

**MINUTES OF THE MEETING
OF THE
ASSEMBLY COMMITTEE ON COMMERCE AND LABOR
SUBCOMMITTEE ON ENERGY**

**Seventy-Sixth Session
April 6, 2011**

The Committee on Commerce and Labor Subcommittee on Energy was called to order by Chair Marilyn K. Kirkpatrick at 3:15 p.m. on Wednesday, April 6, 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:

Assemblywoman Marilyn K. Kirkpatrick, Chair
Assemblyman Kelvin Atkinson
Assemblywoman Irene Bustamante Adams
Assemblyman Ed A. Goedhart
Assemblyman Pat Hickey

COMMITTEE MEMBERS ABSENT:

None

GUEST LEGISLATORS PRESENT:

Assemblyman James Ohrenschall, Clark County Assembly District No. 12
Assemblywoman Maggie Carlton, Clark County Assembly District No. 14
Assemblywoman Teresa Benitez-Thompson, Washoe County Assembly District No. 27
Assemblyman David P. Bobzien, Washoe County Assembly District No. 24

STAFF MEMBERS PRESENT:

Marji Paslov Thomas, Committee Policy Analyst
Carol Thomsen, Committee Secretary
Sally Stoner, Committee Assistant

OTHERS PRESENT:

Matthew I. Knepper, Vice President, Environmental Law Society,
William S. Boyd School of Law, University of Nevada, Las Vegas
Michael M. DeLee, Broker, DeLee and Associates, Las Vegas, Nevada
Rory Dwyer, General Manager, Boulder City Electric Utilities, Boulder City,
Nevada
Bob Tregilus, representing Feed-in Tariffs for Nevada and the Electric
Auto Association of Northern Nevada; Member, Steering
Committee for Alliance for Renewable Energy
Joe Johnson, representing Nevada Solar Works and Toiyabe Chapter,
Sierra Club
Kyle Davis, representing Nevada Conservation League
Luke Busby, representing Clean Energy Center, LLC
Judy Stokey, representing NV Energy
John Owens, Director, Customer Renewable Generation and Energy
Efficiency, NV Energy
Susan Fisher, representing Valley Electric Association, Inc.
Randell Hynes, representing Nevada Solar Authority, Ltd.
Alison Haugh, representing Nevada Building Performance Professionals,
Las Vegas, Nevada
Tiger Adolf, Western Regional Director, Building Performance Institute,
Cheyenne, Wyoming
Jenny Reese, representing Nevada Association of Realtors
Randy Soltero, representing Sheet Metal Workers Union Local 88
Tom Clark, representing OPower
Stacey Crowley, Director, Office of Energy, and Acting Commissioner,
Nevada Renewable Energy and Energy Efficiency Authority, Office
of the Governor
Warren B. Hardy II, representing Hamilton Solar
Gregory Price, Regional Director, Northern Power Systems, Portland,
Oregon
Rose McKinney-James, representing the Solar Alliance
Tom Price, Chief Executive, CleanPath Renewables Development, Reno,
Nevada
Marnee Benson, Deputy Director, Black Rock Solar, Reno, Nevada

Jeff Wiggins, Vice President, Solpower Solar Energy/Millennium Development Corporation, Inc., Reno, Nevada
Grace Townsend-Caldwell, President, Independent Power Corporation, Reno, Nevada
Annie Carmichael, Government Affairs Manager, SunEdison, Denver, Colorado
Marion Barritt, Private Citizen, Gardnerville, Nevada
Chad Dickason, representing Hamilton Solar
Scott Hansen, Public Works Director, City of Boulder City
Daniel Jacobsen, Technical Staff Manager, Bureau of Consumer Protection, Office of the Attorney General
Rebecca Wagner, Commissioner, Public Utilities Commission of Nevada
Terry Care, representing GA Solar Gestamp Corporation, Las Vegas, Nevada
Lee Novak, Senior Project Manager, GA Solar Gestamp Corporation, Las Vegas, Nevada
David Goldwater, representing Sierra Nevada Corporation
Ernie E. Adler, representing International Brotherhood of Electrical Workers Local 1245

Chair Kirkpatrick:

[Roll was taken.] At this time we will open the hearing on Assembly Bill 385.

Assembly Bill 385: Revises provisions governing providers of electric service.
(BDR 58-33)

Assemblyman James Ohrenschall, Clark County Assembly District No. 12:

This bill is about promoting more solar power use in the state. We have been working very hard on this legislation. You should have an amendment ([Exhibit C](#)) before you in the Nevada Electronic Legislative Information System (NELIS). It does change the bill quite a bit. With the Subcommittee's indulgence, I believe the witnesses are coming upstairs to speak to the more technical aspects of this bill.

I can give you a history of the bill. There was a symposium on renewable energy a couple of years ago at the William S. Boyd School of Law at the University of Nevada, Las Vegas (UNLV). It was sponsored by the law school's Environmental Law Society (ELS). They had many of the stakeholders there, and they discussed the different obstacles standing in the way of distributed solar power generation. This bill came out of an effort to try to increase distributed solar power generation. In Las Vegas we have many rooftops that have the potential of producing electricity. That was the genesis of this bill.

I would like to turn this over to Mr. Matt Knepper. Matt is a third-year law student at the William S. Boyd School of Law and a member of the law school's Environmental Law Society. To my right I have Mr. Michael DeLee, a graduate of the William S. Boyd School of Law who has worked very closely with Mr. Knepper on this bill.

Chair Kirkpatrick:
Good afternoon.

Matthew I. Knepper, Vice President, Environmental Law Society, William S. Boyd School of Law, University of Nevada, Las Vegas:

Assembly Bill 385 is an extension of interest in understanding feed-in tariff (FIT) that started in the fall of 2009. I had an opportunity to write an extensive bit of academic research on the subject the following spring semester. At that time, it was generally our feeling that FIT was not something that would be viable under federal law, subject to federal preemption under the Public Utility Regulatory Policy Act of 1978 (PURPA), and as the European south FIT goes, that remains my opinion. That is to say, levelized cost of production plus reasonable rate of returns not tied to avoided costs is most certainly going to be subject to preemption of tax under federal law and likely to fail. What we tried to do in the process of writing this bill was take a look at a recent Federal Energy Regulatory Commission (FERC) order, which is Order No. 741, October 21, 2010. It dealt with a request by the California Public Utility Commission to figure out how they could segment costs on the basis of technology type.

So what does this mean? It means that the California Public Utilities Commission wanted to set up a rate base that reflected the quality of the energy that was coming from combined heat/power at that time. Basically, the FERC said that would be acceptable, but to the extent that you have two factors at play. Number one, you have to set it to a rooted cost. Number two, you can do that only to the extent there is a statutory carve-out for that particular technology type. The logic that was involved in that particular decision and, in fact, was a particular quote from FERC, was that you cannot reasonably take prices of natural gas, for example, which is notably less expensive than solar, and use that to say, "This is what we are going to pay you for your solar panels," and say that this is a fair equivalent. You can only then segment to the avoided costs to the solar to the extent that the carve-out in your solar energy equivalent under the Renewable Portfolio Standard (RPS) gives you the ability to do so. That means if we were to take an avoided cost of solar energy and use that to calculate the cost that we would be willing to pay under this bill, distributed generation, you can do that to the extent that the 5 percent of 15 percent for this particular year would allow. After that, you

would run into preemption issues because you are running outside of the statutory mandate on the utility in order to comply with the RPS.

That is the rationale that drives the legislation or, at least, the bill that is before you. I would like to take you on a section-by-section walk-through of the legislation.

Chair Kirkpatrick:

Thank you. I think that I would prefer that we first go through the bill and then ask questions.

Matthew Knepper:

Thank you. We will go ahead and proceed in that manner.

The first several sections, through section 10, are readily recognizable as definable sections. As with Senate Bill 184 and Assembly Bill 268, we worked with the Vermont language, so you will see some continuity between those two bills and A.B. 385, with the exception of the definition of “system capacity” in section 8. This language was changed to “nameplate capacity” because we wanted to have a definition for people to refer to rather than system capacity being the equivalent of nameplate capacity. Without more the definition was uncertain.

Section 11 is where the substance of the rate structure comes into play. The rate structure starts in subsection 4. This is the basis for this program.

Chair Kirkpatrick:

We are on page 3, section 11, subsection 4 ([Exhibit C](#)).

Matthew Knepper:

In subsection 4, paragraph (a) and the three subparagraphs below that, it says that to the extent that the utility has solar energy in place, or expects to have solar energy in place, either from the solar generations program or from any other power purchase agreement—for example, the 50-megawatt NextLight facility in the south—that cumulative number is the number they have met under the RPS carve-out for solar energy. To the extent there is a difference between that number and the number called for by the RPS for solar energy, the remaining amount would be dedicated to this program. That leaves the Legislature the ability to determine the degree to which it wants to increase the capacity dedicated to this program above the amount that the utility is able to meet. As I understand it, the utility is going to make its renewable portfolio carve-out for solar this year and anticipate that going forward.

Subsection 5 sets the avoided cost number once you determine the capacity that you are going to dedicate as a residual amount the utility has not met. Avoided costs under PURPA can be boiled down to two elements. It is the cost that you would have paid for energy but for the purchase from your qualifying facility, or the avoided cost that the utility would have incurred to build the facility and provide the energy itself.

The assumption is that if the utility is unable to meet the requirements of the RPS, the remaining way to set the avoided cost would be against the cost of building a facility. That is what section 11, subsection 5 in the amendment does. It says there are two ways for the cost to be determined. First, the utility facility, the structure itself, is tied to the definition under the Utility Environmental Protection Act (UEPA). The second part is any cost of distribution and transmission. When it says "any cost," it means any cost including a presumed cost associated with a regulatory review.

The sentence in section 11, subsection 5, just after paragraph (b) that begins "Any tax credit" should be "flush" language, to modify paragraphs (a) and (b) to say, "Any tax credit or other incentive should be given to the utility to apply to this avoided cost determination." If we are determining all avoided costs, then we should also be determining any tax incentive or other incentive that would be available to them, federal, state, or local, so that they can reduce that cost accordingly. That is what that language was actually intended to do and it should, in fact, be flush language to do that.

Moving on to section 11, subsection 6, we leave to the Public Utilities Commission (PUC) of Nevada the right to determine how the benchmark price would work. In essence, what it would be is the facility, however constructed or theoretically constructed, for the purposes of the avoided cost termination, would be allocated on a per-kilowatt-hour basis, to the extent of the residual amount under this program.

Let us assume there are 100-megawatts that the facility has failed to achieve for the program year. We would dedicate that to this program. They would have to build a 100-megawatt facility, but what that facility looks like would be left to the discretion of the PUC. It probably could take a number of formats, understanding that a 100-megawatt facility is not necessarily equal to a 2.2 generator. We would need to leave it to the PUC's discretion and expertise to determine how best to equate the two facilities. They would create the facility, and then the cost of that facility's construction would be allocated on a per-kilowatt-hour basis. That would be the rate that would be offered through the standard offer contract to the distributed generation providers under this program.

Section 11, subsection 7 in the amendment is borrowed from existing language in the solar generations program. It should not look too unfamiliar. The idea is that the portfolio energy credits created as a result of this program, and initially held by the distributed generators, will automatically transfer to the utility.

Section 11, subsection 10 says that when the contract is established it will apply from this point forward. There will be no retroactive determinations to existing contracts in subsequent program years.

You will see that there was a section 12 for the purposes of format and readability. It was moved to section 11, subsection 4.

Section 12 speaks to what the standard offer contract must do. That includes being a transferable contract so that one person is not locked into it in the event there is some type of economic incentive in selling or otherwise transferring it.

The standard offer contract must provide several things. There is a "must take" provision in subsection 2, paragraph (a). Paragraph (b) requires that the system owner pay the costs of construction. Paragraph (c) requires the utility to provide for the cost of any transmission or distribution upgrades required to meet the program, understanding that currently there is a docket on distributive generation costs coming forward that will further inform this program. The PUC determines those costs.

In section 12, subsection 3 in the amendment there is a tremendous amount that has been eliminated. It was confusing language that tried to set up how the costs would be allocated. Leaving that up to the PUC's discretion and expertise seems to be a more prudent decision.

Section 14 is a "catchall" that says the PUC will adopt all of the regulations necessary, including establishing reporting requirements. There is a reporting provision in section 17 to report back to the Legislature on whether the program is working or should be corrected.

Section 15 provides that a distributive generator may enter into a contract outside of this program.

Section 16 is a hold harmless clause on behalf of the state. If individuals involved in setting up the program succeed, fail, or cause injury, they would be liable as they choose to participate in the program, and the state would not be involved.

Chair Kirkpatrick:

I want to clarify that this allows for the PUC to determine a program based on all these requirements. Is that correct?

Matthew Knepper:

That is correct.

Chair Kirkpatrick:

So when you pulled Vermont's language, did you, as discussed during the interim study on energy, pull the potential costs of the FIT? I believe it was somewhere between 20 cents and 30 cents additional per kilowatt. I am wondering if this is intended for all ratepayers to pay that additional amount, or if it is just headed towards the folks that are benefiting from it.

Matthew Knepper:

The way that this program is set up is not precisely the European style of FIT. I think that the cost structures that you were able to have made available to you are not necessarily applicable. The reason is that this is tied specifically to the residual category within the carve-out that the Legislature statutorily has seen fit to determine. Because we are determining this on the basis of an avoided cost, rather than determining this on an FIT unrelated to avoided costs, I do not believe that those costs would necessarily translate.

Chair Kirkpatrick:

Is it passed on to all the ratepayers or one, and what is the potential cost to the person who does the FIT?

Matthew Knepper:

The way the cost works will ultimately be determined by the strength of the program as determined by the solar carve-out. The cost that the Legislature has already seen fit to build into the RPS with respect to the carve-out for solar is the cost that would be capped on this program. It really depends on you.

Chair Kirkpatrick:

I need to know if the entire rate is placed upon all residents of Nevada. As an example, a 67-year-old constituent does not necessarily need solar, does not necessarily want it, but supports green energy. How much is his power bill going to go up?

Vermont's law has been in place a little over a year and a half, and it has only had a small potential use, although it is making strides. I need to be able to explain to our senior citizens how much their power bill will go up, and what some of the potential pitfalls could be. Information that we heard during the

Subcommittee on Energy is that very few states are doing this. It is a relatively new thing, and I was not sure we agreed that Nevada wanted to be one of the top ten to do this until we determined what the rates were for the ratepayers. Somehow you have to hypothetically give me what the cost would be. I have seen 35 additional cents per kilowatt-hour in Arkansas and Vermont is about 20 cents. Some states have done it and it is very expensive. Europe and Spain did it years ago and they struggled a long time to get the rates down.

Matthew Knepper:

The way to hypothetically calculate the cost is on the basis of numbers that have been brought forward, certainly in the hearing on S.B. 184. The number is somewhere between 5 cents and 7 cents per kilowatt-hour. It is difficult to answer in a cost per kilowatt-hour because the moving part is the cost determined first by construction of the avoided cost facility. Another way to do it would be to say the amount of the program that is carve-out solar could be said in kilowatt-hour numbers, and then to take that number and distribute it across the retail number of total kilowatts consumed by the consumer. The number could be significantly less. The 55 cents is the amount of money we would assume that the distributive generator would be receiving as a part of this program, but that is a number that is very difficult to pin down because it depends on the size of the program carve-out.

Chair Kirkpatrick:

I will say one last thing, and then we need to move on. I am not a fan of making policy without being able to go home and tell constituents what the rate increase is going to be. When Vermont did their legislation they had a very full discussion on specifics. If I remember correctly, in Vermont they limited it to a certain amount of rate going forward. Although this leaves it up to the PUC, in Vermont they did 30 cents per solar kilowatt-hour. I can pull up the bill, but I need to have specifics to take home to my constituents. I don't know what S.B. 184 is since we have not heard it here. Unless I can get specifics, I am not inclined to support any new policy that I cannot justify with my constituents.

Matthew Knepper:

Because the program amount is already set under the current RPS, we are not calling for any more capacity beyond what the Legislature determines. It would be no more than what we already have set under RPS and the costs of solar energy, or at least what they are buying it at, which, I understand, is at 55 cents. One of the other elements of the program that makes sense is that the utility would have every reason to build a facility that is cost-effective, so they can actually drive that rate down. That would potentially reveal some

good utility scale planning in the long term. That would also be a moving part of this particular program.

Chair Kirkpatrick:

Thank you. Would you like to go to your other speakers, Mr. Ohrenschall?

Assemblyman Ohrenschall:

Thank you. I would like to introduce Mr. Michael DeLee.

Michael M. DeLee, Broker, DeLee and Associates, Las Vegas, Nevada:

We were waiting for the amended version of the bill. There were some sections that were dropped entirely, and we do not need to put that on the record unless you need us to discuss the bill as originally written.

Chair Kirkpatrick:

I do not think that is necessary. I think it is cleaner if we all work off the same amendment.

Michael M. DeLee:

Then I have nothing to add. Thank you.

Chair Kirkpatrick:

I would like to hear testimony from southern Nevada.

Rory Dwyer, General Manager, Boulder City Electric Utilities, Boulder City, Nevada:

We are neutral on the bill. Our concerns have been resolved; therefore, we have no comment.

Chair Kirkpatrick:

Assemblyman Ohrenschall, is there anything else before we talk to those in support of the bill?

Assemblyman Ohrenschall:

No. I would be happy to let the other proponents come forward and testify in support.

Chair Kirkpatrick:

At this time I will call those who want to testify in support of the bill.

Bob Tregilus, representing Feed-in Tariffs for Nevada and the Electric Auto Association of Northern Nevada; Member, Steering Committee of the Alliance for Renewable Energy:

For the past year I have been co-host of "This Week in Energy," an international podcast. I wanted to indicate our support for A.B. 385. I will attempt to answer a few of the questions that came up. I believe section 12 on transferability should be amended. This has been a pitfall in other jurisdictions where there is unlimited transferability before the facility is built. People get into the queue and start the contracts and nothing ever gets built. This should be limited to one transfer. After the system has been built and put into service, it could be transferred an unlimited number of times. This would be my only exception to this bill.

There seems to be some confusion on how the program costs are distributed to the ratepayers. Under an FIT or a standard offer contract, FITs are simply payment for generation, or wholesale generation in this case, as opposed to retail generation that you have under a net metering program. Being wholesale is simply payment for generation. As we should all be aware, energy on the grid comes at different prices. There are some at \$1 per kilowatt-hour for frequency regulation and spinning reserve at some of the peaking plants and others of this sort. There are other generations on the grid that are really cheap, such as an old, amortized coal plant, which is about 4 cents per kilowatt. This falls into that broad mix.

There is some specific language in here that caps the ratepayer program per the renewable energy portfolio and what is being determined by the Legislature that effectively develops a cap. As far as the distribution of the ratepayer impact, of course this goes out to everybody; the ratepayers are always paying for generation, and this is just another component of the generation that they paid for. We did a study based on the University of California, Los Angeles (UCLA) Luskin Center research that was done for the Los Angeles Business Council last year, and we did a hypothetical solar-only program of 600-megawatts. For a 600-megawatt program, by year five of this program the ratepayer impact would still be in the 60 cents per average household range.

Chair Kirkpatrick:

Is that cost per kilowatt or 60 cents total?

Bob Tregilus:

That is 60 cents total on the bill. Your energy bill would have a line item that talks about the green energy development or whatever the name of the program would be. You would see a percentage on each kilowatt used. The kilowatt

charge impact for a 600-megawatt program would be 0.06 cent per kilowatt-hour.

Chair Kirkpatrick:

If that is the case, why are we not trying to cap it with statute such as Vermont and three other states have done? I hope my constituents can bill-back someone to make sure their power bill is the same. We talk in hypothetical numbers, but even some power bills in Vermont are not what were anticipated.

Bob Tregilus:

The Vermont program was capped at 50-megawatts, I believe. They are currently reviewing it and, I am pretty sure, will reinstitute the program. We have lots of examples of how this is done. Time and again it has been done correctly. It is the cheapest way to incentivize renewable energy.

Unfortunately, I have not been able to participate at the level that I wanted to. I will try to meet with you later to go over a few of these issues. As far as the actual cost with the solar system that is being developed, it looks like it depends on the project size. It is probably in the 16 to 22 cents per kilowatt-hour range to ensure a reasonable rate of return on the investment.

In closing, we have been talking about FITs in Nevada for approximately a year and a half, and a range of organizations have expressed interest. To my surprise, Nevada is not really on the radar for renewable energy, with the exception of geothermal. We have over 100 endorsements collected for the idea of the FIT. Many come from outside of Nevada. Some are manufacturers who are quite interested. The reason is that the solar generations and net metering programs are very complex systems, and getting financing is very difficult. The FIT is very transparent. On the surface it is simple and is something that can be figured out quite readily once some variables are input into a program. This reduces the risk to investment, and the cost of capital now goes down. Financiers love this. A large number of those endorsing this are financial firms that I have found have an interest in FITs in Nevada.

Chair Kirkpatrick:

Would you be able to submit that list to us? I would implore you to find Nevada businesses that are just as interested, because Nevada ratepayers would be paying for it initially.

Bob Tregilus:

Yes.

Joe Johnson, representing Nevada Solar Works and Toiyabe Chapter, Sierra Club:

We stand in support of the proposed amendment and share the concern of the Chair regarding ratepayer impact. The renewable energy portfolio has no cap put on the cost. This program being proposed fits within the required solar compliance portion, which presently does not have a cap to it on cost. It has a cap on the total number of kilowatt-hours that is required for the utility to perform. The concern of the cost and why it is so difficult to state a definitive ratepayer impact is that this proposed standard offer contract is based on a calculated price of avoided cost to the utility. This is something that is constantly changing and directed towards a comparable supply. Presently, the utility has before the PUC two utility-scale photovoltaic (PV) projects that come in around 12 cents per kilowatt-hour on purchase. If you use that value, you can readily see the ratepayer impact for a simple calculation. Whether that would be the avoided cost on programs would be determined by the PUC. It is a variable and, hopefully, a declining cost in the future.

Chair Kirkpatrick:

Thank you. Are there any questions? [There were none.]

Kyle Davis, representing Nevada Conservation League:

One of the priorities of the Nevada conservation community this session is moving towards a system that pays for the performance of the system that is installed. Clearly this piece of legislation would do that in the mechanism that is proposed in the bill and in the amendment. We are in support of programs such as this in order to more efficiently allocate the ratepayer dollars that are allocated for renewable energy systems.

Chair Kirkpatrick:

Are there any questions? [There were none.] Is there any further testimony in support of A.B. 385? [There was none.]

Assemblyman Ohrenschall, I would like to call attention to page 3, section 11, subsection 3. I want to understand how that is defined because different types of solar energy have different useful life. We have some that are good for 5 years, some that are good for 20 years, and some that are good for 25 years. Even in Europe when they started their contracts, they limited them to a certain time. When we look at contracts, we have to look at the ratepayer, because people can make their money back over the long term of a contract, but this is pretty wide open for the PUC to determine cost of the solar project.

Matthew Knepper:

This depends on the type of technology that the individual distributive generator wants to employ. That is why it is less efficiently brought. There may be different types of solar panel technologies that make more sense to that particular generator. Over time that can become more efficient and/or more cost-effective in terms of installation. The reason we left that broad was to give the distributive generator the greatest degree of flexibility in terms of project design and, ultimately, to allow those determinations to be consistent with what the PUC would be comfortable with.

Chair Kirkpatrick:

I would appreciate it if you could please get the Subcommittee a list of the states that actually have FIT programs. I know of only three, so that would be helpful.

Is there anyone else who wants to testify in support of A.B. 385? [There was no one.] Is there anyone who would like to testify in opposition to A.B. 385? [There was no one.]

Judy Stokey, representing NV Energy:

We are in opposition to A.B. 385. We have spoken to the sponsor about our concerns, and we will be speaking to him again. Everyone agrees there is a problem with our solar generations process. We have presented one of our ideas to this Subcommittee. This is another FIT idea to try to fix some of the problems. There is the performance base, which you are going to be hearing in another bill. Assembly Bill 385 is an FIT, and it is a separate policy from the portfolio standards. Countries with FITs typically do not have any other type of incentive program such as RPS, set-asides, or subsidies in their programs. Nevada has been very successful incentivizing renewables. We are a leader in the nation in renewables.

In A.B. 385 there are some provisions that we think place too much risk on the customers, such as:

- Pricing cannot be changed during the term of the contract.
- The contracts can transfer to new parties with no ability for review by the provider.
- There is no balancing of developer provisions against other state policies or cost to customers.
- The program would expose customers and utilities to significant risk because of the cost.

Assemblyman Atkinson:

Did you submit anything to the Subcommittee regarding these issues?

Judy Stokey:

No, but I will submit it to NELIS.

**John Owens, Director, Customer Renewable Generation and Energy Efficiency,
NV Energy:**

As Judy Stokey mentioned to you, we do have concerns with respect to this mechanism. One of the main concerns is the potential adverse cost effects of the bill on our customers. As you have heard from members of the industry, the price for solar is dropping. You have to ask yourself the question, "If the price of the systems is coming down, why would you lock in the price today under a long-term contract of 10 to 20 years when next year the price is probably going to be lower?" We believe the one-time rebate mechanism we currently use will result in better value and lower costs for Nevada's electric customers and accomplish the same results. The FIT proposal essentially picks a technology winner as small-scale solar. The carve-out requirement in our RPS of 6 percent starting in 2013 exists because these systems are more expensive today than other renewable resources, namely geothermal and wind. The carve-out was put in place to help the industry get to a point of cost competitiveness, and we support that. However, this mechanism would create a situation where, as opposed to buying over time every year through a solar generations rebate program, you are locking at a price for 10 or 20 years, depending on the term of these agreements. We think that results in risk for our customers. The last point you should be aware of is that when you look at the aggressive procurement that the company has conducted over the last two years, we are in a position where we will be in compliance with the solar carve-out requirements probably for the next 20 years. This is a result of the following:

1. The growth in our renewable generations program.
2. The projects that are already in production and under contract.
3. A number of new contracts that are under development.

One of the questions we have about this bill is that it talks about the extent to which we are short in meeting the requirement. We need to use this mechanism. Our question would be, "What if we are not short due to the agreements and contracts that we have already entered into to comply?" Is it the intent of this bill to undermine those existing projects that are already under development, or is it a matter of deferring the implementation of this mechanism until such time as it is needed?

Chair Kirkpatrick:

Assemblyman Ohrenschall can get together with you to clarify that issue.

Susan Fisher, representing Valley Electric Association, Inc.:

I signed in as opposed to the original bill as written, but with the amendment I have moved to a neutral position. As long as the bill moves forward with the amendment, we will stay neutral.

Chair Kirkpatrick:

Is there anyone who is neutral on the bill who would like to testify?

Randell Hynes, representing Nevada Solar Authority, Ltd.:

In general terms, we would be in agreement with this bill, but we are testifying in the neutral position because moving forward we see that this is one of five bills using standard contracts to try to reach the same end. Working in the industry, we need to look at it in terms of what is going to accomplish these goals—put Nevadans back to work as quickly as possible and create more sales tax revenue.

I have talked to Mr. Knepper about the process of waiting for avoided costs. I am totally in agreement with the process he testified about as being the most proper way to establish the avoided costs. We want to be able to establish something now that will allow the industry to start to work and flourish. If avoided costs are established, we can add that as an option to standard offer contracts in a year or more. It is not said that even after the whole avoided cost process has been accomplished that amount will even be enough to attract solar investors. We do not know what the actual capacity of the program is going to be or what the avoided cost is going to be; therefore, we cannot tell you how much the program is going to cost eventually, but there is a good possibility that the avoided cost after the whole process is gone through will not be sufficient to attract solar investors.

Assemblyman Ohrenschall:

I appreciate your indulgence. I would like to turn over the testimony to Mr. DeLee and Mr. Knepper.

Matthew Knepper:

I would like to thank the Committee for their time. Watching this process from the academic viewpoint does not fully give the weight or sense of responsibility that goes on here. To be here today has been an honor.

My only closing comment would be in response to Mr. Owens. This bill is not meant to displace current programs. In fact, no matter what program comes

forward, in this session or upcoming sessions, this is to serve as a backstop role to the extent that the utility is unable to meet the carve-out. Regarding the question of whether or not it was a deferral-type program, I think it would be more consistent to defer to the Legislature's best judgment to the extent they want to increase the carve-out and create an opportunity for distribution; that is what this program is meant to do, not to preempt current programs and not to preempt contracts under consideration.

Michael DeLee:

I look forward to working with the opponents of the bill. I think the narrow concerns about costs can be addressed through a minor change in the language. We went over it with a fine-tooth comb but we could have missed something. We will bring it back to the Subcommittee clarified.

Chair Kirkpatrick:

I will point out to you that if you look at Florida, Vermont, and some other states, when they went to FIT, they got rid of their other programs. You might want to work in that direction.

Assemblyman Ohrenschall:

Thank you. I appreciate your time and I look forward to working with the people who had problems with this bill.

Chair Kirkpatrick:

We will close the hearing on A.B. 385 and open the hearing on A.B.390.

Assembly Bill 390: Revises provisions relating to energy assistance.
(BDR 58-801)

Assemblywoman Maggie Carlton, Clark County Assembly District No. 14:

Before you today is a solution to a problem one of my constituents encountered in the last interim. The problem was that within a mass-metered community, each resident gets an electric bill individualized for the amount of electricity he uses. Under the Fund for Energy Assistance and Conservation for low-income folks, these people are not recognized as customers. Therefore, even though they might fit the guidelines to receive that assistance, they were not allowed to apply because they were not recognized. The only recognized customer was the landlord or owner of the mass-meter.

Assembly Bill 390 includes, within the definition of the eligible household, language that would allow these constituents to apply for low-income energy assistance. There is no guarantee they will receive assistance for their electric bills, but A.B. 390 gives them the opportunity to apply.

I would be happy to try to answer any questions.

Assemblyman Atkinson:

I am trying to make sure I have this right. This rings a bell with me from last session.

Assemblywoman Carlton:

I believe former Assemblywoman Ellen Koivisto had a bill that was similar in the 2009 Legislative Session; however, I did not go back and look at that bill. This was the issue that the constituent brought to me, so this is what we tried to address. I am not familiar with the other bill. I do not think it ever made it to the committee I was serving on at the time. I would be happy to do some research if you would like more information.

Chair Kirkpatrick:

I just realized that you represent former Assemblywoman Koivisto's district now. Maybe it is the same constituent.

Assemblywoman Carlton:

He is a wonderful gentleman who is looking out for the more senior people in his mobile home park.

Assemblywoman Bustamante Adams:

I wanted to make sure that I understand. You use the words "mass-metered community," which means groupings like manufactured homes and apartments. Is that what we are referencing?

Assemblywoman Carlton:

Yes. I do not think apartment buildings are mass-metered because, I believe, most apartments have individual meters. The normal mass-meter, and we can have the energy company go into more depth, is for the mobile home parks. There is the mass-meter and there are the individual meters on the individual mobile home parks. The designated customer is the landlord who owns the mass-meter.

Chair Kirkpatrick:

Anyone who would like to testify in support of A.B. 390, please come forward.

Judy Stokey, representing NV Energy:

We support A.B. 390 and we want to commend Assemblywoman Carlton for bringing this to everyone's attention. All of the customers, including mass-metering and mobile home park customers, pay into the universal energy charge. If they pay their power bill to the utility, then they are a customer,

but if they pay to a landlord through the mass-meter, they are not considered a customer in our system. We definitely support this bill and we think this is a hole that should be corrected. To answer Assemblywoman Bustamante Adams' question in regards to mass-meters, we have them in some of the manufactured housing developments and a few apartment complexes. We are trying to not do mass-metered facilities anymore, if possible.

Chair Kirkpatrick:

We were going back and forth on how this relates to former Assemblywoman Koivisto's bill.

Judy Stokey:

I can talk to that. The main objective of that bill was to let the residents know how much they were paying in their power bill and to have that communicated in some kind of written form. People were being told by the landlord how much they owed for their power and they had nothing to support that.

Chair Kirkpatrick:

Thank you. Are there others who would like to speak in support of A.B. 390?

Joe Johnson, representing Nevada Solar Works and Toiyabe Chapter, Sierra Club:

This is a fix that is long overdue. In 2001, when we adopted the universal energy charge, this was a defect in the legislation. We stand in strong support of A.B. 390.

Chair Kirkpatrick:

Is there any further testimony in support of A.B. 390? [There were none.] Is there anyone who is in opposition to A.B. 390? [There were none.] Is there anyone who is neutral on the bill? [There was no one.] We will close the hearing on A.B. 390.

We will open the hearing on Assembly Bill 432. I will turn the Chair over to Assemblyman Atkinson.

Assembly Bill 432: Enacts provisions relating to energy auditors. (BDR 54-136)

Assemblywoman Marilyn K. Kirkpatrick, Clark County Assembly District No. 1:

I have with me Assemblywoman Teresa Benitez-Thompson, who will also testify on this bill. I would like to give some background and history of Assembly Bill 432.

The energy auditor was part of a bill from the 2007 Legislative Session where it talked about doing energy audits in our homes. However, the water was very muddy because there was no record specifically in the legislative history on what type of audits were supposed to be done. It was left to the purview of the Office of Energy but between sessions switched to the Energy Commissioner's office, so it has been an ugly process. When switching all of these people and moving the legislation and requiring that regulations be adopted, the Legislature failed to allow the authority for the Energy Commissioner to actually put the regulations in place. Unfortunately, during the interim before the Legislative Commission's Subcommittee to Review Regulations, we put into place an energy audit regulation. That was not the best piece of regulation that we put forth, but I can tell you that Dr. Hatice Geçol, Office of Energy Director at the time, had a big job with what the Legislature left her and the parameters with which she had to work. I gave my commitment, and there were several people unhappy about what we ended up with, but if we had not put something in place, we would be in violation of our own law.

We have a terrible regulation in place that does not express the intent of what anyone wanted, but it gives us a starting point to go forward. However, during the interim I made my commitment that I would come back, readdress this issue, and make it clear on the record what the legislative intent was so that there would be no misunderstanding. I have worked with the energy auditors and with labor. The realtors had concerns and my concerns were that we were not going to license these people and they would be running amuck throughout our state. We wanted to make sure we had some consumer protections. We also worked with Stacey Crowley, Director of the Office of Energy and Acting Nevada Energy Commissioner. I asked Assemblywoman Benitez-Thompson to be a part of this discussion because, for the longevity of the program, the institutional knowledge as we all are termed-out, I think we need to have some freshmen take this over someday. She has worked hard and should be commended. She has an amendment that will address everyone's concerns.

The goal of this energy audit is to make sure that the consumers are protected, to make sure that they are getting what they are paying for, and to make sure that it is market-driven. Currently within the appraisal process you can specify if you have done any green energy upgrades. There are loans you can get to retrofit your program. I want to make it clear that we did not adopt one standard or another, because we need to adopt a standard that works best for Nevada. This is a Nevada standard that works best. I would like to turn the testimony over to Assemblywoman Benitez-Thompson.

Assemblywoman Teresa Benitez-Thompson, Washoe County Assembly District No. 27:

I want to thank Assemblywoman Kirkpatrick for inviting me to join in this conversation. I have learned a lot and have enjoyed the process, especially getting to know all of those who care about this issue.

I want to walk you through the guts of this bill, because at its heart is how we define an energy audit and how we define an energy auditor. The consumer protection comes in terms of how we license these people and who can be out in the public presenting themselves and selling services as an energy auditor doing an energy audit.

The first place we started the research was with the U.S. Department of Energy. They do not have a clear standard that sets out how states should define these two things. When I talked with the U.S. Department of Energy and asked where to begin the conversation on acceptable standards and good language, they said to go to the Building Performance Institute (BPI) and the Residential Energy Services Network (RESNET) Home Energy Rating System (HERS) program. Those two are the most widely accepted national programs and put out good information. I contacted both BPI and HERS. We are fortunate to have with us Ms. Tiger Adolf, Western Regional Director for BPI. She put lots of thought into helping us craft this language. We also vetted the language through RESNET and their home energy rating system.

The directions that Assemblywoman Kirkpatrick gave to me were that we want this to be market-driven and we do not want to feed-in to just one system. We do not want to force Nevadans who want to become energy auditors down one path and their dollars to one service. That is what Assemblywoman Kirkpatrick means when she says that we did not just take BPI or RESNET standards and write them into our statutes. What we have is what both considered baseline acceptable standards for who their energy auditor should be and what an energy audit should encompass in terms of scope.

You will see that section 3 defines who an energy auditor is. Section 5 walks you through the training and qualifications required of an energy auditor. Energy auditors need to be certified or accredited from an approved organization, and they need to have at least 40 hours of training and practice in areas like heat transfer, air distribution and leakage, combustion appliance management, building performance, and other details as outlined in section 5.

The scope of an energy audit is covered in section 6. You are going to notice that it is not just a checklist for someone walking through the house, but a qualitative look at that home as a whole, and the systems in that home as a

whole. It includes a visual inspection and diagnostic testing of the home's energy features, air quality, ventilation, U-factor estimation, and base-load energy analysis. This should give the auditor a good idea of what is happening in the home. One of the most important parts of that energy audit, because it is science-based, is translating that into a document that the homeowners can use to make the home more energy efficient and to change their own behaviors to become more energy efficient. That is in section 6, subsection 2, which states that the energy auditor has to prepare a report that is given to the homeowner where they talk about addressing any health and safety issues. The auditor will walk the homeowners through any programs available to them, including financing upgrades for energy efficient measures. The point of the audit is to help with energy efficiency.

We will be happy to answer any questions you might have about who an auditor is and what an auditor does.

Assemblywoman Kirkpatrick:

I would like to enter a conceptual amendment ([Exhibit D](#)) into the record. We have been working directly with the auditors to address some of the specific terms to make sure we are clear on what the auditors are doing.

Acting Chair Atkinson:

Do you want to go over the amendment before questions?

Assemblywoman Kirkpatrick:

No, I think this may answer questions on specific terminology, but we may have to call additional witnesses.

Acting Chair Atkinson:

I need you to clarify section 1, subsection 5. Who is the administrator?

Assemblywoman Benitez-Thompson:

The administrator we are referring to here is Gail J. Anderson, Administrator of the Real Estate Division in the Department of Business and Industry.

Assemblywoman Kirkpatrick:

We worked with the industry on the proper place to license the energy auditor. We have been working with the Real Estate Division. During the interim we discussed with Ms. Anderson whether she could already do it within her purview, but she could not; therefore, these auditors will be licensed the same as any other profession. There will be a professional group of people who will come to your home and do energy audits.

The reason they are there and not with the State Contractors' Board is because they do not necessarily fix a problem, but rather give an evaluation of the problem. The realtors have home inspectors under *Nevada Revised Statutes* (NRS) Chapter 645D, so we felt this was the better place to go and we all agreed to work in that direction.

Acting Chair Atkinson:

That answered one of my questions. I am unclear why the licensing cannot be done within the current purview of the Real Estate Division.

Assemblywoman Kirkpatrick:

I believe it had to do with the definition of the home inspector, but I do not recall. We worked with Legal prior to the regulations being adopted.

This bill is effective upon passage and approval and will get rid of those unworkable regulations.

Acting Chair Atkinson:

It appears we anticipate having more than one auditor. How many will we plan to have?

Assemblywoman Kirkpatrick:

We had American Recovery and Reinvestment Act of 2009 (ARRA) funds to use to stimulate the growth and to create auditors. We still have some of the money and a lot of trained people who have nowhere to go. I am sure that Mr. Randy Soltero of the Sheet Metal Workers Union, Local 88, could tell you that he has about 70 auditors that are ready to go and waiting for some legislation.

Acting Chair Atkinson:

You can use all 70 of Mr. Soltero's workers?

Assemblywoman Kirkpatrick:

I believe that we may use more than that. This is market-driven and not mandated, but I believe that Assemblywoman Benitez-Thompson and I put a quality audit in place so that people will want to get specifics.

**Alison Haugh, representing Nevada Building Performance Professionals,
Las Vegas, Nevada:**

We appreciate having the opportunity to work with Assemblywoman Kirkpatrick and Assemblywoman Benitez-Thompson and the realtors. Per discussions, the placement about the option for an energy audit on the purchase agreement for residential property will benefit Nevada consumers through education about

energy efficiency and opportunities they may not have realized were available. Nevada businesses will also benefit as the audits lead to retrofit work performed by contractors.

Because Nevada Building Performance Professionals (NBPP) promotes high building performance standards, we look forward to having a licensure for energy auditors and the consumer protection that will be a result. As we have discussed in our meetings, NBPP is concerned about the privacy of our clients and understands that the process will be sensitive to keeping any address-specific information from becoming public.

Assemblywoman Bustamante Adams:

My concern, since there is a training program in place using the ARRA funds, is that we ensure there is no conflict with the training lined out in this piece of legislation. Also, it is my understanding that the individuals who have been trained and are waiting would go to the Real Estate Division for actual licensing.

Assemblywoman Benitez-Thompson:

This keeps in line how the majority of folks who present themselves as energy auditors are licensed. Many people have either a BPI certification or a RESNET HERS certification or both. What this would not keep in line are those people who are presenting themselves as energy auditors who do not have the required amount of knowledge or training or field experience required under this language or BPI and RESNET.

Tiger Adolf, Western Regional Director, Building Performance Institute, Cheyenne, Wyoming:

Those people working in the programs you identified are already qualified. They have had the training identified by this bill and would easily be able to step into that licensing application process. The U.S. Department of Energy estimates that 4.5 million workers are needed with certifications to do 1 percent of the homes in any given year. The workforce is substantially undersized to meet energy goals across the country, and Nevada is at the forefront of doing some of this work.

Earlier I heard talk about renewable energy. We have a saying in the home performance industry that you should do your energy efficiency vegetables first and your renewable desserts later. This particularly lines up with laying out that opportunity for homeowners to do the work in the right order and obtain the right loading order as they do the work to size down those new installations and achieve the maximum benefit, both from energy efficiency and from the renewables. The standard laid out here is something that I cannot advocate for as my position with BPI, but we fully support the intent of this legislation and

we like the concept of laying a good foundation for a very robust home performance industry in Nevada moving forward.

Assemblywoman Bustamante Adams:

Thank you for the clarification. Several of my constituents have participated in those training programs, and I would hate to see that their efforts would not be recognized.

Would these auditors be independent contractors? Also, I want to make sure that the cost charged to the auditor is not prohibitive.

Tiger Adolf:

Most of the contractors who do this work will be independent business owners. They will be independent contractors, but there are two business models that are prominent in the industry. One is the consultant model, where they go in and do the evaluation, prepare a work scope for the homeowner, and other contractors may complete that work. The other is a one-stop shop where they "own" the job. This is much better for the contractors' bottom line. They can do the evaluation, and the installations that the homeowner chooses in line with those recommendations, and do quality assurance inspections on the back end subject to the rules of the local jurisdiction. Or, if they are BPI-accredited contractors, they also get quality assurance from us.

Assemblywoman Kirkpatrick:

I just want to clarify for the record that Nevada did take the policy position that we would like to keep an arm's length between the one-stop shops. We believe the auditors will serve their own purpose and that contractors should be separate for the benefit of the consumer for the long term. Nevada is on the forefront; however, we are concerned. We do not let realtors or escrows do that within our state, and we are consistent with our policy in the best interest of the consumer.

Alison Haugh:

As far as the cost issue, in the amendments we did lend for energy assessment or a lesser energy audit. Consumers can then choose the services they want; they do not have to do a full audit that may cost more money.

Assemblyman Hickey:

Related to certifying these auditors and raising them to the level of an inspector, does that allow real estate transactions for the cost of those audits to be negotiated or shared between buyers and sellers? I am wondering about concerns you have mentioned about whether there is buy-in from the realtors. I know in neighborhoods where there are older homes there have been concerns

about the audits. Not having the newer features of newer homes, the older homes were hit especially hard in some real estate transactions.

Assemblywoman Benitez-Thompson:

You are correct. I live in a house built in 1968. It had the original sliding glass door. I thought that if I put my house through this audit and I was required to make all of the necessary upgrades, it would be cost prohibitive for people like me.

Jenny Reese, representing Nevada Association of Realtors:

When a buyer chooses to get an inspection done, such as an energy audit, the buyer would typically pay for that audit, but it is always negotiable in a real estate transaction.

Assemblywoman Bustamante Adams:

I appreciate the collaborative efforts of bringing all of the stakeholders together. I know that my constituents have been waiting very patiently for this to come forth because we have trained a lot of people and have not been able to take the next step.

Chair Atkinson:

Are there any further questions? Is there any additional testimony?

Tiger Adolf:

I have submitted written testimony ([Exhibit E](#)) to be included in the record. The Building Performance Institute (BPI) supports this. Our role in energy efficiency programs across the nation is one of support, and we are in support of Nevada in any way possible. We have 242 affiliates available across the country. Three of those are headquartered in Nevada already, and we have the infrastructure in place to move this forward as fast as Nevada wants to move.

Jenny Reese:

The realtors are in full support of A.B. 432 and the amendment.

Alison Haugh:

We want to express our concern about the cost-prohibitive nature of the amended amount. Originally the fee for issuance or renewal of a certificate or license was \$250, but with the amendment the fee increased to \$500. Many of us have not had a lot of work, and the fee would be a large burden for us.

Chair Atkinson:

Are you in favor of the bill?

Alison Haugh:

Yes, I am in favor of the bill but concerned about the \$500 licensure fee.

Randy Soltero, representing Sheet Metal Workers Union Local 88:

We are in full support of A.B. 432. As Assemblywoman Benitez-Thompson and Assemblywoman Kirkpatrick talked about earlier, we have been engaged in a training program. Our apprenticeship program has been up and running for some time. We have over 70 people who have received their certificates through both BPI and RESNET, although we are concentrating on the BPI program now. We are developing a nationwide program because we feel that this is part of the future of the energy industry. These energy audits will be a big part of what is going on. This is huge, and Nevada is on the forefront. We are developing the nationwide program through our apprenticeship. It is a two-year program that will go into a lot of the commercial and residential work. Our apprenticeship program has applied to the Nevada Office of the Labor Commissioner State's Apprenticeship Council to have that program approved. We are in full support. We know this will create jobs and put people to work. That being a bipartisan issue in this Legislature, we look forward to being able to put people to work.

Assemblywoman Bustamante Adams:

Mr. Soltero, my question is regarding people who have gone through the training. Some of the programs involved individuals who were retrained and they have been out of work. Do you have a view on the cost of the potential licensing? Would it be a barrier for the individuals in your program?

Randy Soltero:

We are working with a company that does energy audits; it hires unlicensed individuals and then pays for the license fee. I do not think the fee is prohibitive. It is difficult to get the certification and requires a big investment of time and energy by the individual. I would invite you to come by the apprenticeship school in Las Vegas to see what they are doing. Our program far exceeds the 40-hour requirements in this bill. We want to make sure that people are trained at the best level and are given the opportunity to maintain their job or start their own company. We currently have two people who are looking into starting their own energy audit company. I think that you make a huge commitment to do something like this and the licensure fees are part of it.

Judy Stokey, representing NV Energy:

We are in support of A.B. 432 and I have been authorized by Southwest Gas Corporation to say they are in support of the bill. I appreciate Assemblywoman Kirkpatrick and Assemblywoman Benitez-Thompson including us in their discussions of this bill.

Kyle Davis, representing Nevada Conservation League:

We are in support of this legislation. We have been working with Assemblywoman Kirkpatrick and stakeholders in this area, trying to put together an energy audit that makes sense and will actually evaluate the energy performance of the home. As this Subcommittee is aware, energy efficiency is a key part of reducing our energy demands and, therefore, reducing the pollution that goes into our atmosphere. We are pleased to see that we have a bill that everyone supports and that we think can move us forward in trying to get the number of residences and buildings in this state that could definitely use energy evaluation. Hopefully, we can take some steps to reduce the energy consumption in these buildings.

Randell Hynes, representing Nevada Solar Authority, Ltd.:

Before we started Nevada Solar Authority, Ltd., last year, we were inspired by Senate Bill No. 152 of the 75th Session, the green jobs initiative, sponsored by Senator Steven A. Horsford. We started a group called Solar Forces in Las Vegas. We instructed about 1,500 unemployed construction workers to do solar photovoltaic (PV) installations. A majority of those individuals were very interested in energy efficiency audits. Whenever we came to the point in the instruction where we talked about energy efficiency, we would go through the process of explaining all of the responsibilities of an energy auditor. We would tell them that if they wanted to go through the training and get licenses, they could then be called certified energy auditors.

We are in support of the licensing procedures addressed in A.B. 432. The trainees asked about the actual process and what they had to do to become licensed. Presently, you can say you are an energy auditor by obtaining a consulting license from the city or county. There are currently no requirements to establish you as a licensed energy auditor other than getting the consultant license. This bill solves that problem of keeping the honest people honest.

Tom Clark, representing OPower:

We support any and all efforts that add up to contribution and efficiency.

Acting Chair Atkinson:

Is there any further testimony in support of A.B. 432? [There was none.]
Is there any opposition to A.B. 432? [There was none.] Is there any neutral testimony for A.B. 432?

Stacey Crowley, Director, Office of Energy, and Acting Commissioner, Nevada Renewable Energy and Energy Efficiency Authority, Office of the Governor:

I would like to thank Assemblywomen Kirkpatrick and Benitez-Thompson for including us in their discussions. As you are aware, A.B. 432 essentially moves the energy audit function out of our office and into the Real Estate Division. We are supportive of the conceptual amendments put forth today. Through discussions, we will offer the best educational information we can on our website and a link to whatever information is created so there will not be confusion about the energy audit location.

Acting Chair Atkinson:

Assemblywoman Kirkpatrick, there was no opposition to the bill, but you are welcome to refute any testimony heard earlier.

Assemblywoman Kirkpatrick:

I just want to clarify a few things. We have been working on the cost issue for a little over a week and I think there will be more conversation on it. The policy is the most important part for Nevada consumers for the long term. As far as the cost, initially we talked about 25 auditors coming in at once. We hope we have quite a few, but we have to at least provide for an initial person within the Real Estate Division, and the license fee is for two years. In my opinion, based on the policy we talked about today, the auditors are more experienced, scientific, and knowledgeable about energy than our home inspectors. I just want to put on the record that we will continue those discussions, but we have to be able to pay for putting the positions in place to handle the influx of applications.

I spoke with the Real Estate Division, and we want to work with Mr. Soltero to make sure, if his folks already have a certificate, that we streamline the process for them so that we can get some Nevadans back to work right away.

I appreciate your indulgence, and we hope we have addressed every issue that we failed to address in 2007.

Acting Chair Atkinson:

There being no further questions, we will close the hearing on A.B. 432.

[Assemblywoman Kirkpatrick reassumed the Chair.]

Chair Kirkpatrick:

We will open the hearing on A.B. 416.

Assembly Bill 416: Revises provisions governing certain programs for renewable energy. (BDR 58-849)

Assemblyman David P. Bobzien, Washoe County Assembly District No. 24:

Thank you for the opportunity to present A.B. 416. I have some brief opening remarks and then will turn the testimony over to Mr. Kyle Davis from the Nevada Conservation League who will walk us through the bill.

It is important to note that we have a significant amendment to this bill (Exhibit F) which will be referred to as proposed Amendment 5965.

As someone who has worked on these incentive programs for two sessions and who authored the wind power incentives in 2007, I have an interest in watching these programs develop, go forward, become more effective, and do their part to generate the industry that we all hope to have thriving and growing in Nevada.

Specifically, what this bill does is attempt to put together a performance-based incentive for how we do our incentives programs. The operational concept is that we should be giving incentives to projects that are generating kilowatts most effectively. We should be rewarding those projects that are designed well, cited well, and giving the ratepayers who support these programs the most bang for the buck.

Kyle Davis, representing Nevada Conservation League:

Before I go through the bill, I want to give you an idea of the process and how we got to this point. Our goal in this entire process was to improve the current program. We wanted to work within the confines of the program we currently have with the solar generations and the wind generations and make it work better. This has been a collaborative process. We worked with renewable energy developers and with people in the environmental community and tried to be receptive to differing opinions and thoughts on the best way to go about this.

Essentially our goal was to get more renewable energy to more customers for the same cost to the ratepayers. We are trying to make these dollars work more efficiently to install more energy for the actual cost that will be on the ratepayer's bill. We are also looking for stability, to allow the market to grow in a sustainable fashion and to get away from the starts and stops in the current program, so that we can have sustained growth of the renewable energy sector and allow for these jobs to be created, and to continue. We do not want to have a situation where companies are hiring people and then laying them off. The idea is that we are looking for a program where the renewable energy

program rate, which I might refer to as the “reaper” as I go through the bill, will be lower than it currently is. The goal is to lower customers’ utility bills. I would like to quickly go through the bill and Amendment 5965 ([Exhibit F](#)) and try to explain what we are going to do.

Section 1: This section deletes the concept of a program year. The reason for that is we are trying to set it up to have a sustained program, so we would not have the start and stop that is common to the concept of a program year. Instead we want to set up a different system that I will explain as we get further into the bill.

Section 2: You can see that we made the change in this section to stay with the 501(c)(3) nonprofit organization, which we felt was best at this time. We also set up four different categories where these incentives would be placed. Currently we have four categories, which are (1) residential, (2) small business, (3) school property, and (4) public property. We still have four program areas, which would be (1) residential, (2) commercial, (3) public buildings, and (4) persons who for compensation own or operate individual systems which use renewable energy to generate electricity and sell the electricity generated from those systems. This is essentially a leasing program where these companies come in and install the system on the premises of the customer-generator, but the company owns the system. We wanted to create a category that allows for this to happen because it is a significant opportunity for people who may not have the funding available up front to purchase these systems. This type of process would allow customers to participate and have renewable energy systems in their homes or businesses without having to buy the systems up front. What we do in this legislation is leave it to the Public Utilities Commission (PUC) of Nevada to allocate how much is going to go in each one of those four categories. We feel they will be able to properly account for the demand that may be occurring in one category versus the other.

Section 4: This section is setting up the concept of a performance-based incentive. What we are trying to do is pay for the actual performance of the system. We are trying to reward good system design and to ensure that ratepayers are paying only for energy actually produced. Under the current system we provide rebates on the nameplate capacity of a system. If a system says that it produces 5 kilowatts, then we give a rebate that anticipates that output, although that may not be the case based on where it may be installed, whether there are shade factors, or other reasons. This makes sure that the ratepayers are paying only for power that is produced from the system.

What we currently have is a system of up-front rebates where you receive a lump sum payment from the utility when you install your system. This is based

on a price per watt. What we are proposing to do here is to pay for the performance. You would pay a certain price per kilowatt that is produced from the system. This would be spread over a longer term and would be put forth with a contract between the customer-generator and the utility.

Chair Kirkpatrick:

Is there a cap? What happens if some of these great technology pieces perform higher than anticipated? You said it best, that the ratepayer is paying for this, so is there a cap so that you cannot go over a certain amount? Is there a cap on the length of the contract? I want to make sure that the interest of the consumer is protected.

Kyle Davis:

With reference to the cap, with the current technology we are rebating as if the technology was working perfectly. Under this system you are likely going to be seeing less than what we are currently paying when you look at it holistically, because that system is not going to produce at maximum capacity. In that sense, you are likely not going to see impacts beyond what we are currently rebating on.

The contracts in section 3 would be for a specific period of time, so the utility would not be paying in perpetuity for the performance of the system. Most likely the time period would be set at the PUC. At the end of that term they would both have the option to renegotiate.

Chair Kirkpatrick:

So we are putting this back on the PUC? This seems very administrative for the PUC with what we are asking of them, and they might require additional staff. Has that been a discussion?

Kyle Davis:

I certainly do not want to speak for them. The idea, our goal, was that this would not be too much of a change from the way we are currently doing things. We are trying to work with the PUC.

Hopefully, I have explained the concept of how the performance-based incentive will work. If not, I am sure there will be speakers following us who will do a better job of explaining than I have done.

The PUC would be the one responsible for setting the amount for those performance-based incentives, similar to the way they currently set the amount of the up-front rebates. They would review the incentives for participation no less frequently than annually.

Section 5: This section is where we set forth our goal. The goal would be for us to have 400 megawatts of solar energy systems installed before January 1, 2020. That is the goal the PUC would use when setting the rulemaking on this to design incentives to get us to that point in the budget that we have outlined. The ratepayer must also be a customer of the utility.

Section 6: Subsection 7 is to allow applicants to get an extension if something comes up and they are not able to install. Currently we require them to install within 12 months, but we would allow extensions if they apply for them. The idea is that we are getting people who apply for an incentive, but when they decide not to do it, they never let anyone know. If they are still seriously working on the installation, they would probably apply for the extension.

Section 7: We have tried to simplify this language to provide for a budget so that between January 1, 2012, and December 31, 2020, the installation would not exceed \$360 million. When we came up with this number, we were trying to balance between what was the status quo of funding available for these programs while looking at the annual revenues of the utilities.

Chair Kirkpatrick:

We spent a lot of time with the PUC trying to clarify whether that was per entity, per utility, per company, per customer, et cetera. We need to be very clear.

Kyle Davis:

We are talking about statewide. We are talking about both the southern and the northern Nevada utilities. This budget would apply to both of them.

Section 8: The provision in subsection 3 was to tighten up the issues around public works to make sure that when these projects are being done on public buildings, they are indeed public works projects.

Assemblyman Bobzien:

I wanted to highlight this section since it is a big policy change. Those of us who have been legislating in this area for a while have heard complaints many times regarding who is the enforcing authority. I think this solution in subsection 3 will put it to bed once and for all. If you are going to apply in a public class, have your public works bid number.

Kyle Davis:

Section 10: We have been discussing the solar program, but this section gets into the wind program. Solar energy typically is consistent from home-to-home and business-to-business; however, because of variables in the wind program we have put in machine attributes and wind resource standards to ensure that installers are installing wind turbines in an area where there actually is wind.

Much of the wind section is mirrored in the solar section. We are trying to make them go together and operate in the same fashion. You will see the same four categories that you can apply for wind. The goal here is for 100-megawatts of wind by December 31, 2020, and this is to apply statewide. We intend that this will be the same type of performance-based incentive.

Section 11: You will see the same language about the extension provision that I mentioned in the solar section.

Section 12: This contains the budget. For wind we are looking at \$90 million, or one-quarter of the amount that we have put in for the solar program. To be clear, this was intended to be applied statewide to both northern and southern Nevada utilities.

Chair Kirkpatrick:

To further clarify, that is \$360 million plus an additional \$90 million.

Kyle Davis:

That is correct. The \$90 million is approximately what is in the program now, so we are looking to continue with a little growth.

Section 13: In this section you will see the same issue with the public works that Assemblyman Bobzien just addressed but specifically for the wind program.

Section 14: The water power energy demonstration program is deleted in this bill. Our purpose is not to get rid of the water power incentive program. We think it is important and would like it to continue; however, under current statute that program expires in July 2011. In terms of working with the Legislative Counsel Bureau Legal Division in the drafting, they thought that since it expires when this bill takes effect, it needs to be taken out in this section. We intend to address the water power system in another bill.

Section 15: This deals with the customer-generator's premises. We want to establish that customers can install something on their property that is contiguous to their current property. This will allow for them to install where

the resource is best. This is more important for wind than solar but can certainly be important for both technologies.

Section 15, subsection 2(b): We changed it from 150 percent of "the peak demand of the customer" to 120 percent of "the customer's anticipated annual consumption of electricity." The reason for this was to try to get at an estimate that better syncs up with the actual energy use of the customer. One hundred fifty percent of the peak demand of the customer would be turning on everything in the house that uses electricity to get a peak demand and then oversize the system. We do not want to do that. We want these systems to be sized to offset the demand of the customer but not to try to generate more electricity. We feel that 120 percent of the anticipated annual consumption of electricity will give us an estimate where the building systems are appropriately sized to offset the customer's generation and also allow for any level of growth that may happen in that residence in the near future.

Section 17: This addresses an issue that we face in some of our rural counties. Currently it requires a building permit from a local government. In some of our rural counties we do not have building departments. What we are trying to do is provide another avenue of compliance, so if that is not possible, you can also get the signature stamp of a professional engineer to meet that requirement. It would still be subject to the regulatory bodies that you see in paragraphs (a), (b), and (c).

Chair Kirkpatrick:

Section 17 reads, "A customer-generator must obtain a building permit issued by a local government or provide proof" Who are they providing the proof to?

Kyle Davis:

Proof must be provided to the utility.

Section 18: Regarding subsection 2(c)(2), you will not see anything for this in our amendment. I know there will be people coming up after us who want to talk about that specific section. We intended to have something in the amendment, but there was confusion as to what we were trying to do.

Subsection 5 provides more information for the customers so they can get a better idea of how their system is performing and whether it is actually offsetting their load.

Section 23: This was a placeholder, along the concept of a bridge, until the new program could come into place. The language we put in the original bill did

not seem to work, so we took it out. We are still trying to find a way to put a bridge in place that will allow for program continuity until rulemaking is done on a new program.

That is everything in the amendment. I will gladly take questions. What we have tried to do with this bill is work within the confines of the current system to try to make the ratepayer dollar stretch further and install more systems. That is what we are trying to do with a performance-based incentive and to try and outline for the Subcommittee the design on how we would expect a performance-based incentive to work. This would be a step-down process where the PUC would authorize levels for the payment of the incentive; these would step down over time so that eventually we would get the solar and wind energy to the point they could be installed without incentive. That is the goal.

The Legislature has worked to try to improve this program, expand the capacity, and grow the market to where we now have a thriving renewable energy industry in this state. As a result Nevada, along with other states and international developments, is driving down the cost of these systems. If we continue to keep this commitment to building this industry in Nevada we will continue to create jobs, enjoy the environmental benefits that come from getting more of our energy from renewable sources, and continue to drive down the price of these systems to the point where they are very competitive. We would hope to be able to do this without incentives in the future. We hope for the Subcommittee's support.

Assemblywoman Bustamante Adams:

I wanted to make sure that I understood the extensions an applicant can have. It is my understanding that you can install within 12 months and the increments for the extension is based on a yearly process. Is that correct?

Kyle Davis:

The idea is that the customer would be able to apply for two separate extensions, each lasting six months. If they applied for two extensions, they would be able to delay for a year.

Chair Kirkpatrick:

Why do they give extensions? Give the incentive to someone who is ready to go, and then they can get back in line. What is the thought process behind allowing extensions?

Kyle Davis:

The idea is that there are, in some cases, legitimate reasons why they were not able to install. For instance, maybe they had a deal with an installer that fell

through but the customer still wants to install. We felt that we should have a provision where they would be able to get some kind of extension. In talking with people in the industry and with regulators, most likely the people who do not end up installing get approved, do not install, and never let anyone know. If we require them to come back to the utility and request an extension, it would do an effective job of weeding some of those people out.

Assemblyman Bobzien:

I think one of the big scenarios contemplated is one that we deal with here in the north—the weather. Snowstorms come and projects get moved around and the developer might have legitimate scheduling conflicts. There is the full intent to move forward but they need extra time. For the people who are too busy to care or cannot be bothered to let anyone know, then we should move on to someone else who is interested. For those who do have legitimate reasons, we should provide the extension.

Chair Kirkpatrick:

To defend my position on this, in Assembly Bill No. 522 of the 75th Session the developers can only come before us 18 months ahead of time. They need to have all of their ducks in a row and be ready to go or they do not get the sales tax exempted. We have a tight window to be serious and not be speculators, but here we are giving somebody who is not going to do the same scheme of project twice as much time. We can have this discussion later, but I want you to think about that.

Assemblyman Bobzien, you have many people signed in to testify in support of the bill, but do you know if they are also in support of the amendment?

Assemblyman Bobzien:

This amendment ([Exhibit F](#)) is the result of a long process of talking with a number of different interests. Predominantly, you will hear from Luke Busby on wind energy, Chad Dickason representing Hamilton Solar, and the representative for Solar Alliance. These people were the primary parties at the table. I think this is a true negotiation. I would not say that any of those parties is happy with everything, but this is close, and everyone is still committed to working together. You will probably hear from other interests who have similar perspectives.

Chair Kirkpatrick:

We are going to call those who are in favor of Amendment 5965.

Kyle Davis:

I realized in going through the bill and acting as facilitator I neglected to put my organization's position on the record. I wanted to make it clear to the Subcommittee that the Nevada Conservation League is in full support of this bill. This bill is one of our four priorities for this session to move towards a performance-based incentive.

Warren B. Hardy II, representing Hamilton Solar:

I have with me Chad Dickason of Hamilton Solar and we want to go on record in complete support of the amendment. We do not have additional amendments. We do have issues on which we are still working, but we are not prepared to offer amendments today. Mr. Dickason will provide an overview of the issues still outstanding. We think that Amendment 5965 does represent a great start and the culmination of much work on this. We appreciate the efforts of Assemblyman Bobzien and the efforts of the Subcommittee.

Luke Busby, representing Clean Energy Center, LLC:

We want to express strong support for Amendment 5965. We think it provides a great solution to the major problems associated with the wind and solar programs and provides a clear and effective path for moving those programs forward. It provides for a performance-based incentive, as you have heard, which is the best deal for ratepayers. It is a "pay for the energy you produce" program, not a "pay for what you install" program. It incentivizes the right conduct, which is better and more efficient systems. It does the best job with balancing the needs of ratepayers and of the burgeoning distributed generation industry in Nevada. The benefit of the program staying in Nevada is that the installation jobs and the kilowatts put into the system stay here. It gives the PUC of Nevada the tools to specifically tailor the variables of the programs to best suit implementation of distributed generation and to mitigate impact on ratepayers. It provides a cost cap for both programs so that the potential rate impact is controlled. It contains provisions that require machine attribute and wind resource standards to protect consumers from unscrupulous developers, such as installers of wind systems where there is no wind.

The state has already made a significant investment in this industry, and this bill helps it move forward in the right direction. The net metering provisions of the bill clarify an outstanding issue as to the definition of premises. If you own contiguous parcels that you use to build the system, this provision is helpful because it states that you can build a system on either parcel. It provides a broad definition of contiguous, so if there is a road running through your property, it does not matter if you build a system on either side of the road, as it would today. This provision would be especially helpful for agricultural interests or larger customers who desire to build these systems, such as

universities, cities and towns, or corporations with large campuses divided into several parcels. You will, no doubt, hear that net metering in Nevada constitutes a subsidy. While this is the case, we believe that the benefits of net metering—i.e. the jobs, fuel hedge, operations and maintenance savings, deferred capacity benefits—likely justify these overall costs.

We look forward to discussion as to the specific rate impacts of each of the proposals put forward to modify the net metering statute, and possible measures to mitigate those rate impacts, so the Legislature can accurately assess the actual rate impact of any subsidy associated with net metering, along with the benefits of the program on ratepayers and on the state in general.

Chair Kirkpatrick:

Are there any questions? [There were none.]

Gregory Price, Regional Director, Northern Power Systems, Portland, Oregon:

As a global leader in wind turbine manufacturing and the oldest wind turbine manufacturing company in the United States, we have had the privilege of seeing programs through the state and through the utility across the country. Unfortunately, we have seen poor quality technology, poor sites, and installations that compromise state and utility programs as well as give our industry a black eye. Wind technology is significantly different than solar technology in that there is a wide range of difference in performance and safety from one wind turbine to the next. Fortunately, performance-based incentives support credible technology tested to industry standards and at the same time give the most value to ratepayers. Northern Power Systems and the Distributive Wind Energy Association are in full support of the proposed Amendment 5965 as well as A.B. 416.

Chair Kirkpatrick:

Are there any questions? [There were none.]

Rose McKinney-James, representing the Solar Alliance:

The measurements before you reflect the position that the Solar Alliance has taken throughout this discussion around the identification of an incentive that will make sense in terms of the attempt to balance the interest of all parties, and the ratepayer in particular, because this body has been very sensitive to those impacts. We brought forth the notion of a performance-based incentive with the understanding that we could spread those costs over a period of time in an effort to mitigate some of the implications for ratepayers. We believe that is an effort that will increase the overall cost-effectiveness of these programs.

I would like to go back to an observation that Mr. Davis made. The efforts that you see in the variety of bills that are before you are really focused on establishing long-term sustainability for industry that we believe is directly connected to an economic opportunity that Nevada has in a very unique way. There are a variety of mechanisms out there that are being used in states. Many states are adapting performance-based incentives. Other measures have other mechanisms, but if we stay focused on the goal of having a healthy, sustained industry, particularly around distributive generation, with the notion of this industry reaching a point where it is self-sufficient, I think you can appreciate why we support the provisions of A.B. 416 and why we were happy to be a part of those discussions. Assemblyman Bobzien reached out, and we were happy to be at the table because this bill reflects two of our significant priorities. We appreciate the fact that he was willing to do that. I am speaking only to the solar provisions.

I believe that as we figure out what the next steps are going to be, we will have to come to terms with the details. Many of the details are set forth in this bill and reflected in other measures. We will probably have to circle back and figure out exactly what the public policy signals will be, and that is what, unfortunately, is on your side of the aisle versus ours. We want to be available to provide you with as much information and detail as we can based on the experience that the industry has, and has had, in the West and across the country, in terms of advancing distributive generation.

Chair Kirkpatrick:

Are there any questions? [There were none.]

Tom Price, Chief Executive, CleanPath Renewables Development, Reno, Nevada:

We are a developer of renewable energy systems here in the state. Recently, Nevada Solar Works LLC, a partnership between Q&D Construction, CleanPath Renewables, and Alternative Energy Solutions, won a contract to build a 1.3-megawatt third-party financed power purchase renewable project for the City of Reno. Colleagues of mine also financed, developed, and built the 14-megawatt array at Nellis Air Force Base in 2007.

In support of A.B. 416, I wanted to highlight one of the provisions and the reasons behind it, specifically, the need that arose during the development of the City of Reno project. In Section 17, regarding the 120 percent of use versus 150 percent of demand, the challenge with hub demand is calculated as in any 15-minute time period during the course of a month, the number of kilowatt-hours you use can determine the rate class you are in. That, in turn,

places an upper limit on the amount of kilowatts that you can install at a particular facility.

The City of Reno managed the use of their wastewater treatment plant to keep their use even throughout the day and the year. Unfortunately, that even use ended up putting them into a rate class that had an upper limit on its size that did not equal their use. That raised the other issue which Mr. Davis spoke to. He said there was a change that was supposed to have been included in this, and it was not. If appropriate, I will highlight that for you.

Chair Kirkpatrick:

There seem to be many testifiers who have problems with portions of this amendment. To expedite, I would prefer that you came back at neutral and present your concerns at that time.

Tom Price:

Yes, I can do that.

Chair Kirkpatrick:

Thank you. Would the next speaker please come forward?

Marnee Benson, Deputy Director, Black Rock Solar, Reno, Nevada:

We are a nonprofit solar installer here in Nevada since 2007. We do projects that otherwise would not be done for organizations with little or no ability to pay up-front costs, such as the Food Bank of Northern Nevada, the Children's Cabinet, and the Pyramid Lake Paiute Tribe Medical Clinic. We support the amendment to A.B. 416. We think it represents a significant improvement over the current system and provides stability and an incentive program for the Nevada solar industry. Our only concern is the need for smaller businesses to obtain credit financing. We would like to make sure to provide for a successful transition from capacity-based incentives to performance-based incentives so we can help protect our homegrown solar companies.

Chair Kirkpatrick:

We want to protect the ones that have invested in Nevada long before all of this came about. Are there any questions? [There were none.]

Jeff Wiggins, Vice President, Solpower Solar Energy/Millennium Development Corporation, Inc., Reno, Nevada:

I am in support of the amendment to A.B. 416. I believe that some carve-outs need to be addressed for the interim basis until we can find some financing mechanisms. Ultimately, we are trying to find consistency on a 365-day schedule for all of our installers and the people within the state. We need to

have continued growth in the state, and we need to find a cost-effective program. I think this bill is addressing those specific issues.

You asked a question in regards to kilowatt-hour production against the kilowatt-hour for the performance-based incentive. Was your question answered on how that works with the technologies?

Chair Kirkpatrick:

I would like you to submit that information to me in hard copy.

Jeff Wiggins:

I will be happy to submit a hard copy.

Grace Townsend-Caldwell, President, Independent Power Corporation, Reno, Nevada:

Over the past 14 years our company has designed and installed several hundred solar systems throughout the state. I am in support of the amendment to A.B. 416. The solar generations program, as it stands, has helped us grow tremendously, and the size of our company has quadrupled over the years. It has been very helpful for hundreds of homeowners. I would echo the testimony heard earlier.

The only thing I would say specifically is that a carve-out for very small systems, such as residential systems, would be very helpful to keep the capacity-based payments up front. I think that would be much more beneficial to the ratepayer. The homeowners have a fixed amount of money they can use. If they get that additional incentive money paid out over years, that money will not go into putting in additional solar. Perhaps some kind of transition period would also be beneficial.

Chair Kirkpatrick:

Is there any more testimony for support of the amendment to A.B. 416 as written?

Annie Carmichael, Government Affairs Manager, SunEdison, Denver, Colorado:

SunEdison is a global solar service provider. I am here to stand in complete support of the bill. I thank Assemblyman Bobzien for taking so much time to engage with stakeholders in this process. We think this bill represents the best practices in a solar incentive program drawing from experience from utilities across the West.

Marion Barritt, Private Citizen, Gardnerville, Nevada:

I have the first net metered house in the state of Nevada. In 1997 I helped work on renewable portfolio standards, and also the net metering bill, and built the first house to use net metering. I get credits that the utility company buys from me every year.

Section 4, subsection 1(a) of the bill says that "the amount of the incentive must be paid over time." I agree with an earlier speaker that in the case of people like me, who have small residential installations, it would have been a benefit at the time to have the money up front. Maybe this section can be modified.

Chair Kirkpatrick:

Is there anyone else to testify in support or neutral on the bill?

Chad Dickason, representing Hamilton Solar:

Last year, when we started the process of meeting with the other constituent groups and looking at the impact of the program as it is right now, our primary goals from the Nevada perspective were to develop a program that was 365 days a year, consistent, and cost-effective. We are supportive of the text in the bill, but there have been some issues that Mr. Kyle Davis alluded to that we want to highlight from a Nevada installer standpoint. That is what we would call a bridge and a mechanism for a potential carve-out for some of the smaller systems. We do not want to hold the bill up for this, but we would like to continue to explore different language options. If we can come up with something, perhaps we can introduce it some time in the future.

From Hamilton Solar's perspective, the key is that we are currently the largest solar installer in northern Nevada to focus on distributive generation. We have about 40 employees. The transition period over the next year is very important because the contracts we have all expire around September. We are worried about being able to maintain our workforce until next year, when the program is launched again. We would like to continue to work on that in the future, but we are supportive of the bill as written.

Chair Kirkpatrick:

To clarify, that is the financing piece where having the money up front is beneficial to the smaller companies.

Chad Dickason:

That is correct. There are a couple of things that we have looked at with that, and we have rolled the transition and the carve-out together in the same discussion. We are looking for a vehicle to create an in-state financing outreach

to assist the local installers. If the performance incentive goes through, it will be more challenging for the small local installers to obtain the financing programs. We are looking for a vehicle that would be able to provide that. It is easier for the small local installers to have that incentive for residential systems or perhaps small commercial. We do not want to tie the hands of the PUC on that, but we are also looking for something that allows us to continue working between now and when the provisions are rolled in next year.

Chair Kirkpatrick:

Thank you. Let us turn to southern Nevada for testimony.

Scott Hansen, Public Works Director, City of Boulder City:

Boulder City, Nevada, is neutral on A.B. 416. The City of Boulder City owns over 8,000 acres of land that is zoned for solar development. The City is unable to sell land to developers due to charter restrictions; therefore, we enter into long-term leases with developers to build utility-scale solar projects. The amendment we submitted ([Exhibit G](#)) on this bill was to make sure that *Nevada Revised Statutes* (NRS) Chapter 338, the public works chapter, did not apply to these large-scale utility projects that were built by private developers. The amendment as discussed here today addresses our single concern.

Chair Kirkpatrick:

On the large-scale utility projects, do you get credits from the utility to install your projects? I thought you would fall under existing statutes. I am confused where Boulder City fits into this particular piece of legislation.

Scott Hansen:

As the amendment was read here today, I do not believe we fit into this piece of legislation. In the original bill draft, we were concerned that the large-scale utility projects might fall under NRS Chapter 338.

Chair Kirkpatrick:

Thank you for clarifying. Is there further neutral testimony in southern Nevada?

**Daniel Jacobsen, Technical Staff Manager, Bureau of Consumer Protection,
Office of the Attorney General:**

We have signed up as neutral on this bill. There are many aspects to this bill, and some of them may be helpful to consumers. We want to express concern about the fact that this bill would significantly increase the caps on the incentive amounts that ratepayers are going to fund. Moving from where we are to \$369 for solar and \$99 for wind is a significant increase. If you compare the per year funding level now based on the per year amount that funding would move to, it is almost double.

There is a frustrating problem in Nevada because the demand for energy is not growing. If you look at NV Energy's financial reports year-by-year, the demand for energy declined. There was a lot of discussion about avoided cost. When the customers do not use NV Energy's facilities because of either efficiency programs or renewables, the cost of energy purchases is avoided, but all of the other fixed costs are not avoided. Customers have to pay for those fixed costs whether they use them or not. Our concern is that if you increase this significantly, it will add to more of the output pressures on consumer rates.

Please do not interpret our comments as saying we are opposed to renewables or opposed to efficiency programs. We are not opposed, but we ask you to be cautious about raising the amount that ratepayers have to bear, particularly during this difficult time when costs are not avoided.

Randell Hynes, representing Nevada Solar Authority, Ltd.:

I am in support of the goals of A.B. 416. The only recommendations I might make are in section 4 and how to establish the program. We have a system of full energy credits that allows us to participate and compete for the portfolio energy credits that are available by the renewable portfolio standard (RPS). Generally, with the 15 percent requirements for the RPS, there is a pool of about 3.2 billion portfolio energy credits that would be available. We would like to be able to compete for those. I have discussed suggested amendments to find a place in the home of A.B. 416. If we are able to do that and compete for those portfolio energy credits, we do not want to have to compete with systems outside the state.

During the last session, the definition of renewable energy systems was changed, and we would have to compete for those portfolio energy credits with systems outside of the state. I do not think that is fair to spend our money to buy those credits outside the state when we should keep them here to build new renewable energy systems.

Rebecca Wagner, Commissioner, Public Utilities Commission of Nevada:

I am not speaking on behalf of the full Public Utilities Commission (PUC) or the PUC staff. I wanted to weigh in because we are the ones who have to implement the program. I think A.B. 416 and performance-based incentives are a step in the right direction to maximize ratepayer dollars to achieve the public policy goals that you set forward. I am concerned about the cost and some of the overall targets, but I think this is the best way to start adding this program. We need guidance. During the interim when we have to implement these programs, the testimony you hear often changes when they get to the PUC. As a result we have incentives that are set too high. I would like to work with the bill sponsor and the other supporters of the bill to come up with something

workable. We want to have the legislative intent and goals publicly stated so that the PUC can get it right.

Stacey Crowley, Director, Office of Energy and Acting Commissioner, Nevada Renewable Energy and Energy Efficiency Authority, Office of the Governor:

I echo the comments made by Ms. Rebecca Wagner. I am supportive of all of the collaboration that has gone into this bill and the language that has been developed. We are supportive of revising the existing rate of incentive programs to be more stable. I think, as others have expressed, the concern of the bridge, and what happens between the programs, also goes to supporting the PUC while those regulations are being developed and making that process as efficient and effective as possible.

In section 8, subsection 1, and section 13, subsection 3, there needs to be a clarification of language regarding a public work.

Chair Kirkpatrick:

Thank you. I will have that clarified.

Tom Price, Chief Executive, CleanPath Renewables Development, Reno, Nevada:

To highlight the intended but as yet unmade change Mr. Kyle Davis talked about, it relates to net metering getting proper credit. Currently under NV Energy rules, for most customers, if you have a solar system on your business and you produce energy in the summer, you can use that against your demand at night or in the winter. However, if you are what is called a time-of-use customer, you cannot. What that means is if you produce a kilowatt-hour of energy at 5:59 on July 4 and at 6:01 need to use that unit of energy, you cannot get credit for it because it stays in that same time-of-use. The unintended fact of this is that the production in the summer peak period cannot be used to offset your use during the nighttime or during winter, which makes it very difficult to monetize the benefit of that energy. There is an easy fix for this and that is NRS 704.775, subsection 2(c)(2), which is on page 15 of the bill. The issue would be addressed by striking the sentence that reads, "If the customer-generator is billed for electricity pursuant to a time-of-use rate schedule, the excess electricity carried forward must be added to the same time-of-use period as the time-of-use period in which it was generated unless the subsequent billing period lacks a corresponding time-of-use period." This would create an even playing field for all customers. If you generate it, you should be able to credit that against your use at some future time. This can happen without having to monetize and pay for the kilowatt-hour. It would simply be one unit created and one unit used.

Terry Care, representing GA Solar:

We had signed in as opposed to this bill but in light of Assemblyman Bobzien's amendment, our position is now neutral. Our concerns were, to some degree, alleviated by the proposed amendment. In section 8, subsection 1 the amendment would leave current law undisturbed but there remains the new language, which is section 8, subsection 3, as well as similar language in section 3. I have with me Lee Novak, a senior project manager with GA Solar. GA Solar has entered into a master service agreement with the state and is concerned with the remaining language even after the amendment in section 8, subsection 3. It would probably be more appropriate for him to address those concerns.

Lee Novak, Senior Project Manager, GA Solar, Gestamp Corporation, Las Vegas, Nevada:

We have recently, along with the Sierra Nevada Corporation, won the master service agreement from the Nevada State Office of Energy to provide renewable energy for up to 55 sites for the state of Nevada. We are concerned that this provision will have a negative impact on our ability to provide as much energy and as many successful projects as possible to the state. We ask the Subcommittee to examine the impacts of this language on cost to the state and how that may prevent more projects from being produced.

Chair Kirkpatrick:

This subsection specifically applies to the public works provision. Is that correct?

Lee Novak:

Yes, as I understand it, that is correct.

Chair Kirkpatrick:

Does your agreement have to go to the Davis-Bacon Act of 1931?

Lee Novak:

No, it does not. The project was originally conceived under the master service agreement. The projects are privately financed. We are looking at privately financed projects. We will be supplying energy to the state under a long-term contract.

Chair Kirkpatrick:

How will you be getting benefits?

Lee Novak:

The state will pay for energy that is provided.

Chair Kirkpatrick:

This is for participation in the solar program, and you are in the solar program so you are getting dollars. At the end of the day Nevadans better benefit from Nevadans paying the ratepayers. I do not care if you are a Nevada or an out-of-state business. Are you in the solar program?

Lee Novak:

Some of the sites will have renewable generations rebates that may be applicable to those projects and may help to finance those projects.

Chair Kirkpatrick:

When you do this, do you already have a power purchase agreement (PPA) in place with your costs? It bothers me that people do not want to pay prevailing wage when my neighbor and I are paying for it. At least pay some Nevadans a decent wage so that they can turn around and spend that money at the grocery store. I do not know what you pay, but this is a sore spot with me every session because Nevada ratepayers are paying for it every day. We need to turn that money around in our economy.

Lee Novak:

I am not sure I understand what the question is. At this point we have a master services agreement for each site. There will be a PPA. Those sites are being analyzed for feasibility. Those PPAs will be coming to the Board of Examiners (BOE) and the Interim Finance Committee (IFC) in the next couple of months. Our goal is to use Nevada employees and Nevada labor wherever possible to create these projects.

Chair Kirkpatrick:

Within the solar program, if you have your PPA agreement you probably have set aside a certain amount for labor, so what was the hourly wage that you set aside for Nevada workers?

Lee Novak:

We do not have a PPA at this time.

Chair Kirkpatrick:

So it is still applicable for you to put this in?

Lee Novak:

That is our concern.

David Goldwater, representing Sierra Nevada Corporation:

I submitted testimony ([Exhibit H](#)) for A.B. 416 so I will not go over what has already been discussed. The answer to your question, Madam Chair, is that in the master service agreement, in all of the pro formas, the financing scenarios not only did not contemplate paying prevailing wage but the financing models did not contemplate the additional amount for the Public Works Board and the amount of money they take under NRS Chapter 338 for review. As you move down to each individual PPA, I think you are getting into something else.

One other thing that is not in my testimony is that we still want to work with the bridge between the programs as identified by Mr. Kyle Davis. That is important for solar programs that already have contracts in place. We do not want to do anything to harm those contracts.

Chair Kirkpatrick:

Are there any questions? [There were none.] Is there anyone else who wants to testify neutral on A.B. 416 as amended? [There was no one.] Is there any testimony in opposition to A.B. 416 as amended?

Judy Stokey, representing NV Energy:

We are opposed to the bill and amendment as it is written. The benefits of the rebates that we pay up front are to decrease the installation cost to the consumers. Payments over time do not defray the up-front cost, so we do not think that would be beneficial for the residential customers that are trying to put them on their roofs.

Performance-based incentive provides a mechanism that pays over time and then the customer would sell the power directly to the utility at fixed cost. NV Energy would enter into a long-term contract. We are not sure what the term is on this bill specifically, but we did run some scenarios on a 20-year term that Mr. John Owens will go over for you.

Currently, as was put into statute last session, there is a \$255 million cap on what we pay in the rebate incentives for the solar generations program. We have currently committed to spend up to \$140 million. You then have a balance. In addition to that, we are committed to spend up to \$30 million on some wind programs. When you add it up, it is somewhere between \$255 million and \$285 million total up to the year 2021. The way this bill is written you are going to \$360 million from 2012 to 2020. That does not take

into account that we have already spent the \$140 million. That is going to increase what we actually put into statute last session.

I also wanted to address the net metering caps. We have discussed this every session. Every session there is a proposal to increase it. We have a proposal this year in another bill to go 1 percent statewide. Currently from what we have and what is committed, and if all the projects get built, we are still going to be significantly under that 1 percent, and we think we will continue to be under that 1 percent through the end of next year. We do not see where we need to increase that percentage so drastically. That would be a huge increase.

**John Owens, Director, Customer Renewable Generation and Energy Efficiency,
NV Energy:**

We have a number of concerns with this bill. I would like to start with a clarification for the Subcommittee because you heard a lot about how performance-based incentive is in structure from the current renewable generations program. Actually, there is a component that is common to both of these proposals that has not been clearly talked about, and that is the net metering credits that all customers receive under either mechanism. It does not matter if I am a performance-based incentive customer or a renewable generations customer. Under the current program design, for every kilowatt-hour that my system produces, if I am a residential customer, it is about 11 cents per kilowatt-hour; I get a credit off my bill up to that number of kilowatt-hours multiplied by 11 cents. That is common to both structures. The only difference with a performance-based incentive is that instead of paying a one-time up-front rebate, you are spreading the cost of that over a long period of time, either 10 or 20 years. Essentially you get to the same place. It is analogous to a down payment on a loan with a smaller payment over time or a bigger payment over time.

When you get to the consequences of this, we have done some modeling. I believe the Solar Alliance distributed to a number of the community members an example of a 400-megawatt program on March 24, 2011 ([Exhibit I](#)). We have modeled that particular structure, which is a performance-based incentive. It starts at about 17 cents per kilowatt-hour for a residential customer and declines to about 8 cents. Essentially we found that depending on whether that 400 megawatts is in addition to the RPS requirements in our state, or whether it is intended to be a part of it, there are fairly significant cost increases that would be driven by that proposal.

The reason for that is what it is displacing. Essentially this becomes a must-take contract for the utility at a fixed price over a long term of 10 or 20 years. We modeled at a 20-year term. When we did that we asked, "If it is

in addition to the RPS, what is it displacing?" It is displacing high efficiency natural gas generation. It is displacing coal and it is also displacing low-cost market purchases. There is a premium related to these contracts relative to what we otherwise would have purchased. If, on the other hand, it is part of the RPS, at least you are comparing it to its displacing renewable energy sources. But what it is displacing there is large-scale solar, wind, or geothermal.

If it is on top of the RPS, we estimate this could result in a \$1 billion premium over the 20-year period. If it is part of the RPS, it could result in a \$500 million premium. Those premiums are on top of the numbers Ms. Stokey was talking about in terms of programs' costs. That is just the increase in revenue requirements over the term. The reason for that is you are displacing conventional power at 4 to 6 cents per kilowatt-hour if it is above the RPS. If it is below the RPS, you are displacing wind or geothermal that comes in at 9 to 11 cents per kilowatt-hour with something that starts out at 17 cents and is in place for 20 years and maybe drops to 15 or 16 cents, but you can see there is still a differential and that is what causes this big increase. We are very concerned about the potential cost of that.

Finally, we did a little research with our neighbors to the west, Pacific Gas and Electric (PG&E). I spoke with their program manager yesterday to get a feel for the nuances of their program and how it works. They have performance-based incentive mechanisms under their California Solar Initiative (CSI) program. The PG&E program is in order of magnitude about 575 megawatts. Pacific Gas and Electric is roughly three to four times our size. To have a 400-megawatt program for a utility of our size seems very out of scale in terms of something that would be a good fit for Nevada. I am enthusiastic about small-scale renewables. We are encouraged by the progress we have made, and we are on track to add significant amounts, but I feel this proposal is out of scale for the state.

Chair Kirkpatrick:

What would be a reason of proposing 400-megawatts? What would be a reasonable amount for our state?

John Owens:

The public policy question is how much financial support you want to provide this industry to help it get to a self-sufficient state. That is why we expressed support for a proposal in another bill that provided a funding mechanism that was a percentage of the utilities revenues. That provides the stability that a number of the folks have mentioned they are looking for but puts a cap on what the rate impacts are for customers.

Chair Kirkpatrick:

Is there anyone else who wants to testify in opposition to A.B. 416?

Ernie E. Adler, representing International Brotherhood of Electrical Workers Local 1245:

I reluctantly testify in opposition to this because the electrical workers union does support renewable energy. I think one of the union's problems is that every plant you replace that is operated by NV Energy is a loss of union jobs. All of the independent solar operators are not union and are generally at a lower wage scale than plants owned by NV Energy. I think the ideal thing from the union's perspective would be if NV Energy would build its own renewable energy plants. I think the Subcommittee needs to be aware that if you are displacing plants that are currently operated by the union, I do not think that is a positive thing for some of the laborers of the state.

Chair Kirkpatrick:

Assemblyman Bobzien, would you like to follow up?

Assemblyman Bobzien:

Thank you for this opportunity, but I do not feel that I can give a full rebuttal specific to the numbers and cost, the most significant issue with this legislation. I think there is significant disagreement with some of the numbers presented today, and we would like to have a chance to work with some of the bill opponents to address those issues.

With this approach we are looking at extending what has been the state policy for these incentives programs for the past 10 years. We are trying to find a way to make them better. As I was listening to some of the opposition testimony, I observed that many of the concerns raised were with the program that we have right now. I am also excited to learn that I actually have a barrier to my legislation ever being supported by NV Energy, but that is okay.

Chair Kirkpatrick:

The Committee on Commerce and Labor will try to hear this again on Monday, so you probably need to address any potential amendments by Friday of this week.

Assemblyman Bobzien:

We will be working feverishly to have those prepared in order to go forward.

Chair Kirkpatrick:

We will close the hearing on A.B. 416. Is there any public comment? There being no public comment, this hearing is adjourned [at 6:25 p.m.].

RESPECTFULLY SUBMITTED:

Carol Thomsen
Committee Secretary

Linda Blevins
Transcribing Secretary

APPROVED BY:

Assemblywoman Marilyn K. Kirkpatrick, Chair

DATE: _____

EXHIBITS

Committee Name: Committee on Commerce and Labor,
Subcommittee on Energy

Date: April 6, 2011

Time of Meeting: 3:15 p.m.

Bill	Exhibit	Witness / Agency	Description
	A		Agenda
	B		Attendance Roster
A.B. 385	C	Assemblyman James Ohrenschall	Proposed Amendment
A.B. 432	D	Assemblywoman Marilyn Kirkpatrick	Conceptual Amendment
A.B. 432	E	Tiger Adolf	Prepared Testimony
A.B. 416	F	Assemblyman David Bobzien	Proposed Amendment from Kyle Davis
A.B. 416	G	Scott Hansen	Proposed Amendment
A.B. 416	H	David Goldwater	Written Testimony
A.B. 416	I	John Owens	Proposal