MINUTES OF THE MEETING
OF THE
ASSEMBLY COMMITTEE ON COMMERCE AND LABOR

Seventy-Sixth Session
May 13, 2011

The Committee on Commerce and Labor was called to order by Chair Kelvin Atkinson at 1:05 p.m. on Friday, May 13, 2011, in Room 4100 of the Legislative Building, 401 South Carson Street, Carson City, Nevada. The meeting was videoconferenced to Room 4401 of the Grant Sawyer State Office Building, 555 East Washington Avenue, Las Vegas, Nevada. Copies of the minutes, including the Agenda (Exhibit A), the Attendance Roster (Exhibit B), and other substantive exhibits, are available and on file in the Research Library of the Legislative Counsel Bureau and on the Nevada Legislature's website at www.leg.state.nv.us/76th2011/committees/. In addition, copies of the audio record may be purchased through the Legislative Counsel Bureau's Publications Office (email: publications@lcb.state.nv.us; telephone: 775-684-6835).

COMMITTEE MEMBERS PRESENT:

Assemblyman Kelvin Atkinson, Chair
Assemblyman Marcus Conklin, Vice Chair
Assemblywoman Irene Bustamante Adams
Assemblywoman Maggie Carlton
Assemblyman Richard (Skip) Daly
Assemblyman John Ellison
Assemblyman Ed A. Goedhart
Assemblyman Tom Grady
Assemblyman Cresent Hardy
Assemblyman Pat Hickey
Assemblyman William C. Horne
Assemblywoman Marilyn K. Kirkpatrick
Assemblyman Kelly Kite
Assemblyman John Oceguera
Assemblyman James Ohrenschall

COMMITTEE MEMBERS ABSENT:

Assemblyman Tick Segerblom (excused)

GUEST LEGISLATORS PRESENT:

Senator James Settelmeyer, Capital Senatorial District
Senator Michael Schneider, Clark County Senatorial District No. 11

STAFF MEMBERS PRESENT:

Marji Paslov Thomas, Committee Policy Analyst
Sara Partida, Committee Counsel
Andrew Diss, Committee Manager
Earlene Miller, Committee Secretary
Sally Stoner, Committee Assistant

OTHERS PRESENT:

Stacey Crowley, Director, Office of Energy, Office of the Governor
Joe Johnson, representing Toiyabe Chapter, Sierra Club
Rose McKinney-James, representing The Solar Alliance, Bombard Electric, and Amonix, Inc.
Jason Geddes, Environmental Services Administrator, City of Reno
James Medeiros, Founder, The Solar Store, Carson City, Nevada
Judy Stokey, representing NV Energy
Brooklyn Andreasen, Intern of Senator James Settelmeyer
Kyle Davis, representing Nevada Conservation League
Rob Joiner, representing Pyramid Lake Paiute Tribe
John Sande IV, representing Nevada Franchised Auto Dealers Association
Thomas Danzinger, Private Citizen, Washoe Valley, Nevada
Bob Tregilus, representing the Electric Auto Association of Northern Nevada and Feed-In Tariffs for Nevada
Alaina Burtenshaw, Chair, Public Utilities Commission of Nevada
Paul Maguire, Manager, Engineering Division, Public Utilities Commission of Nevada
Debra Gallo, representing Southwest Gas
Luke Busby, representing RightCycle and Clean Energy Center
Pegeen Hanrahan, Principal, Community and Conservation Solutions, LLC, Gainesville, Florida
Ted Ko, representing Clean Coalition, Palo Alto, California
Janet Gagnon, Head of Government Relations, SolarWorld, Camarillo, California
Glen Williams, Partner, Solar Venture Partners, LLC, Reno, Nevada
Eric Severance, Partner, Solar Venture Partners, LLC, Reno, Nevada
Tom Millhoff, Vice President, Business Development, HelioPower, Reno, Nevada

John Owens, Director, Customer Renewable Generation and Energy Efficiency, NV Energy
Dan Jacobsen, Technical Staff Manager, Bureau of Consumer Protection, Office of the Attorney General
Chad Dickason, Partner, Hamilton Solar, Reno, Nevada
Trevor Hayes, representing China Mountain Wind, LLC
Jack McGinley, Director, Regulatory and Legislative Strategy, Rates and Regulatory Affairs, NV Energy
Ernie Adler, representing International Brotherhood of Electrical Workers Local 1245

Chair Atkinson:
[The roll was taken, and a quorum was present.] We will open the hearing with Senate Bill 59 (1st Reprint).

Senate Bill 59 (1st Reprint): Increases the cumulative capacity of net metering systems operating in this State. (BDR 58-408)

Stacey Crowley, Director, Office of Energy, Office of the Governor:
This bill as amended proposes to increase the capacity of net metering systems from 1 percent to 2 percent of the total peak capacity of utilities in the state. Net metering as defined in *Nevada Revised Statutes* (NRS) Chapter 704 is the difference between electricity supplied by the utility and the electricity generated by a customer-generator that is fed back to the utility over the billing period. The installation of many renewable energy projects in the state in recent years has demonstrated the success of the incentive programs offered through the utility company. The benefits are the reduction of fossil fuel based energy consumption and a reduction of load on the grid. Ancillary benefits include an increased workforce, technology development, and financial investment to our communities.

Renewable energy is an important tool in the state's economic toolbox that creates jobs, business opportunities, and other opportunities for Nevadans. Renewable energy developers, manufacturers, and contractors need to know there is consistency within the system to promote the industry for the long term. At the same time, the current system of rebates and subsidies directly affects the utility's customer rates. We understand that there are many other components to a successful renewable energy program for the industry. An increase to a 2 percent net metering cap is one important step in that system. It is the mission of the Office of Energy to provide consistency, reliability, and opportunity for our citizens to develop businesses and products that stimulate our economy, reduce our energy consumption, and improve environmental quality for future generations.

Chair Atkinson:
Are there any questions from the Committee?

Assemblywoman Bustamante Adams:
What does that increase mean in dollar amounts?

Stacey Crowley:
The increase in the cap is the amount of energy capacity. It is not a dollar amount. The utilities in the state have a certain capacity of electricity. What we are trying to do is say 1 percent of that energy capacity can be used under a net metering system. This bill does not attach dollars to the issue but is a policy discussion to increase the cap from 1 percent to 2 percent of energy capacity.

Assemblyman Conklin:
I am not sure that I read this as a cap. Section 1 says a utility "shall" and that does not usually mean "may"; it means "must." Then it says "until the cumulative capacity of all net metering systems operating in this State is equal to 2 percent." So that is not a cap; it is a mandate. Is that correct?

Stacey Crowley:
It is offering the net metering system to be increased to 2 percent so it is going to be incumbent on the customer generators to apply for and install those systems to 2 percent. The language could be confusing.

Assemblyman Conklin:
Do we have any idea what the cost will be to the consumer?

Stacey Crowley:
Because there are a number of other renewable generation incentive bills, those costs are going to be determined, if at all, through those bills. If we kept the current system of incentives, I would have to get that number for you.

Chair Atkinson:
Are there any additional questions from the Committee?

Assemblyman Daly:
I understand that we are raising the level to which we want to aspire to 2 percent of the capacity of all utilities in the state. Will all ratepayers share in paying the incentives, or are only some of the utility companies and some of the ratepayers going to pay the incentives?

Stacey Crowley:
The net metering program is somewhat detached from the incentive program. You can net meter your renewable energy but you do not have to take advantage of an incentive program. The net metering system has its own structure in terms of billing for the utility. The incentive you get for net metering is that you can take advantage of the energy you produce when you do not need it for that billing period. I believe that is translated to all ratepayers. It has a consistent effect on all ratepayers.

Chair Atkinson:
Are there any questions from the Committee? I see none. Is there anyone else wishing to testify in favor of S.B. 59 (R1)?

Joe Johnson, representing Toiyabe Chapter, Sierra Club:
While we support a higher limit than 2 percent, we are in support of this bill at this time. I would like to address the potential costs. The Director of the Office of Energy said that the net metering system in this portion of the chapter is separate from any other direct incentives. We have other programs that are within the statute. There are a number of bills addressing those. Regarding the indirect cost of simple net metering, if I buy and install a system on my roof, get the interconnection agreements, and offset my load, there is an assumed cost of the general rate that allows the utility a return on their investment and capital. The counter argument is that most of the net metering programs are solar photovoltaic, which produce within the peak demand hours and probably have a higher value than the evening consumption that the utility is providing back.

The statute is explicit, but there is no cost for additional metering. There are two separate classes of net metering from 0 to 100 kilowatts that has preferential treatment on rates. For 100 to 1,000 kilowatts, there are offsets to the costs. The argument that has been made in the past is that the additional cost to the general ratepayer is covered by the additional benefits that the system receives, so there is a very small or an actual positive benefit to a net metering program. The offsets in rebate programs that are stimulating economic development are separate from the issue involved in S.B. 59 (R1).

Chair Atkinson:
Are there any questions from the Committee? I see none. Is there anyone else to speak in favor of this bill?

Rose McKinney-James, representing The Solar Alliance, Bombard Electric, and Amonix, Inc.:
We are in favor of S.B. 59 (R1). I submitted a memorandum (Exhibit C). During our testimony before the Subcommittee, we were hoping to look at an increase to 5 percent. It is probably in our best interest to support the increase to 2 percent. We are bumping up against the 1 percent limit that is in place in the northern part of the state and will rapidly be in a similar situation in the southern part of the state. We believe this is a reasonable accommodation. Net metering is a fundamental tool when it comes to advancing renewable energy, particularly solar photovoltaic and small wind. We are supportive of this measure.

Chair Atkinson:
Are there any questions from the Committee? I see none.

Jason Geddes, Environmental Services Administrator, City of Reno:
I want to add two points in support of the bill. In the language on line 4, it says that they need to offer net metering until it reaches a certain capacity. We are approaching the current cap, so there is a concern in the community that we will approach that prior to 2013. We think it would be best to move the cap up to the 2 percent and look at it over the interim to assess the full effects of the system and determine what are the appropriate costs and benefits.

Chair Atkinson:
Who is concerned from the community? I have heard we are way below the cap.

Jason Geddes:
With the programs that out there in the approved rebate program and through various requests for proposals (RFP) at the state and city levels, we are getting near 45 or 50 megawatts, and we are looking to do 75 megawatts at the 1 percent cap. If it waits until the 2013 Session for implementation, it is likely that we will hit the cap before it could be addressed. The community is people who work with solar, wind, and water for net metering systems.

Chair Atkinson:
Are there any questions from the Committee? I see none.

James Medeiros, Founder, The Solar Store, Carson City:
I am neutral on this bill but I think there should be no cap on solar. In my store, I see my competition coming from out of state and not paying state revenue or sales tax on systems that are consistently 70 percent of the cost. We collect more in sales tax than we pay in rent for our store. In order for businesses in Nevada to survive, you have to make sure there is tax revenue being collected

for the state. It prevents me from doing business when people buy their system over the Internet, pay a contractor to install it, and get state incentives without supporting the state. It puts me out of business as well.

Chair Atkinson:
Are there any questions from the Committee? I see none. Is there anyone else to testify in favor of S.B. 59 (R1)? I see none. Is there anyone in opposition to this bill?

Judy Stokey, representing NV Energy:
We opposed this bill in the Senate when the proposed cap was 5 percent. When it was amended to 2 percent, we were still in opposition because we believed that the 1 percent is 72 megawatts of our system. We have just hit 12 megawatts. If everything that is in the pipeline gets built, we will hit just over 40 megawatts. We did not believe that we needed an increase at this time. We are concerned that doubling of the net metering percentage does not double or change the commitment that was made last session of $255 million of rebates that our customers pay. There was a question about the cost of net metering. The net metering subsidy is approximately $8 million annually once we hit the 1 percent cap. So at the 2 percent cap it will be approximately$16 million.

Chair Atkinson:
Who pays the $8 million?

Judy Stokey:
All of the subsidies come from our customers in their rates.

Chair Atkinson:
Are there any questions from the Committee? I see none. The “community” is concerned that by 2013 we are going to surpass the 2 percent.

Judy Stokey:
The 1 percent, or 72 megawatts, is statewide for the company north and south. The way the law is written, it is 1 percent for the north and 1 percent for the south. We are going to hit 1 percent in the north by the end of next year. That is why we wanted to go to 1 percent statewide, because we do not think we will hit that level for years.

Chair Atkinson:
Are there additional questions from the Committee? I see none. Is there anyone else in opposition? Is there anyone neutral? We will close the hearing on S.B. 59 (R1) and open the hearing on Senate Bill 288 (1st Reprint).

Senate Bill 288 (1st Reprint): Revises provisions governing renewable energy. (BDR 58-1026)

Senator James Settelmeyer, Capital Senatorial District:
I would like to have my intern introduce this bill.

Brooklyn Andreasen, Intern to Senator James Settelmeyer:
Senate Bill 288 (R1) includes Indian tribes and tribal organizations in the Waterpower Energy Systems Demonstration Program and extends the prospective expiration of the program until June 30, 2016. It also expands the capacity of the program to 5 megawatts. At least 1 megawatt of that amount must be allotted to systems with a capacity of 100 kilowatts or less. Rebates under the program must not exceed 50 percent of the total cost of a system. The bill amends the net metering program to accommodate certain systems serving contiguous property, including property that is separated by a street, alley, creek, river, or certain rights-of-way. The effective date is upon passage and approval for the purpose of extending the prospective expiration of the Waterpower Energy Systems Demonstration Program, and on July 1, 2011, for all other purposes.

Chair Atkinson:
This bill sounds similar to something we heard earlier.

Senator Settelmeyer:
I believe Assemblyman Goicoechea had a similar bill earlier this session. My goal was to do something that I have been trying to talk to NV Energy about for six years and before I was elected to the Legislature. That concept was to allow individuals in hydro situations to have net metering of multiple meters on contiguous properties. Generally in hydro the water is dropped from the highest elevation to the lowest elevation, and therefore you are generating the power at the lowest point on the property, where you traditionally have no energy demand. Most people try not to build their houses at the lowest point on the property because that is not where their irrigation pumps are. We are looking for a way for hydro to meet all of the power requirements so people can become energy independent. That was the original goal of the bill, which was hard to get NV Energy to agree to. Senator Schneider encouraged me to include more.

Chair Atkinson:
Are you going to try to combine your bill with Assemblyman Goicoechea's bill?

Senator Settelmeyer:
We have been talking. This bill came out of the Senate with a 21 to 0 vote, with some difficulty, because we were asking for a lot for renewable energy.

Chair Atkinson:
Are there any questions from the Committee?

Assemblywoman Carlton:
It appears that you want to operate like a co-op without being a co-op as far as tying these energy systems together.

Senator Settelmeyer:
Imagine that when you successfully put a hydro facility on your property, it made the meter at the bottom of your property run in reverse and generated 1 kilowatt of power in reverse. On other parts of your property you are using power. Under the current law, the generated energy cannot be credited to the other facilities that are using energy because they are different meters. It would force the people in these situations to put their own transmission lines on their property to try to get the power from the point of generation to the place of use. There would not be a co-op; they are trying to reduce their own power bill. It would be as if your home had individual meters throughout the house.

Assemblywoman Carlton:
You are still going to get only one bill and a credit for the one facility that is producing energy. You will still get a benefit from that meter running in reverse.

Senator Settelmeyer:
In most of these situations, they are not, because at the bottom end they do not have enough power being used. They are not running in reverse.

Assemblywoman Carlton:
It is the consumption part, not the generation part.

Senator Settelmeyer:
That is correct. This is about eliminating the consumption aspect for the rest of the operations.

Chair Atkinson:
Are there additional questions or comments from the Committee? I see none. Is there anyone else to testify in favor of S.B. 288 (R1)?

Judy Stokey, representing NV Energy:
We support this bill and have been working with the Senator and Assemblyman Goicoechea. We have seen approximately 50 percent of our hydro-generation program customers end up with these same problems, so we support this bill for hydro only.

Chair Atkinson:
Are there any questions from the Committee? I see none. You said for hydro only. Is there an issue we need to address?

Judy Stokey:
There was an amendment in the Senate that did not get in this bill and I assumed it would come up here.

Chair Atkinson:
We have not seen an amendment. Are there any questions from the Committee? I see none. You have seen Assembly Bill 359, which is Assemblyman Goicoechea's bill. Is there much that can be together, or do you see them as separate issues?

Judy Stokey:
They are very similar. We could work with both of the sponsors to see if there is a way to combine them. There are some minor differences but we could work on them.

Kyle Davis, representing Nevada Conservation League:
We are in support of the bill. Waterpower is a renewable program and will help us to reduce our consumption of fossil fuel. We supported the amendment in the Senate but understand it is not offered here.

Chair Atkinson:
Are there any questions from the Committee? I see none.

Rob Joiner, representing Pyramid Lake Paiute Tribe:
We appreciate the efforts of the sponsors to include the tribes in this program. As you may know, the Pyramid Lake Paiute Tribe has a very aggressive economic development program and this will fall into that. They have projects in mind that will benefit from this bill. We strongly support the bill.

Chair Atkinson:
Are there any questions from the Committee? I see none. Is there anyone else wishing to get on record in favor of this bill? Is there any opposition to this bill? I see none. Is there anyone to testify from a neutral position? I see none.

We will close the hearing on Senate Bill 288 (R1). We will open the hearing on Senate Bill 281.

Senate Bill 281: Requires the Public Utilities Commission of Nevada to establish the Electric Vehicle Demonstration Program. (BDR 58-1019)

Senator Michael Schneider, Clark County Senatorial District No. 11:
Last session, I chaired the Senate Committee on Energy, Infrastructure, and Transportation. I stress the linkage between energy issues and transportation issues. I will read a couple of paragraphs from a news article from McClatchy Newspapers that appeared in the *Tri-City Herald* in Washington State on April 8, 2011. These lines capture the thrust of my comments about the linkage between those two sectors and demonstrate the potential for technological advancement and economic development.

> Entire industries grew up around gasoline-powered cars, ranging from the ubiquitous filling stations to fast-food restaurants along highway exits. Similarly, the rise of electric cars probably will transform more than just the automobile. "The moment you put a plug in a car, you [have] these two titan industries coming together supporting the consumer," said Ed Kjaer, the director of electric transportation for the Southern California Edison, a giant utility. The alliance between utilities and carmakers will lead to numerous changes, he predicts, including a faster build of the so-called smart grid. In a true smart grid, digital communications between a utility and the consumer's home could stagger the charge coming to an electric car depending on the overall demand for power. Big off-peak energy users could see lower bills. This is one factor behind General Electric's November announcement that it will purchase 25,000 electric cars by 2015, a number almost as large as its current fleet of 30,000 conventional gasoline-powered cars. GE anticipates savings from fuel economy and overnight charging. What will become of the corner Exxon or Shell station? The first wave of car-charging stations is likely to involve the owners of buildings and national retail chains that install car-charging operations for some small economic and marketing gain. Once a critical mass is reached in production and sales of electric cars, advocates said, the market could build out quickly. "At some point, you will have these well-capitalized people who come in and say, 'We want to be the Exxon of charging infrastructure.' And they will buy electricity in bulk from the utilities, and they will pony up the money to actually plant infrastructure on the ground [and] sign up customers," said Mahi Reddy, the CEO of SemaConnect, a

company in Annapolis, Maryland, that is now making charging stations and going nationally with them.

I introduced Senate Concurrent Resolution No. 19 of the 75th Session which established an interim study committee on the production and use of energy in Nevada. Part of the rationale for the study was the understanding that energy in terms of electric power production, heating, and transportation is fundamental to every aspect of Nevada's economy. It was also noted in connection with S.C.R. No. 19 of the 75th Session that an estimated $11 billion per year is spent on energy transportation fuel in Nevada. A great deal of this is spent outside of the state. Studies indicate that for every dollar retained within the state, there is a multiplier effect in the state's economy.

Because of the linkage between energy and transportation issues, I introduced Senate Bill No. 327 of the 75th Session to establish an electric vehicle demonstration program to provide incentives for electric vehicles. The goal was to help Nevada begin to deploy electric and hybrid-electric vehicles as well as to give our electric utility practical experience in serving a new customer base, the transportation sector, and advance their technical ability to serve them. Unfortunately, the bill was unsuccessful. Although the estimates were that the modest demonstration project would cost the average residential customer only about 3 cents per month, there was concern that the various energy programs cumulatively would cost ratepayers too much. I do not believe enough attention was given to the offsetting benefits of encouraging electric vehicle usage in terms of reducing both gasoline consumption and environmental impact.

With gasoline now costing about $4 per gallon, it is a good time to reassess how much money we want to send out of state for transportation fuel. We adopt these types of demonstration projects when we want to stimulate new technologies. With the auto industry still recovering, and financing for loans sometimes difficult to obtain, as we hear in testimony on Senate Bill 234, which addressed car dealers, it is important to provide incentives to purchase the clean vehicles that we hope will become our primary mode of transportation in the future. In March 2009, President Obama announced a national goal to put1 million plug-in hybrid vehicles on American roads by 2015. Senate Bill 281 represents an effort to help achieve that goal.

Section 19 of this bill clarifies that a person who owns or operates an electric vehicle charging station is not a public utility and is not subject to the jurisdiction of the Public Utility Commission of Nevada (PUCN). This provision was suggested by the Consumer's Advocate. There was a dispute in 2008 concerning if companies that install solar panels on a home or business and lease them to the building owners were public utilities. It took a full-blown

PUCN review and Assembly Bill No. 186 of the 75th Session, sponsored by Assemblywoman Sheila Leslie, to settle the controversy. We do not want to delay the deployment of electric vehicle charging stations because the industry is uncertain how to treat these people and whether they should be regulated.

In California, there are incentives and tax credits for hybrid and electric vehicles. Currently in California, the Nissan Leaf, which is 100 percent electric, qualifies for a $5,000 tax rebate for in-state buyers, and the Toyota Prius and Lexus plug-in hybrids qualify for a $3,000 rebate. Plug-in electric vehicles are the wave of the future, but we need to subsidize them to spark the industry. This is the stimulus needed to get Nevadans to buy electric vehicles.

Chair Atkinson:
Are there any questions from the Committee?

Assemblyman Goedhart:
This is a $3,000 credit from the state for a person who purchases a new electric or hybrid vehicle. Is there a cap on the number of vehicles that would be eligible for the rebate? In the defining language, what precludes electric golf carts from being eligible for the rebates?

Senator Schneider:
I would agree to an amendment to eliminate those types of vehicles.

Chair Atkinson:
In section 12, it has a minimum of 1,500 electric vehicles in the state by January 1, 2016. Are there any questions from the Committee?

Assemblyman Hickey:
One of the concerns we have heard relating to electric vehicles is that purchasing less fuel contributes to less revenues for the state and for highway funds. People who would purchase these vehicles do it as an alternative energy source and to save money. Why do we have to provide an incentive for the customers when they are hoping to save money and be environmental good stewards in the process?

Senator Schneider:
That is a good question and everyone has their philosophy about it. This will create a lot of attention. This is the government making a statement that we want this to move forward quickly. This is an incentive to sell electric vehicles. In the future, because people are reducing the amount of highway tax they are paying by purchasing vehicles with better mileage, we will and should wipe out gasoline consumption and have a tax on the number of miles driven.

By keeping the money in the state that we now pay out of state for gasoline, those dollars will have a great effect. Of the $11 billion per year spent for gasoline in Nevada, a great portion of that is sent out of the country. There is huge philosophical change here, and I want to push it forward faster.

Chair Atkinson:
Are there additional questions from the Committee?

Assemblyman Goedhart:
What is your opinion on compressed natural gas (CNG) cars?

Senator Schneider:
That is one of the other alternatives that we are exploring. There is an issue with fracking the earth when they release the natural gas because it pollutes water. Natural gas is much cleaner and it is a good thing. I think you will see that more in large trucks. I do not think it will be used for family automobiles. I think we will go straight to electric, which will be carbon-free.

Assemblyman Ohrenschall:
In those states that have adopted incentive programs like this or other incentives, has it worked?

Senator Schneider:
It is working well. The lag is the charging stations. That is why we have allowed in the bill for the charging stations to not come under the PUCN. You have to have charging stations for electric cars.

Chair Atkinson:
Are there any additional questions from the Committee? I see none. Is there anyone else wishing to testify in favor of S.B. 281?

John Sande IV, representing Nevada Franchised Auto Dealers Association:
If you build it, we will sell it. We are supportive of new technologies that improve the efficiency of automobiles and look forward to selling these vehicles to Nevada residents and being part of this new generation in technology.

Chair Atkinson:
Are there any questions from the Committee? I see none.

Kyle Davis, representing Nevada Conservation League:
We are in support of this legislation. We think this is the wave of the future and the direction in which we must go in order to get our transportation fleet into cleaner energy.

Thomas Danzinger, Private Citizen, Washoe Valley, Nevada:
I installed a 10 kilowatt wind turbine last August and have under $300 for power bills since then. My average power bills up to that point had been about $120 per month. I am trying to purchase a Nissan Leaf, which unfortunately has been delayed by the earthquake in Japan. Nevada is not in the early stages of receiving Leafs because it lacks the infrastructure that a number of cities have in place. Those cities are Seattle, Portland, San Francisco, Los Angeles, Boston, New York, and Houston. I am in favor of converting to electric and plug-in electrics. This will save a lot of money from going out of state, and people like me can produce our own electricity and reduce our expenditures.

Chair Atkinson:
Are there any questions from the Committee? I see none.

Bob Tregilus, representing the Electric Auto Association of Northern Nevada and Feed-In Tariffs for Nevada:
Our group is in support of S.B. 281. I would like to address the issue about golf carts. The bill talks about electric vehicles used on a highway. It is important to highlight what Senator Schneider said about making Nevada ready for electric drive transportation as it brings economic development to our state. Nevada will probably not get Nissan Leafs for sale until spring of next year. We are almost the last on the list because our state has not indicated an interest in electric vehicles. This is a very modest bill which I feel will help bring up the level of awareness that Nevada is ready for electric drive transportation.

Chair Atkinson:
Are there any questions from the Committee?

Assemblywoman Carlton:
What about the Chevrolet Volt?

Bob Tregilus:
The Chevrolet Volt is for sale in Nevada. It is a hybrid and has a backup gasoline engine. It does not have the mandatory requirement of a couple of charging stations strategically positioned to mitigate range anxiety, which is a psychological, not a physical, problem for people who know electric vehicles.

Chair Atkinson:
Are there additional questions from the Committee?

Assemblywoman Kirkpatrick:
Are the 1,500 vehicles for the entire state? Would this program be similar to the other programs and the ratepayers would pay the $3,000?

Senator Schneider:
The 1,500 vehicles are for the entire state. The incentives would be paid by the ratepayers. It goes through the PUCN and they develop the program; it will cost 3 to 5 cents for the ratepayers.

Chair Atkinson:
Are there others to speak in favor of S.B. 281? I see none. Is there any opposition? I see none. Is there anyone to speak from a neutral position?

Judy Stokey, representing NV Energy:
We are neutral on S.B. 281. We love electric vehicles and think they are a great idea. We do not like the $3,000 rebate because there is a federal tax credit of up to $7,500 in place and a $2,000 rebate for charging stations. The rebates would cost $4.5 million.

Chair Atkinson:
So people will get a total of $10,500 in tax credits.

Judy Stokey:
Yes.

Chair Atkinson:
Are there any questions from the Committee? I see none.

Alaina Burtenshaw, Chair, Public Utilities Commission of Nevada:
We wanted to bring to the Committee's attention to the interplay between sections 13 and 15. The Commission is required to adopt regulations for this program pursuant to section 13, but section 15 requires the company to make a filing on October 1, 2011. We then have 30 days until November 1, when the Commission has to review and issue order. The timing of this will be problematic because if we are going to have regulations in place before the company makes its first filing, we have calculated that the soonest we could complete the rulemaking in this matter would be March 30, 2012. If the company makes its filing on October 1, 2011, they will be doing so in the absence of regulation.

Another significant concern is that we have 30 days in which to review and act on the plan after they have made the filing in October. We are required by law to notice every filing that is made with us, and it takes at least three days to even get the notice out and get the comments back from the public. So we would probably need more time between the filing and the time frame for review.

Chair Atkinson:
Could you address Assemblywoman Kirkpatrick's concern?

Assemblywoman Kirkpatrick:
I asked if the $3,000 will go into a program similar to our solar program; is that is how you would envision them getting the money back and who would pay for it?

Alaina Burtenshaw:
We do have some other rebate programs and I think it would operate in the same manner. The person would come to the utility, identify that he had purchased the vehicle, and seek the rebate.

Paul Maguire, Manager, Engineering Division, Public Utilities Commission of Nevada:
It would be a rebate that would be paid out from the utility, just like solar rebates, and spread over the energy rates for the year.

Assemblywoman Kirkpatrick:
It would be paid on the rate base, and the energy company could include their energy efficiency and conservation recovery costs. Would it also apply in this instance?

Alaina Burtenshaw:
I am not sure because the energy efficiency and conservation are associated with saving electricity as opposed to gas. In this instance they are going to be adding load to the system.

Assemblywoman Kirkpatrick:
I wanted to have that on the record for when regulations are developed.

Chair Atkinson:
Are there additional questions from the Committee? I see none. Is there anyone else to speak on S.B. 281? I will close the hearing on S.B. 281. I will open the hearing on Senate Bill 182 (1st Reprint).

Senate Bill 182 (1st Reprint): Makes various changes concerning renewable energy systems. (BDR 58-286)

Senator Michael Schneider, Clark County Senatorial District No. 11:
Senate Bill 182 (R1) revises provisions governing the Solar Thermal Systems Demonstration Program. The bill requires an installer of these systems to possess an appropriate license issued by the State Contractors' Board and

removes a requirement that each solar thermal system have a meter or other measuring device installed. The bill specifies which performance certification of solar thermal systems is needed to be eligible for a rebate pursuant to the demonstration project. Senate Bill 182 (R1) also clarifies that the rebates are provided by the utility rather than the Public Utility Commission of Nevada (PUNC).

Debra Gallo, representing Southwest Gas:
We are here in support of S.B. 182 (R1). The first reprint deals only with the Solar Thermal Systems Demonstration Program that was passed during the last legislative session. This cleans up some issues that we found during the rulemaking with licenses. It clarifies that a meter is not needed for each installation. The OG-100 system certification is used for a large commercial installation and that is one of the categories that we are required to install. We needed to add that in addition to the OG-300, which is for small commercial and residential.

Chair Atkinson:
Is this rebate program for 10 years?

Debra Gallo:
Yes. We just started it. We had a rule making and started training contractors, and we already have started the applications with NV Energy and their natural gas properties in northern Nevada.

Chair Atkinson:
As amended, it will deal only with solar thermal projects?

Debra Gallo:
Yes.

Chair Atkinson:
What happens after 10 years?

Debra Gallo:
The rebate goes away. We have a goal of a number of installations over 10 years, and at the Commission we divided it based upon our customer base, between our natural gas customers and NV Energy's natural gas customers.

Chair Atkinson:
Who pays for the rebates?

Debra Gallo:
The customers pay for them.

Chair Atkinson:
Are there additional questions from the Committee?

Assemblyman Horne:
Why do you not want the metering device?

Debra Gallo:
In dealing with this in the rulemaking process, we have had trouble finding an actual meter, and the cost of the meter would make the systems prohibitive and it is not necessary. We are doing a sampling versus putting a meter on each installation.

Chair Atkinson:
Are there additional questions from the Committee? I see none. Is there anyone to testify in favor of S.B. 182 (R1)?

Judy Stokey, representing NV Energy:
We support this bill.

Joe Johnson, representing Toiyabe Chapter, Sierra Club:
We support this bill.

Rob Joiner, representing Pyramid Lake Paiute Tribe:
We are also in support of this bill. We are participating in these kinds of programs and support any efforts.

Chair Atkinson:
Are there any questions from the Committee? I see none. Is there anyone else in favor of this bill? Is there any opposition to S.B. 182 (R1)? I see none. Is there anyone to speak from a neutral position? I see none. I will close the hearing on S.B. 182 (R1) and open the hearing on Senate Bill 184 (1st Reprint).

Senate Bill 184 (1st Reprint): Requires the Public Utilities Commission of Nevada to establish the Renewable Energy Systems Development Program. (BDR 58-229)

Senator Michael Schneider, Clark County Senatorial District No. 11:
This is the feed-in tariff bill. There is a long-standing legislative policy of encouraging development of renewable resources and this bill kicks it up. Significant economic and environmental benefits come from this policy.

Nevada has a variety of tools to foster renewable energy development. *Nevada Revised Statutes* (NRS) Chapter 701B has demonstrations programs, tax incentives, and the Nevada Institute of Renewable Energy Commercialization (NIREC). The universities and the Desert Research Institute (DRI) have outstanding geothermal, solar, biomass, and other programs. Another economic development tool for renewable energy comes from Germany, Spain, and other countries that have utilized feed-in tariffs (FIT).

A few United States jurisdictions have FITs and other jurisdictions are considering them. Hawaii recently passed a FIT, as has Ontario, Canada. The Committee should examine FITs for renewable development as a possible addition to our other state policy initiatives. According to a 2009 study by the National Renewable Energy Laboratory (NREL), after Germany began its FIT in 1991, the country installed more than 22,000 megawatts of wind and more than 3,800 megawatts of solar by the end of 2007. A couple of towns in Germany are totally off the grid. This resulted in 250,000 renewable energy jobs at a cost of $3.82 per household per month, which accounts for about 5 percent of the total average electric cost. Not all experiments with FITs have been successful. Spain's program had an initial boom in solar installation, but the program was not properly constructed. Some incentives turned out to be too high. The program was interrupted, and that led to disruptions in what had been a promising new industry in Spain.

Most details of establishing a FIT we will delegate to the Public Utilities Commission of Nevada (PUCN). The Legislature does not have the expertise or time to work out the details necessary to launch a FIT. However, the PUCN does have the time and talent to perform the task. The hearing system at the PUCN mobilizes expertise and insight of all interested parties so multiple proposes can be advanced, thoroughly examined, and debated. The result is that we would have a plan well suited to the particular needs of Nevada and its citizens. Once the PUCN completes the process and proposed regulations, the Legislature has an opportunity to review those regulations. If the Legislature decides corrections or modifications are needed, the regulations can be sent back to the PUCN for additional work. While the bill leaves details to the PUCN, the final determination as to the appropriateness of policy remains with the Legislature. This will fill a big hole in our renewable energy plan for the low-end to mid-range power that we need.

Chair Atkinson:
Are there any questions from the Committee? I see none.

Luke Busby, representing RightCycle:
For 50 cents a month on a $100 utility bill, Nevada can invest in opening opportunities for local clean energy businesses and stand out in the United States as the premier state to locate clean energy businesses. This money pays for renewable infrastructure that is built in this state instead of sending nearly one-third of the dollars we pay in our electricity bills to the natural gas suppliers in other states, or to the futures contract traders or banks in New York and Chicago who profit from trading natural gas. This bill addresses the currently untapped market for small to medium clean energy projects where net metering does not work because there is too little energy on-site to justify the project, or the power purchase agreement system does not work because the projects are too small to compete with utility scale projects. Senate Bill 184 (R1) creates a pilot program to address this gap, and to open these opportunities, so the state can make an experience-based decision on how to move forward with developing renewable energy.

Policies such as the renewable portfolio standard (RPS) and net metering are important and we support them. This bill addresses a different market segment. It does not contradict these policies but compliments them. The bill provides that all of the portfolio energy credits produced by these systems become property of the utility, which can use them to meet the RPS. Governor Sandoval stated in his State of the State address, "I support all efforts to make Nevada the renewable energy capitol of the country." We believe passing S.B. 184 (R1) this session would send a strong signal about Nevada's commitment to renewable energy development. The area for growth in Nevada is big enough for more players than just NV Energy. They often raise ratepayer impact as an argument but their fiduciary duty is to maximize profits for their shareholders. They have no problem proposing a $500 million transmission line or a $700 million natural gas plant if they are the one to build it. Every time someone else attempts to build such developments, they oppose it.

Pegeen Hanrahan, Principal, Community and Conservation Solutions, LLC, Gainesville, Florida:
Nevada is truly leading the way in renewable energy because you have an RPS and have great resources for that. I served as mayor of Gainesville, Florida, for six years and was on the City Commission for six years prior to that. We are an AA-rated utility, one of the top 20 financially sound utilities among municipal utilities. We had solar rebates beginning in the 1970s during the Carter Administration and had a strong net metering program starting in 2007. It was when we adopted our feed-in tariff program in February 2009 that we saw an enormous increase in our deployment of installed solar photovoltaic. It has been a 1,500 percent increase so far, and we are only in the second year of an eight-year program. We went through a very exhaustive public

engagement process, including public opinion polling. Every demographic we polled was over 50 percent, and overall there was a 75 percent support level to raise utility bills up to $1 per month to support renewable energy. It was actually closer to 60 cents. Statewide data from Texas and Florida is consistent with those numbers.

Our program was capped in a different way. I think your cap is a more thoughtful approach. We capped at 4 megawatts per year for an eight-year program. We have had enormous uptake and amazing economic benefit. Before we started this program, we had one solar installation company in Gainesville, a city of 130,000. We now have six solar installation companies and we have also had other benefits, such as the U.S. Department of Energy asking us to participate in multiple studies and providing funding. Our chamber of commerce has strongly embraced this program and has made it part of its Innovation Gainesville Outreach. We have gotten an amazing amount of media coverage nationally. We have about 230 systems installed. It is a $20 million investment per year of private capital. We have added no new public employees as a result of this and it took only six months to be implemented.

I requested input for this hearing from various solar installers, and Barry Jacobson, who owns a start-up company called Solar Impact, said, "Solar Impact has created eight jobs within our company. More importantly, we have invested over $1 million in local work and can expect to do another $1 million this year. This has been extremely important for the local construction industry that has been decimated by the recession. I have been told by several company owners that we have kept them in business. They employ roofers, electricians, carpenters, and so on."

We are continuing our net metering program in addition to our feed-in tariff and our rebate. The reason we have varied options is because, depending on your own load, the size of the roof, and your tax status, the feed-in tariff is a fill-in-the-gap type of a program that provides a program for everyone. Different programs work for different people.

Ted Ko, representing Clean Coalition:
We are a national nonprofit organization that is an expert on local clean energy policies that stimulate a deployment of clean energy in a cost-effective way and gathers the most economic benefits for places that put these programs in place. We were asked to help design this bill and to modify and amend it so it is simplified and clear on exactly what the program is, and to make it clear that it is separate from the different markets. It is a 100-kilowatt to 3-megawatt project size, and it is for systems where you do not have a lot of on-site energy

use. It is for systems that will not and cannot use a net metering or rebate program.

This program is designed to address a large rooftop, an empty plot of land, or farmland where they do not have much energy use and which has not been previously addressed. We designed the program to address the concerns that we have heard from various parties. The key concern is ratepayer impact. We addressed that by having a very strong cap. It is really just 50 cents on a monthly bill. [Mr. Ko held up two quarters.] The amendment (Exhibit D) we filed yesterday is to clarify that is the cap and the maximum anyone will pay on a monthly bill for this clean energy and all of the benefits that you will hear about today. The rest of the details were taken out of the bill in order to leave that up to the public hearings at the PUCN. When you hear the support for the bill and the opposition, it all comes down to the 50 cents. Is it worth 50 cents on an average household bill to get all of the economic benefits and clean energy this program will provide?

Chair Atkinson:
Who pays the 50 cents?

Ted Ko:
The ratepayers will pay it.

Chair Atkinson:
I am concerned there is a lot of money being spread out amongst the ratepayers.

Bob Tregilus, representing Feed-In Tariffs for Nevada:
I have been working with Senator Schneider since late 2009 on the Legislative Commission's Committee to Conduct an Interim Study on the Production and Use of Energy to get this bill introduced. About a month ago, we brought in Clean Coalition and others to help support this bill. This is bringing interest to Nevada on a global scale.

Chair Atkinson:
Are there any questions from the Committee?

Assemblywoman Kirkpatrick:
When you talk about how great renewable energy is in Europe, they have been doing it for hundreds of years. It took them a long time to get there. Nevada was the only one of the 17 states who introduced renewable energy legislation last session to do anything, and we are still waiting for the people who said they were going to come. We need to go through the bill because I do

not see where it guarantees my ratepayers will have to pay only two shiny quarters. My first question is in section 14, subsection 7(a), where it says, "Determine a benchmark price based on the weighted average price per kilowatt-hour." That does not say a total of 50 cents. My second question is in section 13, subsection 4, regarding contracts and total amount of incentives. We keep putting this back on the Commission. They did a study, and you did not like the answer from the study, so now you are proposing legislation. If you do not want the PUCN to make the decisions, quit giving them the ability to do it.

Section 13, subsection 5 says that the "term of the standard contract must not exceed 20 years." Twenty years is a long time for someone to be locked into that rate. Section 14 talks about transferring the credits to another person. I have heard nothing about that in the presentation. I worry about my constituents because they have to choose between using air conditioning and buying milk. Section 17 says the state is not liable to any system owner or provider of electric service if anything goes wrong. What is my guarantee for the consumer? Section 16 does not preclude you from voluntarily going into a contract with somebody else. I have laid out five sections of this bill that no one has addressed. My constituents need to know how this impacts them, and this Committee deserves respect.

Ted Ko:
Did you see the amendment?

Assemblywoman Kirkpatrick:
I did not see the amendment, but it is the same issue. This does not say my constituent is going to pay only 50 cents. Subsection 7 says that it is based on the kilowatt-hours of electricity generated.

Ted Ko:
Section 13, subsection 4 specifically says that the total payments in each year due all of the systems in the program will not exceed 0.5 percent of the total retail sales of the previous year. What represents on the average household bill of $100 would be 50 cents. That is the maximum for all of the projects in this program over five years. The annual payments for all of the energy bills will not exceed 0.5 percent of the retail sales.

Assemblywoman Kirkpatrick:
The average bill in my district is $359 not including July and August. I represent an older, more rural district with larger houses that are 20 or more years old. I do not think I have seen a $100 power bill in my life. It is not a charge of 50 cents to my constituent who has that average bill.

Ted Ko:
For that bill it would represent $1.75.

Assemblywoman Kirkpatrick:
That is correct because you said it would only cost two shiny quarters. Quite frankly, in July many of my constituents in my district have $700 bills. Is it the average across the whole year and how is this paid out? There is a lot to consider. I do not think it is fair to send anything to the PUCN without clear direction.

Ted Ko:
It is calculated on the previous year's total retail sales of all of the electricity providers in the state. That is approximately $15 million per year that is spread out over the entire rate base per kilowatt-hour. It will be added to the average per kilowatt-hour retail rate on the electricity bill.

Assemblywoman Kirkpatrick:
Is that regulated utilities or all of the utilities?

Ted Ko:
It is all utilities.

Assemblywoman Kirkpatrick:
How does the PUCN have the ability to go out to the co-ops and municipalities, because I do not think the farmers are going to like this.

Ted Ko:
I misspoke. The calculation of the 0.5 percent is based on the total of all of the utilities. The increase on the rate would be on the utilities that are regulated by the PUCN.

Assemblywoman Kirkpatrick:
I am correct in that the rest of us are going to pay so that some can benefit. I have to tell my constituents that they have to pay so someone else gets a break. Is that correct?

Ted Ko:
It is not that someone else gets a break. The ratepayers are paying for an opportunity for businesses, schools, and churches to put energy on their system when they could not have done so otherwise under the current net metering program. It is actually an investment in the clean energy opportunities in their communities.

Assemblywoman Kirkpatrick:
The rest of us have to pay for the infrastructure for what the feed-in tariff is designed to do. Is that correct?

Ted Ko:
If the generation projects are for the opportunity for communities to put up and take advantage of the clean energy resources in their community—that is, everyone is investing in that economic activity for the state—the answer is yes.

Regarding the PUCN study, the result of the study was not that the PUCN did not like a feed-in tariff. It said it was up to the Legislature to decide whether or not the state shall do a feed-in tariff. That was the conclusion of the study. They opted not to implement a feed-in tariff at that time. This bill was in direct response to that report.

Assemblywoman Kirkpatrick:
I sit on that Committee, as does Assemblyman Conklin**.** The testimony that they gave to the energy committee was that they evaluated it and felt it was not a priority and they were concerned about the ratepayer base. I asked if this was something we needed to look at, and they said they did not think so. To me, they are the consumer protection agency, and if they had thought it was a great idea or a policy the Legislature should approve, they would have introduced the bill and they would not have testified that this was something Nevada could wait on.

Bob Tregilus:
The PUCN study had three sections where they identified that a feed-in tariff might work for the State of Nevada. They suggested that the program gap be filled between 100 kilowatts and 3 megawatts. The PUCN staff also suggested that a feed-in tariff could be adopted once the Legislature determines what the goals of the feed-in tariff would be. They could be economic development, increasing renewable energy, and incentivizing other technologies that are not currently under incentive programs, such as biogas and biomass.

Assemblywoman Kirkpatrick:
I will get the minutes for you. Will you please answer the remainder of the questions? We need to talk specifically about the bill.

Ted Ko:
To address the question about the length of the contracts, we have found that a 20-year contract is necessary in order to get the actual most cost-effective energy for a particular project system. It reduces the risk, the financing cost, and the cost that the ratepayers pay for the energy when a system has a

long term set contract for the energy, because they know they will have a buyer for the energy for 20 years. This has proved to be the best design around the world for such programs.

Assemblywoman Kirkpatrick:
It is a 20-year contract that constituents are going to pay, and you are still saying that it is only going to cost 50 cents. What is the downside if someone only does a 10-year contract? As a ratepayer, I will not see the return on my investment for 20 years. Could it be longer or shorter than 20 years? How does that work for the ratepayer?

Ted Ko:
The 20 years is actually the best way to get the benefits and return on the investment. You get the return on the investment right away, and the cost is spread out over 20 years. If the system comes up within six months to a year, you are getting the clean energy into the system and the jobs associated with building the system and you are spreading the cost out over 20 years. The impact of a 10-year contract is that the rate you will have to pay per kilowatt-hour to the energy system will be higher. The rate impact is actually higher for shorter length contracts. By spreading out the payments for the energy over a longer period of time, you are actually saving money for ratepayers on a per kilowatt-hour basis.

Chair Atkinson:
Who is entering the 20-year contract?

Ted Ko:
The contract is between the project owner and the utility. It is similar to the contracts they are signing with the large-scale projects for the renewable portfolio standards (RPS) program.

Chair Atkinson:
The language says it has to be at least 20 years and could be more.

Ted Ko:
That is correct, and it is up to the discretion of the PUCN.

Pegeen Hanrahan:
The contract is for the owner of the system, because it is privately funded, to feed energy into the system, and then they are paid a specific agreed-upon rate that is the same level rate over 20 years. If the system for any reason is not producing, they are paid nothing. The contract is that for whatever they put into the system, they will be paid the same rate. The rate is determined based

on what it costs to install the system, and the rate will go down over the course of time for subsequent systems that come on the grid, because they are based on the cost of installation. As more systems are installed, technologies get better and the cost of installation goes down, so the rate for subsequent systems should go down. It is a pay-for-performance system.

Chair Atkinson:
Will the rates of the people who get into the program early go down?

Pegeen Hanrahan:
No. Their rate was set on what their system cost was to be installed. For example, for a typical household system, it might be 4 kilowatts. If it is $5 per installed watt, that is a $20,000 system. You take a 30 percent federal tax credit, so you are now down to $14,000. You pay private contractors to install the system and then you feed the energy into the utility, and the utility pays you back a set rate that covers the cost of the installation and a little profit. The profit in Gainesville was set at 4 to 5 percent. That is why every year for 20 years it is the same amortized rate.

Chair Atkinson:
The people who build later will probably pay less because the systems will get cheaper, but the initial builders will be locked into their rate.

Pegeen Hanrahan:
That is exactly right.

Assemblyman Daly:
In section 7, you answered my question in that it applies only to the regulated power companies so only those ratepayers will pay the incentive. In section 13, subsection 7, paragraphs (a) and (b), it says that you are going to set a benchmark price, look at the average cost of renewable energy, and pay an incentive for steady development of renewable energy. In Section 13, subsection 9, it says that if the incentive is not high enough, you will increase it. There is no limit what the incentive could be. There does not appear to be a limit on what the other ratepayers will have to pay if the PUCN does a different calculation, because there is no limit if the incentive is not enough. I have difficulty with that and do not see any safeguards in the bill

Ted Ko:
It is true that there are no hard numbers set on the incentives. Section 13, subsection 4 explicitly limits that no matter what the incentive level is, the total payment of the benchmark and the incentive to the payers will never exceed that 0.5 percent. That was made clear in the proposed amendment.

Assemblyman Ohrenschall:
Has your program in Gainesville, Florida, proven injurious to the ratepayers?

Pegeen Hanrahan:
The ratepayer impact in Gainsville is about 60 cents per month for the average utility customer, who uses a little less than in Nevada.

Assemblyman Ohrenschall:
I have been contacted by many people who want to see more distributed solar power generation, especially in Las Vegas. Do you think a program like this would encourage more distributed solar power generation?

Ted Ko:
It absolutely would. This bill was designed to attract that particular market, including all those places in those areas that have not taken advantage of the existing solar generation program, or the net metering, because they did not have sufficient on-site energy use or some other reason. This program is designed for those. We have seen in Gainesville and other places where a decent amount has been deployed under the net metering or rebate programs, when they instituted a feed-in tariff, it boosted the market tremendously.

Assemblyman Ohrenschall:
Is it possible that if more of the payers are actually using renewable energy and less has to be purchased in fossil fuels, that there could be a cost savings in the long run? Do you have any evidence of that?

Pegeen Hanrahan:
I think that is an excellent question. From my own perspective, you should not be putting it on a home or business that has not done insulation and basic energy efficiency efforts. These programs go hand-in-hand. Our solar peak coincides with our peak for energy demand. We meet that peak with natural gas. When natural gas spikes, we have to pass that on through the bills to the ratepayers on our fuel adjustment. If you are able to reduce that peaking by using solar, you are actually able to reduce your reliance on fossil fuels. As in Nevada, in Florida, that money all goes out of the state.

Assemblyman Ohrenschall:
If many people had photovoltaic on their roofs, could there be cost savings to the ratepayers?

Pegeen Hanrahan:
Through competition and more people installing, we have seen the average cost of installed solar go down by several dollars per installed watt. The fact that

we have more than 230 new systems over 5 megawatts has actually made it more accessible to a larger percentage of our population because the cost has come down.

Assemblywoman Kirkpatrick:
My last question was about being able to transfer contracts. Who makes the profit, is there a limit on the profit, and how do we keep track of those?

Ted Ko:
Is the question directed at the transfer of the credits or the transfer of the contracts?

Assemblywoman Kirkpatrick:
The transfer of the contract as stated in this bill.

Ted Ko:
The transfer of a contract is disallowed before a system is in place to prevent speculation. If they need to transfer the system to another owner, the contract with the utility is then transferred to the new owner of the facility.

Assemblywoman Kirkpatrick:
In the amendment in section 14, it says that they cannot be transferred more than once before the construction or commencing of the renewable energy system. There is a provision that you can continue to transfer those.

Ted Ko:
The intent is that you cannot transfer the contract before the system has been built. Once the system is built, you can sell the property and the contract. The idea was to not allow trading and speculating on contracts before a system is built.

Chair Atkinson:
Is there anyone else in favor of S.B. 184 (R1)?

Janet Gagnon, Head of Government Relations, SolarWorld, Camarillo, California:
We are the largest manufacturer of solar in the United States and make 500 megawatts annually. We do all of the crystalline in the United States from ingots, wafers, cells, and panels. We are also one of the largest solar manufacturers in the world. We are German-owned and we are very familiar with the feed-in tariff. The feed-in tariff is why our company is at the size it is today. We have over 3,600 employees worldwide and we do in excess of $1.5 billion of business. The feed-in tariff helped us to grow in Germany significantly and gave us the capital to come to the United States to start

manufacturing for this market. There was an earlier comment about the farmers not liking it. The feed-in tariff was originally promoted by the agricultural community. It was primarily the farmers who benefited from this type of system, and in this bill specifically it does not say that the systems must be rooftop. It is both rooftop and ground mount. In Germany, many of the farmers have chosen to install such systems to add another "crop" to their repertoire and the amount that is being paid for new projects has actually decreased. The reason that you are paying a 20-year contract is to spread out the payments that the utility has to go make for that green energy and the pacts that go with it. Rather than paying it all up front and not knowing if the system will produce every year thereafter, you are spreading your payments along with the life of the system. You are actually making sure that the system stays in place and stays functioning or you are not paying for it.

We as a company are very excited. There are many major manufacturers in the solar industry who are looking for states that are going to take the aggressive leadership role in this particular mechanism. This has been shown to be tremendously successful. Spain did not have a way to reduce its fees each year as they should have. This bill has that in it. We strongly support this bill.

Glen Williams, Partner, Solar Venture Partners, LLC, Reno, Nevada:
I am here with Eric Severance. Solar Venture Partners is a Nevada company whose purpose is to facilitate development of photovoltaic solar systems on commercial and industrial buildings. Our clients are primarily the owners of these buildings. These buildings represent thousands of acres of roof space already connected to the grid. Many of these building owners would like to partner with us to develop photovoltaic solar systems on their roofs, but these ideal solar development sites simply do not work under current net metering policy. They are often large roofs with relatively small load within the buildings, such as lighting, heating, ventilating, and air conditioning (HVAC) and perhaps a small amount of office space.

Senate Bill 184 (R1) enables development in the gap between 100 kilowatts and 3 megawatts as distributed generation, meaning energy generation close to where energy is being consumed. These three levels of solar development policy—net metering, utility scale, and distributive generation—are complementary to each other and together lay the foundation for the kind of renewable energy future that Nevadans envision. The goal is to minimize ratepayer impacts, but if we do not make investments in building a future economy, we never get there. We know we have to diversify our economy and grow our way out of the current fiscal condition. Senate Bill 184 (R1) offers a compelling opportunity to foster that growth. In our view, S.B. 184 (R1) is a key economic development link in building that bridge to the future. Solar costs

continue to come down as more programs come online and competition continues to apply downward pressure on costs. The modest incentives called for in S.B. 184 (R1) will serve to prime the pump on solar development of Nevada's vast amount of commercial-industrial rooftops until those incentives are no longer necessary.

Eric Severance, Partner, Solar Venture Partners, LLC, Reno, Nevada:
Solar Venture Partners is a project facilitator that would be hiring people to build solar projects in this gap of sizes and types of buildings. We are also an investment manager. The goal of all of us is to bring new investment dollars to the state. To do so, we need to reduce the risk of unknowns to investors. To accomplish this we need clear program standards, such as standard contracts, predictability, and transparency. By enabling good policy as this bill envisions, we can provide this and thereby help create new local market opportunities. Many people do not realize that if you invest in putting a large solar array on your commercial or industrial rooftop, you cannot sell that electricity. The "must take" provision of S.B. 184 (R1) is really key. We are all talking about the ability for others to produce power and thereby open up new markets. Feed-in tariffs as well designed policy tools are beneficial companions to the other renewable energy programs we have today. We see FIT as a hedge against the buying of conventional fuel from out of state for billions of dollars and, therefore, benefitting all ratepayers in the long term. We know that doing nothing in regards to energy policy has a rate impact also.

We have everything we need in front of us to get started executing contracts, hiring installers, and building projects. We have large, empty rooftops, capable local installation companies, and a highly skilled construction labor force looking for work, but we need policy help. We strongly urge you to support this bill and let us prove what we in the solar industry can do with this pilot program to enhance economic development in the clean energy field.

Chair Atkinson:
What is your company?

Eric Severance:
We are Solar Venture Partners, and we are based in Reno.

Tom Millhoff, Vice President, Business Development, HelioPower, Reno, Nevada:
Our firm has installed over 1,600 projects. I am a Washoe County resident, but unfortunately 1,550 of those projects were completed in California. The reason is that California has created an infrastructure that allows us to do business there more easily than we can do here. I think the FIT is a great level

playing field opportunity to invite competition into the State of Nevada. It has low overhead policies in comparison to rebate generated programs. It creates a lot of competition so that aggressive business developers and project developers, like me, are attracted to the state.

I have some experience that may give you information to help you make your decisions. Twenty years is a standard term for power purchase agreements and financial structures in this industry. Solar is a readily financeable form of renewable energy production because it is so predictable. As with mortgages and other financial vehicles, it is best to have fairly predictable and regular contracts that can attract lending from large financial entities. That drives down the cost of capital and makes these projects more economically feasible.

My understanding is that the policy proposes a standard contract, and that is good policy. Regarding the ratepayer benefit, $15 million capped does not create any kind of risk or exposure to the ratepayers or the Legislature if it is based as a dollar cap or a percentage of total energy expense. If the FIT is not economic enough to attract business into the state, you will have more or fewer kilowatts for that capped amount of dollars. Competition will come and fight to generate the most kilowatt-hours for the available funding. You will probably not see a lot of solar facilities on top of carports and apartments, but you will find economic installations on top of large flat roofs or ground mounts near electrical interconnection points. That is good because you are going to be generating power where you need it. Those are the most economic solutions and that is the beauty of distributive generation. The FIT approach facilitates that.

The issue about Spain's FIT should be addressed. There is peril in sloppy policy implementation, and I think that is why many of the most salient issues are being left to the PUCN. Pricing is very important and Spain fell down on pricing by having a FIT they could not afford. They did that to stimulate manufacturing and to attract industry. I am not sure that is your goal here. You might attract some manufacturing, but you will probably attract a lot of project development. The $15 million is going to translate into about 12 megawatts per year, which is about $60 million in capital investment. When my competitors and I chase $15 million of FIT in this state, we are going to need to install about $60 million of projects, and that investment will happen immediately. It gets paid out over time because we have financing from large institutions. That is a $60 million capital infusion, which includes me hiring workers in Nevada. There are legitimate concerns but I can tell you the FIT program is the most competitive, most level playing field means of attracting competition, especially in the small to midsize commercial space. If the PUCN goes through a diligent process,

the bill by definition forces us to price that energy at about the cost of energy. That is a fair process.

Chair Atkinson:
Are there any questions from the Committee? I see none. Are there others in favor of the bill?

Rose McKinney-James, representing The Solar Alliance:
We took a neutral position in the Senate to the original bill; the bill has been significantly amended. The design set forth in this measure provides consistency about how the projects will be structured. It also provides a tool for the mid-range. This is outside of the priorities that The Solar Alliance has established with respect to our focus on smaller projects that are net metered. It provides a path to an opportunity to deal with a very specific segment of the market. We view the PUCN as the appropriate venue to determine how best to promulgate regulations to implement these kinds of programs. This bill will allow that and mean that we have a well vetted process. The policy decision has to do with supporting the policy of the state for more than a decade. At this time, paramount concern is focused on ratepayer impact. Every aspect of our electrical infrastructure, besides those things that are set aside for shareholder investment, in one way or another affects our ratepayers. We are obliged to find the appropriate balance, and we will by bringing programs that provide both the economic and long-term benefit to the state and advance Nevada's resources. These policies are directed to achieve that.

Chair Atkinson:
Everything we have heard today has some component to be borne by the ratepayers, and we do have concerns and hope to minimize them.

Kyle Davis, representing Nevada Conservation League:
We are in support of this legislation and think it is an appropriate way to progress towards a system that is going to pay for the actual performance of the system as installed, which will result in more efficiency for the ratepayer.

Thomas Danzinger, Private Citizen, Washoe Valley, Nevada:
There are positives and negatives about solar panels, and they do have an effect on the environment. The overall feeling is that they are positive because it is a renewable resource and does not impact the environment. It has benefited other countries that have done this. Germany is successful in this field because of the FIT. China does not have FIT but they are the leader in solar installations. The province of Ontario, Canada has approved FIT and their current installations have increased greatly. Feed-in tariffs work and it appears this bill has been carefully vetted. I would appreciate your support of this bill.

Joe Johnson, representing Toiyabe Chapter, Sierra Club:
We support this bill because it addresses a gap in the existing programs.

Chair Atkinson:
Is there anyone else to speak in favor of this bill? I see none. Is there any opposition to S.B. 184 (R1)?

Judy Stokey, representing NV Energy:
We are in opposition to S.B. 184 (R1). We opposed it in the Senate. NV Energy is a strong supporter of renewable energy, and that is evident in the amount of renewables we have in our system and our continued efforts to comply with the RPS. We are a leader in renewables, and this state has done more than other states have done.

John Owens, Director, Customer Renewable Generation and Energy Efficiency, NV Energy:
Not only do I see potential rate effects but I question the value the citizens of Nevada are receiving from this approach compared to other approaches. What will we get for the approximately $300 million funded over 20 years? I estimate that we will get 50 megawatts of solar installed with that funding level. To compare that with the current program that is in place today, we expect under the solar generation program to produce 70 megawatts over the next 10 years at a cost of approximately $255 million. It is a better value. If you look at a 50 megawatt solar array, I would expect it to put out roughly 100,000 megawatt-hours per year. In section 13, subsection 7(a) it says the Commission shall, "Determine a benchmark price based on the weighted average price per kilowatt-hour of electricity generated by each type of renewable energy paid by providers of electric service pursuant to the renewable energy contracts executed pursuant to NRS 704.7821 . . . ." Today NV Energy is paying approximately $150 per megawatt hour for solar photovoltaic. It will cost $15 million a year for 100,000 megawatt hours.

This bill raises another subtle public policy issue. This section of the bill says that in addition to paying essentially the same price that you pay for larger photovoltaic systems, you will pay an incentive on top of that. Why should small-scale solar receive an incentive in addition to the average cost paid for similar renewable resources? Why is small-scale better for the state than larger photovoltaic installations? Both provide environmental benefits and jobs. I do not see the justification for the incentive.

An unintended consequence of this bill is that requiring this funding to be available will essentially displace other renewable resources. We are fortunate to have a great set of resources in geothermal, solar, wind, and some

small-scale hydropower. Between what we have in production today and what is under development today, we are doing very well with complying with the RPS. If you layer the proposals in this bill on top of what is already in the pipeline, you will displace other renewable projects like geothermal or large-scale solar with no justification as to why that is better for the customers. I think it is a worse deal because some of the things that will be displaced probably cost less and produce the same if not more environmental benefits.

Chair Atkinson:
Is there anyone else in opposition to S.B. 184 (R1)? I see none. Is there anyone to testify from a neutral position?

Dan Jacobsen, Technical Staff Manager, Bureau of Consumer Protection, Office of the Attorney General:
I want the Committee to try to look at this from the bigger perspective. Nevada was on a growth pace and NV Energy was adding more capacity when the state was growing. There is a long process to add more generating capacity. They overshot and the demand for generation has declined year after year. The customers are already paying higher rates here than in most other states. There is more capacity than is necessary, and they still have to pay for that capacity if they use it or not. On top of that, layer on things that under consideration for policy purposes. These are costs that would be layered on top of that, not because it is necessary to meet the needs, because NV Energy already has more capacity than necessary to meet the needs of the company, and customers are paying for it whether they use it or not. You have already talked about $4.5 million to subsidize cars, $15 million to subsidize water, and later today you will hear about $30 million to subsidize solar installations. Customers are paying about $100 million per year for efficiency programs, and there is a potential that they are going to pay a lot from the loss sales from those programs. These are policy things that are laid on the top of energy. As you consider another $15 million, you cannot look at that in a vacuum. It is one more thing that is being laid on.

This proposal is to make a 20-year commitment for NV Energy to buy energy produced from these operations at established prices, which remain in effect for 20 years. If the cost structure of solar declines, the contract remains in place for 20 years. There is a provision to revisit that each year, but that does not mean the existing contracts are adjusted. I would reiterate that NV Energy is already meeting the RPS with the things that are in place. I am neutral because I think you should look at it from the broad prospective of everything that is being put on the ratepayer. In a couple of weeks NV Energy is going to file a rate case. In addition to being at over capacity, they are going to introduce the

next generating plant that probably would not have been built had they known that demand was going to drop.

Assemblyman Goedhart:
How much will it cost per kilowatt-hour for this power to be produced by the small or medium green energy producer?

Dan Jacobsen:
The Commission would determine the rate, but it would not be linked to the rate for energy because solar is being used instead of energy. I can guarantee that it will be higher because it is based on other contracts plus incentives. It will be an artificially high rate designed to stimulate an industry. It will be higher than customers would pay for traditional energy.

Assemblyman Goedhart:
How much higher?

Dan Jacobsen:
I think it will be significantly higher, particularly if there are incentives.

Alaina Burtenshaw, Chair, Public Utilities Commission of Nevada:
Section 19 will require the Commission to open an investigatory docket to determine the just and reasonable prices as soon as practicable. We are also required to have rules adopted by December 31, 2011. Our concern is that given those two mandates—the complexity, the number of issues, and the number of participants—we suspect that a rulemaking will take more than six months and closer to one year.

Chair Atkinson:
I will ask the Committee members who have additional questions to follow up with the parties. Is there anyone else to testify in the neutral position? I see none. We will close the hearing on S.B. 184 (R1) and open the hearing on Senate Bill 496 (1st Reprint).

Senate Bill 496 (1st Reprint): Makes various changes relating to renewable energy. (BDR 58-1280)

Rose McKinney-James, representing The Solar Alliance, Bombard Electric, and Amonix, Inc.:
Senate Bill 496 (R1) was developed in an effort to respond to some of the questions we have heard today from the Committee. The bill modifies existing law. The solar generation program is in place and this bill focuses on the changes and improvements that will make the program more successful and

make Nevada more competitive in the use of these resources. We have submitted a conceptual amendment (Exhibit E) for your consideration. There are four significant items. We thought it was important to find a way to mitigate the current impacts on ratepayers. One approach is to review the program that is in place, which includes a series of up-front rebates. We propose a mechanism that will spread the cost of the rebates, which is a performance-based incentive as opposed to a rebate. We currently have approximately $140 million of program dollars that are committed at a highest rebate level. It was our original intent to see those rebates decrease consistent with the decreasing cost of systems. The cost of these systems has come down substantially. To spread those costs and to focus on the performance of the system, we are recommending a shift in policy away from the up-front rebate and more toward something that reduces the direct impact on ratepayers.

We would like to see all of the programs combined under a single umbrella with a single budget. We believe that will enhance the efficiency and consistency of the program. The Board of Consumer Protection referenced the fact that we are looking at a $30 million budget, but that represents approximately 1 percent of the utility's annual revenues as a focus for supporting these programs. We would like to see a commercial category of 500 kilowatts for small commercial space that is eligible for net metering. If 500 kilowatts is not an appropriate number, the Commission can determine the number. The increased cap proposed in Senate Bill 59 (1st Reprint) from 1 percent to 2 percent is referenced in here as well.

Luke Busby, representing Clean Energy Center:
Clean Energy Center is a small renewable energy developer in Reno which concentrates on different types of technologies. These proposed changes were the result of discussion and compromise among the distributive generation development community and represent good, practical fixes to move the program forward and to provide a better value for ratepayers.

The first proposed change would create four categories: public property including schools, private residential property, commercial property, and facilities that are installed and owned by third parties. The change to section 8 would amend *Nevada Revised Statutes* (NRS) 704.771, subsection 1, paragraph (b). It would delete the proposed change to 120 percent of average annual consumption to 150 percent of a person's total annual consumption. This would allow for systems to be put on a customer's property where there is a lot of load, but it is highly variable. We would like clarification of the meaning of "premises." We believe this is a problem that is not unique to waterpower. The same problem exists with wind, where you need to put the turbine in the

location where the resource exists. It may not be in the case of a large property near the house. If you have a farm with a large hill that is separated by a road, there is a possibility that you would not be able to build that system. You would have to build it out of the wind, which makes little to no sense. This would allow large entities to buy adjacent property to build systems. It is easier to build systems on the ground than a rooftop. We have provided a suggested definition of "contiguous" which would apply to all technologies.

In section 5 of the amendment, we think that removing references to the program year makes sense because it gives the Public Utilities Commission of Nevada (PUCN) a lot of discretion to administer the timing of the program. If they have broad latitude, they can respond quickly to the dynamics of the market and to developers in getting this capacity to ratepayers in the most efficient manner possible. The changes to section 9 of the bill clarify what information needs to be in a customer-generator's bill. We believe this change is necessary because it is unclear as to exactly what you are getting on your bill when you participate in net metering.

There is a problem now where the existing statute says that it is only the incentive amount that expires after 12 months and not the incentive itself. There is an existing large backlog of capacity that has been allocated under the program where the incentive amount has expired, but the incentive has not. In order to remove that capacity from the system, so it can be reallocated to a new customer, the power company has to get a letter to say they are not going to build it or there is no mechanism to remove it. Systems that are never going to get built are lingering, and that is another cause of delay in development.

We would like to amend the statute to allow a customer to energize a system before a rebate is awarded. It is creating an artificial delay for many system developers in cases where customers are willing to pay for a system up front on the chance that they may or may not get a rebate. Currently, those customers are just waiting and there is not real good indication of when capacity will be released beyond the annual release. We also think it is a good idea to combine all of the programs—water, wind, power, and solar—under one statutory scheme with one timing mechanism and budget. This is a topic that NV Energy has broached in some of their bills. We think it is a good idea because it will simplify the process for different developers and provide clear and consistent rules across technologies. It should reduce costs because the Commission is holding duplicative hearings. If you combine everything, it could simplify things. The idea would be to create an omnibus energy bill that deals with generation programs and net metering.

Rose McKinney-James:
We would like to amend our own amendment to not request an increase in the net metering cap to 5 percent. This program is a critical program for the sustainability of an industry. There is a sincere effort to try to craft the changes we believe are necessary to maintain this market. We are now in a situation where we are looking at the flattening and declination of the load. I believe we are looking at something that is cyclical and there will be ebbs and flows. We have to know that there is going to be ongoing support for sustaining this industry. We are all challenged in trying to find the best way to approach it. We hope that you agree that we have made an effort to try to make what we believe is a very important program better and more cost-effective.

Chair Atkinson:
Was this amendment heard in the Senate?

Rose McKinney-James:
It is new. We promised in the Senate that we would make adjustments to present a bill that represented a broader degree of support.

Chair Atkinson:
The new section proposes to combine all of the programs?

Rose McKinney-James:
Yes, that is what we are recommending. There is a specified budget for solar and the wind and water programs are faced with expiration. We want to make those programs permanent.

Chair Atkinson:
That would be a huge undertaking. Are there any questions or comments from the Committee? I see none. Are there others in favor of this bill?

Joe Johnson, representing Toiyabe Chapter, Sierra Club:
We stand in support of the bill and the amendment. Kyle Davis requested me to express his support of this bill on behalf of the Nevada Conservation League.

Chad Dickason, Partner, Hamilton Solar, Reno, Nevada:
We are in support of the bill.

Chair Atkinson:
Is there anyone else to testify in support? I see none. Is there any opposition?

Judy Stokey, representing NV Energy:
We are opposed to S.B. 496 (R1) for numerous reasons, but mainly due to the cost to our customers. With the low growth of our state, these systems are costly and we are going to have to displace some of the other lower cost generation. Eighteen months ago, a new solar distributive generation carve-out program was instituted, and it is our position that we should let that program continue. I do not think it is the right time to go into a new program.

John Owens, Director, Customer Renewable Generation and Energy Efficiency, NV Energy:
At the policy level, we see the cost of solar photovoltaic systems decreasing and we do not see the benefit to customers to lock in a fixed-price ten-year contract. There is a risk of losing the benefits of declining prices over time if you structure your program this way. This places the burden of setting the price for these systems on the Public Utilities Commission. How do they do that? I do not know. Under the bill, small-scale distributed solar systems will displace large-scale solar, wind, and geothermal systems. The bill mandates in section 6 "the installation of at least 250 megawatts of solar energy systems throughout this State by 2020." This mandate is going to displace other equally valid renewables that provide equal or, in some cases, I believe, even greater benefits. We keep hearing that it is an improvement to the current program because the current program pays a lump sum rebate and there is no guarantee of ongoing system performance. The current program pays an up-front rebate to help customers with the initial cost of the system. The customers receive an ongoing credit on their bill based on the production of the system. If the system stops performing, they stop seeing the credit on their bill.

Chair Atkinson:
The people who get into the initial phase will possibly pay much more than people who build later, and there is no way to adjust for them.

John Owens:
The Commission would promulgate regulations for how the program will be implemented, but the basic concept is that they would set a fixed-price payment for the output of the system that would be fixed for a ten-year period and over time the system costs will go down and the price should also go down. That assumes that you do not burn through the bulk of the capacity in the first few years of the program or hit the funding cap.

Judy Stokey:
We believe this program could cost up to $700 million, not just because of the contract, but also because of the net metering subsidies and because we already have $140 million committed.

Assemblywoman Kirkpatrick:
I think we need to look at the performance base. We have made so many improvements that we need to see what it has done. There has to be an ability to use a different kind of technology so we can determine which is best for our state. I am tired of subsidizing people who do not come to our state like they promised. We cannot do that until we have made that determination. We have to make some change this session so we can move forward. I think the programs we have are great; there are some issues, but we are doing the programs.

Judy Stokey:
The residents we have spoken to in other states like the up-front rebate because it helps to offset the cost of the system. We have discussed having residential being on a different program. I do not believe this is the vehicle because there are so many other issues in this bill. I know there are other bills where we could address these issues.

Trevor Hayes, representing China Mountain Wind, LLC:
China Mountain Wind is a project near the Nevada-Idaho border that in its first phase will have 200 megawatts of wind energy and the second phase is contemplated to be a similar size. It is being developed by Renewable Energy Systems (RES), which is one of the largest wind developers and builders in the country and is responsible for about 10 percent of the wind energy development in existence. Our concern with this bill is that we think it is premature. There are only about 12 megawatts of distributive generation in Nevada where 72 are allotted. This bill would exponentially increase that. There are about 12 megawatts currently in use and about another 20 or so contemplated. We are not even using half of what we are allotted now. By increasing the amount set aside for distributive generation, it cuts the amount that is available for utility-scale projects, such as my client's wind project at China Mountain or their contemplated solar project on the Moapa lands. While we think distributive generation plays an important role in the renewable landscape, this overemphasizes that role and is a concept that is better to be discussed in 2012 or 2015, when they are closer to the capacity that is already allowed.

Chair Atkinson:
Are there any questions from the Committee? I see none.

Rose McKinney-James:
I believe there is misinformation with respect to how much distributive generation is out there. I believe it is more than 12 megawatts. Last session The Solar Alliance came to this body and asked for a carve-out of the renewable portfolio standard that would be dedicated to distributed generation.

That request triggered a tremendous amount of debate. We decided not to go forward with the carve-out because NV Energy made a compelling argument that we had not demonstrated that there was a sufficient market for it. We had not approached the 1 percent that you are hearing about in net metering. In this cycle we are well beyond that, and we would like to not have to come back every two years to ask for adjustments. It is a critical time to establish a policy foundation so we have some certainty. We are looking for some regulatory and statutory certainty. We are not attempting to limit or to negatively impact other renewable resources. There are members of The Solar Alliance that do both small- and large-scale projects. From the perspective of the Legislature we are talking about job creation, job sustainability, and economic growth. I think there is a fit for every aspect of this if it is the policy of this state to advance its renewable resources to maximize economic growth. It is probably not appropriate to put a number on the record as to the cost of the project unless you can substantiate it. We are more focused on the concepts than the vehicle. We feel strongly that the performance-based incentive is something we need to consider. We are more than willing to consider a separate carve-out for small residential to address the issue that was raised by Ms. Stokey.

Chair Atkinson:
Are there any additional questions from the Committee? I see none. Does anyone else want to testify on S.B. 496 (R1)? [There was none.] We will close the hearing on S.B. 496 (R1). I will open the hearing on Senate Bill 488.

Senate Bill 488: Revises provisions relating to energy. (BDR 58-1274)

Judy Stokey, representing NV Energy:
We are here in support of S.B. 488. Jack McGinley will go through the bill and the amendment we are proposing (Exhibit F).

Jack McGinley, Director, Regulatory and Legislative Strategy, Rates and Regulatory Affairs, NV Energy:
The bill itself modified the existing resource planning regulations. In section 1, subsection 4 of the bill, it broadens what we need to do for transmission planning and building transmission for renewable energy. The regulation states that we present a plan to the Commission that solves our needs, which is to meet the renewable portfolio standard (RPS). This provision broadens it to say that we may also develop projects for the benefit of exporting renewable energy into other markets. The company is meeting its RPS goals but the state wants to continue to develop renewable energy. The issue is how do we do that and how do we access other markets with that energy. That section allows us to build facilities for other people.

Section 1, subsection 5 of the bill would have the utility included in its plan for anticipated facilities to meet that plan. Within the integrated resource planning (IRP) process, we would submit our transmission plan and the necessary infrastructure that we would need to build those facilities. Subsection 6 allows us to do it in phases. Transmission projects can be expensive and take a long time to complete in the State of Nevada. Subsection 7 allows the utility to recover its reasonable expenses.

The amendment does three things. There are two "ands" that need to be "ors." The second change is in section 1, subsection 7, about the cost recovery. We tried to narrow what that meant. The bulk of these projects are going to go through the resource planning process, a very detailed public process. If they are deemed to be prudent, they get recovered in a future rate case. The amendment clarifies that language. The intent of the cost recovery language is for projects that are not in that resource planning process. Sometime we have to build under a shorter time frame that does not allow us to take it through the resource planning process in Nevada. In those situations where we permit and construct these transmission facilities, we would like to be able to come back to the Commission for cost recovery. A last sentence added says, "The prudency and reasonableness of these expenses will be determined by the Commission in a general rate case brought pursuant" to *Nevada Revised Statutes* (NRS) 704.110. It gives some consumer protection that says we cannot build anything we want at any cost. It says there are certain circumstances when we cannot go through the IRP process, but this says those are not deemed to be prudent expenses. In an IRP process, they are. This says the prudency would be determined in a future rate case.

The third element of the amendment relates to the Utility Environmental Protection Act (UEPA) statutes. When we build a large transmission project, we have to file a UEPA, which is a detailed filing. It is a timing issue that makes life difficult for the Public Utility Commission (PUCN) staff and us. If we go to any agency and say we want to build a line, existing regulations say that we have to file with the UEPA with the Commission. In order to do a UEPA, we have to do an IRP because we justify a project in the UEPA standards through the IRP. We are not ready to make those filings because we are not sure who is going to use those projects. The amendment is related to fixing it but we do need to notice the Commission.

Assemblywoman Carlton:
You want to be able to build renewable energy facilities and sell the power out of state to whoever will pay you the most for the power. Is that correct?

Jack McGinley:
We are just the conduit. We may not own the power plants. The owners of the power plants may not have the infrastructure to get out of the state. Typically they are too small to build their own transmission lines.

Assemblywoman Carlton:
You will basically be the general contractor for who is building the plant in order to deliver the power to the transmission facilities. When you recover the cost of these, will Nevadans pay for the cost of these lines?

Jack McGinley:
Those who benefit from or use the line pay for it. If a customer is going to build a solar or geothermal plant, it would come to us, and we would build those transmission facilities, which are regulated by the Federal Energy Regulatory Commission (FERC). They would be responsible for the costs, but there could be costs borne by Nevada retail customers.

Assemblywoman Carlton:
That is the issue. You have a geothermal plant in northern Nevada with a transmission line into Utah. Part of the cost could end up on Nevada residents' utility bills depending how the rate case is filed.

Jack McGinley:
That is how it is done today.

Assemblywoman Carlton:
We are not getting the power or the benefit, but we pay for the cost.

Jack McGinley:
Not the direct cost. The developer pays for that. The geothermal company would pay for that and that would be imbedded in his purchase power price to whomever he sells the power. They pay the direct costs, including the new transmission line, not native load customers. There could be network upgrades, which are facilities that benefit the State of Nevada. For example, if you make an intertie and it connects to the grid, it could strengthen the grid reliability. There is a component of cost that could be borne by the ratepayers.

Assemblywoman Carlton:
My concerns are that Nevadans will not benefit from this. Our power company will be providing a service and being paid for it. Depending how these rate cases go, if we are not careful, the power will be shipped out of the state and we may end up paying for part of it. I would have concerns about supporting needs of other states when we have needs here.

Judy Stokey:
Some of the benefits that Nevadans would get out of this are the fact that there will be connection for the power plants and the receiving customers. There are thousands of jobs connected to those. Currently, there is no transmission for them to get the power to another state, so they are not building them. We need the transmission in order for them to build those plants and then get the customers. There are also a lot of property tax benefits.

Chair Atkinson:
Are there additional questions from the Committee?

Assemblyman Hardy:
This could be a benefit to the state with a goal of being a distributor of green energy throughout the Southwest. Is that correct?

Jack McGinley:
Yes. It would be a way for Nevada to develop its renewable resources.

Assemblyman Hardy:
In all the bills we have heard today, the energy generated could be sold outside of the state.

Jack McGinley:
Yes.

Chair Atkinson:
Are there other questions from the Committee? I see none. Is there anyone else wishing to get on the record in support of this bill?

Ernie Adler, representing International Brotherhood of Electrical Workers Local 1245:
We are the electrical workers for NV Energy in the north. We support this bill. During the campaigns we heard people say that Nevada wants to be the Saudi Arabia of renewable energy. It does no good if you have no means of selling it to other states. That is what this bill does, and it does other things as well. Building transmission lines is going to employ a lot of laborers, most at union wages. Once the lines are built, the International Brotherhood of Electric Workers (IBEW) employees will be the ones who do the maintenance on the lines. It is important to develop a more stable energy grid. I have had experiences with industries that would not locate in Nevada because we do not have load following the way they would want it. Having a vigorous electrical grid is important for economic development, and you also get property taxes to local entities if you have more renewable plants and lines connected to them.

Chair Atkinson:
Is there anyone else to testify in support of S.B. 488?

Rose McKinney-James, representing The Solar Alliance, Inc.:
We submitted to this Committee a broad policy statement that reflects our view that there are a suite of policies that we think the state should entertain, including export. In its original form this bill did not provide some of the protections that we think are appropriate. I think it is a critical component because we do not want to inappropriately give away our resources. We want to develop a robust industry in the state, and the export opportunity is one that adds value in addition to what we do in the state. There needs to be a balance. We have more resources than most states. We have to make sure that we have a mechanism that has the protections we deem appropriate. I understand that this bill has been amended to achieve that.

Chair Atkinson:
Are there any others in support of this bill? I see none. Are there any in opposition to S.B. 488?

Joe Johnson, representing Toiyabe Chapter, Sierra Club:
We are in support of transmission to export renewable energy. We are opposed to portions of this bill. Our particular concern is the issue of the projects that were not included in a resource plan or a plan of transmission. Our concern is that we are putting ratepayers at risk of ultimately paying for an external economic development process. That is a policy decision that the Committee needs to address in this bill. The identified tax benefits and jobs benefits are certainly there, but there was some testimony by the utility that mentioned locking corridors, which is fairly noncompetitive. There are applications existing for corridor development for transmission of renewable energy. There are applications for transmission in the southern part of the state for solar development by Valley Electric. It concerns me that we address the issue of locking corridors for the utility, from which the ratepayers of the state will not benefit. It is important to address in the two bills about transmission that there be a process where the ratepayers may have some significant benefit or at least break even. We have serious concerns about the public policy of this bill.

Chair Atkinson:
Is there anyone else to testify on this bill?

Stacey Crowley, Director, Office of Energy, Office of the Governor:
I am neutral on this bill. I appreciate the effort to make some plans for exporting renewable energy, but it is a significant economic development policy decision. The way this bill is crafted with the amendment, it puts the majority

of the risk on ratepayers. Other merchant transmission developers would take this risk themselves. There are ongoing efforts to address the topic of identifying transmission corridors and planning processes to export renewable energy through a nonprofit that the state created two years ago called the Nevada Energy Assistance Corporation (NEAC). Through that nonprofit, we are looking at transmission corridors for export for the benefit of the entire state in an ongoing process.

Chair Atkinson:
Are there any questions from the Committee?

Assemblyman Goedhart:
How much progress has been made by the nonprofit? Do we have any plans in the works for a transmission line, and how is that proceeding?

Stacey Crowley:
We are making some good progress. We are using some American Recovery and Reinvestment Act (ARRA) funds through the Office of Energy to fund an engineering team to look at three specific corridors. They are working diligently on those corridors and just received a contract in March. They are to be finished by February 2012 because of the ARRA fund requirements.

Assemblyman Goedhart:
Will you transmit to my office the three transmission corridors that are currently under study?

Stacey Crowley:
I will do that and I will be happy to provide an update to the Committee.

Chair Atkinson:
Does anyone else want to testify on S.B. 488? I see none. I will close the hearing on S.B. 488. Is there any public comment? [There was none.]

The meeting is adjourned [at 4:47 p.m.].

RESPECTFULLY SUBMITTED:

Earlene Miller
Committee Secretary

APPROVED BY:

Assemblyman Kelvin Atkinson, Chair

DATE:

EXHIBITS

Committee Name: Committee on Commerce and Labor

Date: May 13, 2011 **Time of Meeting: 1:05 p.m.**

Bill	Exhibit	Witness / Agency	Description
	A		Agenda
	B		Attendance Roster
S.B. 59 (R1)	C	Rose McKinney-James	Memorandum
S.B. 184 (R1)	D	Ted Ko	Proposed Amendment
S.B. 496 (R1)	E	Rose McKinney-James	Proposed Amendment
S.B. 488	F	Judy Stokey	Proposed Amendment