarding the problem with the EPA's restriction on hybrid vehicles.

SENATOR TOWNSEND:

We should draft a bill for the use of hybrids and for the purpose of discussion; then put a caveat in the bill for the federal government to make a change that would accommodate things in Nevada. We need to be leaders in fuel efficiency. Will you bring ideas to us?

MR. WELLS:

You are all invited to use the Motor Pool, we have changed in the last six years.

CHAIR SCHNEIDER:

We need to develop a list to go into the bill.

BRUCE MULLIN (Fleet Manager, City of Reno):

We have 650 vehicles that run on reformulated gasoline or biodiesel except the small number of high-performance motorcycles that do not respond well to alternative fuel. We are using RFG, biodiesel, propane, hybrid vehicles and flex-fuel vehicles. The majority of light duty vehicles are RFG. So when RFG becomes unavailable, the infrastructure for the replacement is not currently available and that is one issue that needs to be taken into consideration. The emissions that have been reduced by the use of alternative fuels is substantial in the hundreds of tons of emissions. We need to expand this program.

DAVID GONZALES (Fleet Manager, Washoe County Public Works):

The bulk of my fleet is RFG as shown on the list, [Exhibit D](#). The removal of RFG would have an infrastructural and financial impact. We would have to buy a hybrid.

SENATOR TOWNSEND:

Are vehicles run on RFG and biodiesel more expensive? What is it costing us to clean the air? Is the mileage more if it had been a normal gasoline vehicle?

MR. MULLIN:

The diesel engine costs more; that is the only difference in the cost of the acquisition of the vehicle. The mileage on the biofuels is slightly less than fossil fuel. The addition to the cost of the fuel is slight.

SENATOR TOWNSEND:

Is there any additional cost to run on RFG? Can anyone run on RFG?

MR. MULLIN:

Yes, you do if you live in this area for part of the year. There is a note at the gas pumps that says 10-percent alcohol or ethanol.

SENATOR TOWNSEND:

That is the RFG that we use as consumers during the months that we have inversions.

MR. MULLIN:

The difference is our fleets use it year-round.

SENATOR TOWNSEND:

We are familiar with our problem here in Carson City and Reno. Is that the same situation in Clark County? Do they use only RFG certain months of the year?

MR. MULLIN:

I am not qualified to answer. In some cases, employees could use their own vehicles; however, the majority of our use is with trucks and utility-type vehicles.

SENATOR CEGAVSKE:

I was looking more at the school districts and management.

MR. MULLIN:

It would cost the agency less for vehicle use, but they would have no control over what fuel is used. We would suffer from the alternative-fuel usage.

CHAIR SCHNEIDER:

Can hybrids use alternative fuel, also?

MR. MULLIN:

The hybrid gas electric vehicles in Reno run on RFG. While it sits at the light, it does not use anything.

CHAIR SCHNEIDER:

It would probably be an insurance issue if you are using your own vehicle for state work.

SENATOR CEGAVSKE:
Can we find out?

CHAIR SCHNEIDER:
We will check.

DAN HYDE (Fleet and Transportation Services Manager, City of Las Vegas):
Chapter 486A of NRS works but needs to be modified. There is an enforcement issue that needs to be enhanced. Some fleet managers have had bad experiences with warranty repair work as associated with particular fuels. We have not had one warranty issue in Las Vegas during the eight years that we have used biodiesel fuels. There is a difference of opinion that may be a climate issue, particularly in northern Nevada where it has more flow issues in the cold associated with the biodiesel use.

But I want it for the record to indicate that we are about B20, which is a 20 percent of biodiesel. We have not had one warranty issue claim on any off-road or on-road diesel-operated piece of equipment. What we are also advocating and supporting within that is that as, and what Keith Wells alluded to, is as new technologies become readily available we should be able to deploy them immediately which would require, I understand, a change in the NRS statute as it's currently constituted. And by doing so, we would be able to react much more quickly to promising technologies as they are coming onto market.

The one-page sheet from the City of Las Vegas reflects some of the successes the City has had ([Exhibit H](#)) with the alternative-fuel program which can be attributed to our participation in compliance with NRS 486A since 1993. We have acquired \$14.7 million in alternative-fuel grants in support of the alternative-fuel program of the City of Las Vegas. We have 90 percent of our fleet that operates on one of 6 different types of alternative fuels. In 6 months, 100 percent of our fleet will be involved with some kind of alternative fuel which will include fire services and our paramedics. Those fuels include compressed natural gas, hydrogen, hydrogen enriched compressed natural gas as a blend, biodiesel, B20 and hybrids. The Clean Cities Coalition is very strong down here. We have received congressional, international and local recognition for those efforts in deployment of the variety of fuels and the chief one is the world's first hydrogen energy station that we dedicated in 2002. At the

showcase in the international theater, the City received World Leadership Award in December 2007 in London, England, competing with 400 cities across the world. In 16 years of my dealings with these fuels, it has conclusively proven the operational efficiency, maintenance costs and air-quality attributes have all been enhanced.

The use of these fuels has resulted in the maintenance cost of these vehicles having gone down 12 percent. In our fleet, 40 percent is diesel operated because of their efficient engines, and we used biodiesel B20 blend for 8 years. Our maintenance cost during that time has gone down 18 percent. There was an improvement in mpg performance with B20 of 1.1 percent, also a reduction in nitrogen oxides (NOx) from the smokestack of a diesel engine. We use Clean Boost which reduced NOx by 30 percent. Mr. Ransel's tables will show an increase in his data from all the fleets that he sees. Other benefits with alternative fuels show success in building business models.

John Haycock, before he sold his "Flying J" two years ago, invested his own money in developing a biodiesel production plant in Las Vegas in 2000. As a Clean Cities Coalition with fleets, we will write our contracts to support buying his fuel and deploying it in our diesel operations. He has received publicity, nationally and locally, but he had a question when he was asked at a press conference that I attended. They asked him, "Why are you doing this, Mr. Haycock?" He gave two reasons: 1) it was the right thing to do, 2) it was good business. It is now showing profitability for the first time. We are changing 108 years of dealing with fossil fuel and imported costly oil. It is going to take time for those businesses to take root and show profit and be sustainable over the long term. Mr. Haycock is realizing the benefits associated with that. The University of Nevada, Las Vegas (UNLV) is developing alternative-fuel curriculum that has shown interest by the public and by the students. There is a resale market for alternative-fuel vehicles. There are 11 sites for the sale of biofuels in Las Vegas for the public and government entities.

DENNIS RANSEL (Air Quality Planning Manager, Clark County Department of Air Quality and Environmental Management):

The following presentation is found on *Clark County Alternate Fuel Program Fact Sheet* ([Exhibit I](#)). The Clark County fleet of vehicles has the largest number of hybrid electric vehicles in the State. All the vehicles subject to NRS chapter 486A in the Clark County fleet are using an alternative fuel. Look at the fleet facts in [Exhibit I](#). Fuel savings will grow as the fleet grows. Look at

the air quality facts on Emissions Reduction Alternative Fuels versus air-quality facts on Conventional Fuels chart in [Exhibit I](#). Greenhouse gases will be dealt with more closely in the future. Ozone comes mostly from vehicles, vapors from gasoline stations and industries. The new standards for EPA quality are significantly lower, and we will not meet those standards in the near future, but will try to meet that standard by 2013. Ozone is a summertime pollutant and alternate fuel will help meet that standard. There may be opportunities for funding with the new administration. We support revisions to the NRS to make the program more flexible.

CHAIR SCHNEIDER:

This Committee will have some bills later helping with clean air, such as truck stop, electrification bills and others. The last program for today is NRS 701.215 which requires the director of the State Energy Office to prepare a State Energy Reduction Plan with a goal of reducing grid-based energy purchases for State-owned buildings by 20 percent by 2015. This provision was added during the 22nd Special Session in 2005 introduced by the Assembly Committee of the Whole.

Nick Vander Poel (Deputy Director, Nevada State Office of Energy):

This program began in 2001. Governor Guinn implemented it as a piece-by-piece participant program. Data was collected from agencies that participated but the Nevada State Office of Energy showed no interest in the program; only some participation. This program was carried out by Jim Walker and office staff, but he is no longer there. There have been six directors in two years and high turnover in staff. The last action taken with this program was in 2006, due to lack of personnel and resources. In 2005, staff did conduct a workshop that highlighted the background and purpose to departments and agencies to reestablish the intent of Governor Guinn's order to reduce energy consumption. Their strategy was ENERGY STAR benchmarking, auditing buildings and building a spreadsheet, implementing a behavioral program, setting up performance contracting and looking at leased facilities. Clark County School District did participate and had a cost savings around \$6 million. With a loss of staff, this plan began, but had no follow up. We want to address the lack of enforcement or compliant requirement. We want 20 percent by 2015, but the office cannot force departments and agencies to comply. We have no concrete plan.

HATICE GECOL, Ph.D., (Energy and Science Advisor, Director, Nevada State Office of Energy):

The Governor urged us to apply for the pilot program referred to earlier by Mr. McInnis. We were one of three states chosen to conduct a free energy audit with Walmart. We are still waiting for the audit report. We will be putting a photovoltaic solar panel on top of the State Capitol through a grant. This will produce between 25 to 30 kilowatts, saving 20 to 25 percent of electricity from the grid.

CHAIR SCHNEIDER:

Where is the panel going to be placed on the Capitol?

DR. GECOL:

The panel will go on top of the building on a space not visible to the public. My engineer is not here today to tell you exactly where.

MR. MCINNIS:

The Capitol building has three roofs facing south with good exposure. The exact location is not determined because of structural problems. There are some panels available that are similar to the existing shingles.

CHAIR SCHNEIDER:

This building, as well as the Nevada Supreme Court Building, would be a good choice.

DR. GECOL:

The Legislature will be the second one to have the solar panels.

CHAIR SCHNEIDER:

What do you need to make the program work better?

DR. GECOL:

We do not have a staff member with that expertise in the Energy Office. This law only requires us to come up with a plan. Without knowing what kind of buildings you have, it is difficult to come up with a plan. This is a huge task concerning all state buildings in the existing grant. We need to know how much energy each building is using. The U.S. Department of Energy says we can save up to 9 percent. To know all these things, will enable us to come up with a plan and how much it will cost. Buildings and Grounds explained the challenges

earlier. Each year the building will need to be monitored, after all is initially done, in order to track the savings. Who is going to do that? We do not have a mechanism established in the law to accomplish these goals nor the resources.

CHAIR SCHNEIDER:

Is there any money in the stimulus package?

DR. GECOL:

I hope so. We are watching closely.

CHAIR SCHNEIDER:

Did you talk to the Governor about that?

DR. GECOL:

Yes.

SENATOR LEE:

You want some compliance and authority. What would you do to make others comply? You do have a governor. Your Bureau of Consumer Protection Report (BCP) needs to go to the Governor and tell him what you need. He is the executive officer; he is supposed to do that. You should not be given authority to write up someone.

MR. VANDER POEL:

I agree. Who has the authority? The data shows: if there was compliance, they were participating. It was a basic reply that we are implementing the same efforts that we did the previous year. It is a case-by-case situation. Every department and agency is different. We have agencies that move from a wasteful building to a 90-percent efficient building. In compliance, we have to go to 20 percent and we are tracking that data. Where do we draw the line on conservation?

SENATOR LEE:

What compliance do you want?

DR. GECOL:

Who is going to track the agency? They do not have an energy manager. We do not have anybody. The key work is up to 9 percent. Changing lighting systems will cost money. The Energy Office does not have the money to give the

agencies and they do not have money either. Even if we received money, it would not be enough to cover all the agencies. Even with the solar panels installed, who is going to track it each year?

SENATOR LEE:

I understand your answer, but it did not answer my question.

MR. VANDER POEL:

We will work with you. A recent decision by the Public Utilities Commission, Docket Number 07-06024, allowed third parties to partner with state buildings, taking advantage of tax incentives.

DR. GECOL:

We are only charged with coming up with a plan but we do not know the buildings. We need to reduce the grid by 20 percent by 2015.

SENATOR TOWNSEND:

A subcommittee should review these roadblocks. A component is sometimes missing when trying to deal with situations. When entrusted with a plan, how do you implement it? That is an Executive Branch decision; not a legislative one. The Governor must say to every state agency, "This is important and I want it done." Since B&G only has control over 10 percent of the buildings, I would like to know the inventory of the other 90 percent. The Energy Office, B&G, Public Works, NV Energy and our local governments need to be at the table to find out how we can structure the advancement of the Renewable Energy Portfolio Standard (RPS). The State should lead the RPS challenge. We are the only state in the Union that allows conservation measures to be put into that formula. A kilowatt that is not used is one that does not have to be produced which is the cheapest one we can have. What is our goal and mission? What is in the way of achieving it and fixing it? We are talking about national security issues and money that is not easily attainable.

CHAIR SCHNEIDER:

A week from Monday would be a good time for a subcommittee to include Senators Schneider, Townsend and Breedon.

DR. GECOL:

Since 2005, according to NRS 701.220, we are obligated to adopt energy conservation in buildings statewide, due to inflation, and roll into the new one every three years. We finally caught up with this. We must prioritize as we are a small office of four. We are coming before the Legislative Commission to finalize this adoption statewide which is 2006. Since 2009 is coming soon, based on our regulations, it will be 30 percent more efficient. We have established an energy usage baseline per NRS 701.215 for 2005. By 2009, we have to meet that 30 percent. We need to track the usage by 2016.

CHAIR SCHNEIDER:

We will look into that in subcommittee. We will hear Senate Bill (S.B.) 73 on another day when Dr. Gecol works out the details.

SENATE BILL 73: Revises provisions governing energy conservation and efficiency standards. (BDR 58-438)

STEVE WACLO:

If you cannot measure something, you cannot manage it. An article in the January edition of *Forbes Magazine* about the man who developed Macromedia Flash sold out his interest and started a business. They invented an inexpensive system that can be integrated into electric metering systems that gives real-time energy-usage information. The systems are wireless going into a main database where the numbers are crunched using Flash technology. You can see what usage is occurring on a 15-minute basis. It costs \$150 for residential usage. It is at a convention in San Diego right now and is called "GreenBox."

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CHAIR SCHNEIDER:

If there is no further testimony, the Senate Committee on Energy, Infrastructure and Transportation is adjourned at 10:41a.m.

RESPECTFULLY SUBMITTED:

Sandra Hudgens,
Committee Secretary

APPROVED BY:

Senator Michael A. Schneider, Chair

DATE: _____