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

Seventy-Sixth Session
March 23, 2011

The Committee on Commerce and Labor Subcommittee on Energy was called to order by Chair Marilyn K. Kirkpatrick at 5:05 p.m. on Wednesday, March 23, 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 David Bobzien, Washoe County Assembly District No. 24
Assemblyman Marcus L. Conklin, Clark County Assembly District No. 37

STAFF MEMBERS PRESENT:

Brenda Erdoes, Committee Counsel
Marji Paslov Thomas, Committee Policy Analyst
Andrew Diss, Committee Manager
Jordan Grow, Committee Secretary
Sally Stoner, Committee Assistant

OTHERS PRESENT:

Tom Clark, representing OPower
Jeff Lyng, Director, Market Development, OPower
Judy Stokey, Executive, Government and External Affairs, NV Energy
Kyle Davis, representing Nevada Conservation League
Joe Johnson, representing Toiyabe Chapter, Sierra Club
Monica Brett, Nevada Program Associate, Southwest Energy Efficiency Project
Dan Jacobsen, Technical Staff Manager, Bureau of Consumer Protection, Office of the Attorney General
John Owens, Director, Customer Renewable Generation and Energy Efficiency, NV Energy
Randell Hynes, representing Nevada Solar Authority, Ltd.
John Hadder, representing Great Basin Resource Watch
Rose McKinney-James, representing The Solar Alliance, Bombard Electric, and Amonix Inc.
Chris Brooks, representing Bombard Electric
Claudia Eyzaguirre, representing Vote Solar Initiative
Luke Busby, representing Clean Energy Center, LLC
Susan Fisher, representing the City of Reno
Ernie Adler, representing International Brotherhood of Electrical Workers Local 1245 and Reno-Sparks Indian Colony
Paul McKenzie, representing Building and Construction Trades Council of Northern Nevada
Scott Carey, representing Pyramid Lake Paiute Tribe
Jack Mallory, representing International Union of Painters and Allied Trades District Council 15 and Southern Nevada Building and Construction Trades Council

Chair Kirkpatrick:
[Roll was called.] At this time, I am going to have Assemblyman Atkinson, Chair of the Assembly Committee on Commerce and Labor, lay out our role as a subcommittee.

Assemblyman Atkinson:
We will discuss a series of bills on renewable energy over the next few Wednesdays. Please watch for agendas over the next few days. We may not have floor session on those Wednesdays and the meeting time of this Subcommittee may be moved to an earlier time. We are hoping to get something out of these meetings that we can take back to the Committee and which they can take action on. There may be some confusion whether this Subcommittee will be passing motions on bills. That is not the intent. The intent is to hear information, which we will take back to the Committee. Ms. Kirkpatrick will be chairing the Subcommittee.

Chair Kirkpatrick:
With that, I will open the hearing on Assembly Bill 150.

Assembly Bill 150: Revises provisions governing portfolio standards for providers of electric service. (BDR 58-848)

Assemblyman David Bobzien, Washoe County Assembly District No. 24:
This bill makes a modification to the definition of an energy efficiency measure to include implemented measures. Nevada statute currently uses the terminology "installed," which is more of a physical object or system, rather than the broader treatment this bill proposes. For instance, implemented measures could include software. Following my opening statement, you will receive some testimony that will give you some other examples. Nevada's current definition of an energy efficiency measure allows Nevada utilities to take credit only for measures that are installed. Examples of this would be compact fluorescent light bulbs and Energy Star appliances. When you give the utilities the option to include implemented measures in their efficiency programs, they will have the option to deploy low-cost, proven behavior change programs that educate customers on how to conserve energy and save money on utility bills without the need to install anything in a home. This bill is about providing low-cost options for utilities to meet their renewable portfolio standards (RPS) goals while also driving reductions in energy bills for Nevadans.

I would argue that this is a modernization of the statute. It gives a broader range of options to the investor and utility as to ways they can meet their RPS. This latitude will allow for better decision making in terms of selecting systems and strategies that will produce the most bang for the buck. There should be a

copy of a letter (Exhibit C) in the Nevada Electronic Legislative Information System (NELIS) in support of A.B. 150 from Jon Wellinghoff, Chairman of the Federal Energy Regulatory Commission (FERC) and principal author of Nevada's RPS. You will also hear support from others on this measure. You may hear some testimony about cost recovery that the utilities currently can do for their efficiency measures. Because of our economic condition and population stagnation, we are currently below the capacity of the investor-owned utility in terms of what they can generate and produce for the retail customers. This can affect the cost recovery for the utility. We will hear some testimony regarding this issue. However, I would submit that, over the long term, the proposed approach on energy efficiency is good policy for the state and will certainly help us when we see recovery down the road.

The bill is fairly straightforward. Section 1, subsection 1 adds the terminology "or implemented" to the current wording of the statute. In subsection 1, paragraph (a), subparagraph (2), the terminology "the retail customer" is replaced with "one or more retail customers." You will hear about aggregate systems and approaches for promoting energy efficiency in subsequent testimony. With that, I will stand for any questions or yield to the presenters to follow.

Chair Kirkpatrick:
Are there any questions from the Subcommittee? Are the next presenters going to explain the legislative intent of "implemented" and "one or more retail customers?"

Assemblyman Bobzien:
Yes, and you will also get an example of the sort of system that would be allowed under this legislation.

Tom Clark, representing OPower:
I will turn the presentation over to my associate, Jeff Lyng, who will answer your questions and walk you through the ideas we had with this particular piece of legislation. We will be brief, as we recognize there are many more people who wish to testify today.

Jeff Lyng, Director, Market Development, OPower:
I have submitted written comments (Exhibit D). [Mr. Lyng continued to summarize from prepared testimony.] There is a growing body of energy efficiency work that is proving measurable, verifiable, and persistent with respect to communicating to utility customers how much energy they use, comparing their usage against their neighbors, and motivating them to conserve energy.

I would like to give you an idea of what an implemented measure can be. I have provided a copy of a sample OPower home energy report (Exhibit E) from our ComEd program in Chicago, Illinois. You can immediately notice that the report is branded to the local utility. The report looks like a utility bill, but it is not. It typically arrives a few weeks after the consumers receive their utility bill. They may think, "Oh, another bill from the utility. What is this?" When they open it, they see it is not a bill but a report that will tell them if they live in a "Prius" house or a "Hummer" house. They can see how their usage compares to their neighbors. The report represents the power of social comparison in driving energy conservation. The first page of the report is about analytics. In this example, you will see that Ms. Ryan's consumption is three times higher than an efficient neighbor in this utility service territory would use. She has some work to do. At the bottom of the page, there is a monthly comparison.

The report assumes that the consumer would be motivated to save on energy costs. In this example, she can see that she is spending $655 more per year than her neighbors. The graph at the top of the second page shows the consumer that her usage has increased over the previous year. I must point out that these results would not necessarily be the case for every customer. This example is merely an illustrative example of a customer that may be headed toward a high bill. However, the second page outlines action steps the customer can take to save money. It is not a list of 50 or 100 action steps; it is three action steps tailored for that specific customer. We often push any existing rebate programs for efficiency available through our partnership with the utility. For example, if the utility has a rebate program to swap out a second refrigerator that is in a garage, we market that on our report. We might inform the consumer of such a rebate by printing, "Go to your utility's website and download a rebate application to swap in your second fridge." We see about a 20 percent increase in the participation of those utility rebate programs when we market them through our home energy reports. That program lift drives more work toward contractors and additional rebate applications to utilities, and ultimately drives greater energy conservation. This is an example of an implemented measure which could lead to an installed measure.

In terms of groups of customers, the model on neighborhood behavior comparison programs by nature include groups of people. We are comparing a control group to a test group that is receiving our reports so that we can verify the information against the group that is not receiving the energy savings. The purpose of changing the terminology in the bill to "one or more retail customers" is that implemented measures involve groups of utility customers rather than single customers. I would be happy to answer any questions.

Chair Kirkpatrick:
Does anyone have any questions? How do consumers get this report? I represent a district that includes an older demographic. If they are told they will save $120 per year if they take certain actions, they will monitor actual savings. What happens if they do not reach that number? How is the number justified? Does it include possible rate increases? How do you get the information on their neighbor's energy use? I am certain to be asked that question in my district.

Jeff Lyng:
Those are all great questions. We currently have 50 utility partners. We typically set up a 50,000-household pilot program. One-half of the households become the control group and do not receive the reports. The other half does receive the reports. This is an opt-out program versus an opt-in program. For example, solar incentives are very much an opt-in program because the consumer has to decide to make a purchase decision, fill out rebate forms, make an application to the utility, become accepted into the program, and then install the system. With an opt-out program, the customer automatically receives the report, whether they have asked for it directly or not. This is in part what drives the effectiveness of the program. About 85 percent of those households who receive our reports will actually take action; those households achieve savings on average of 3 percent. That is the difference between an opt-in and an opt-out program; the customer does not request the report. We work with the utilities to set up the control and test groups to ensure those two groups are similar. For instance, there would be equivalent numbers of low-income and high-income households in each group.

In terms of the savings, we have quite a lot of data on what a typical cost-saving measure taken by the consumer will save based on the given climate, square footage, and historical level of energy consumption. However, these are estimates. So, when the "quick-fix" box recommends raising your thermostat setting to save up to $120 per year, that is an estimate. It is possible to save more or less. After implementing a measure, customers will know if they are on track to start saving or if they are still using more energy than they used last month, for example. The consumer does receive relatively quick feedback in subsequent reports as to whether he is saving money.

The data for the reports come directly from our utility partner. We are an agent of our utility customer. We work with the utility company to analyze their customer data to make these recommendations. The sample report we provided for Ms. Ryan was done specifically by analyzing her data. The recommendation is specific to the customer.

Tom Clark:
If I might just add to that, all of the information that is gathered is public information. There is nothing that is going to be provided to this company that is proprietary or could lead to identity theft. The data is not sold. There is a direct relationship with the utility company, which keeps the information confidential.

Chair Kirkpatrick:
Section 1, subsection 1, paragraph (a), subparagraph (1) of the bill states, "The measure is installed or implemented on or after January 1, 2005, at the service location of or for a retail customer . . . ." Would this refer only to relatively new homes? Does this apply only to those set up after 2005?

Jeff Lyng:
My understanding is that January 1, 2005, is the date after which the installation of energy efficiency measures qualifies under the renewal portfolio standard. The "or for" means in addition to the service location. So, the installed measure would be done at the service location, but a report, since it is analyzed within the utility, is done on behalf of or for a residential customer. It comes in the mail, rather than as work done at the service location.

Chair Kirkpatrick:
To be clear, if it is implemented after January 1, 2005, would they get this report? Or would they get this report, and anything that came after 2005 would be quick fixes?

Tom Clark:
The January 1, 2005, date is the program itself. Because implemented programs have not been allowed, they will be implemented after July 1, 2010. The date is when the statute originally allowed installed programs to be used for the RPS. The implemented programs, since they did not exist previously, are going forward. It has nothing to do with the age of the house or the customer.

Assemblyman Atkinson:
I would like to know why the wording was changed from "the retail customer" to "one or more retail customers." Is it because it crosses over? Why are we changing it?

Jeff Lyng:
The modification is with respect to the implementations of efficiency measures that involve groups of people. Traditionally, efficiency measures that are opt-in—in other words, installed measures—are done on a per-customer service location level. Programs that analyze neighborhoods involve multiple

customers at one time. Therefore, the language has been modified so that it reads "one or more retail customers," to allow groups of customers to participate in a single program.

Assemblywoman Bustamante Adams:
I appreciate the example of what implementation means. My concern would be that there would be an abuse of interpreting what is an implementation and what is not. What would constitute and qualify as an implementation under this legislation?

Jeff Lyng:
It is our intention that implemented measures could involve home energy reports. The broadening of the legislation is intended to involve and allow for utility bill analysis. I cannot think of an abuse of the word "implemented." It is a broad term, but in this case, the goal is to allow utility bill analysis.

Tom Clark:
The other thing that is important is that the Public Utilities Commission (PUC) of Nevada will oversee any of these programs. They will define what an implemented program is. The utility will have to come to the PUC to discuss these types of programs. The PUC will have to agree that it is a program the utility can pursue.

Chair Kirkpatrick:
What is the cost to the ratepayers? Is there one?

Jeff Lyng:
That is a fair question. Any program brought to the PUC by the utilities is required to pass the total resource cost (TRC) test. The benefit accruing to the ratepayer must be greater than the cost incurred by the ratepayer. The home energy report platform offered by OPower specifically depends upon the number of households involved. On average, it costs approximately $10 per household.

Chair Kirkpatrick:
Per year? Per day?

Jeff Lyng:
Per year. That translates to about a 3-cent-per-kilowatt-hour cost. So far we have passed TRC tests with room to breathe in each of the markets we are currently working in.

Chair Kirkpatrick:
Are there any questions? Mr. Clark told me he saved $75 at his house, so now my husband has me trying it. We will see if it works.

Tom Clark:
That was up to $75.

Chair Kirkpatrick:
I told my husband $75, so I have to find that amount of savings. Are there any other questions? I will call those in support. Please come up four at a time.

Judy Stokey, Executive, Government and External Affairs, NV Energy:
We are here in support of A.B. 150. We support energy efficiency measures, and this is an outgrowth of what we have used in the past in the area of installed efficiency measures.

Chair Kirkpatrick:
Will you specifically use this type of report, or will this legislation give you the ability to use whatever report is out there?

Judy Stokey:
When a program is presented, we have to file a plan with the PUC in order to implement it. We would weigh it against all the other programs out there.

Kyle Davis, representing Nevada Conservation League:
We are in support of the bill and view it as another effective way to reduce energy consumption.

Chair Kirkpatrick:
Are there any questions?

Joe Johnson, representing Toiyabe Chapter, Sierra Club:
The Sierra Club supports this measure and the concept of conservation and efficiency. We often speak about efficiency within these chambers but neglect the conservation portion of the discussion. We are active in various organizations in holding workshops on conservation. This could be a real game changer in the sense that it allows the adoption and utilization of the advanced delivery system, smart meters, and demand response programs that we have going forward. This would offer an opportunity to see the savings. Also, it is important to have all economic classes of households involved in trial neighborhoods, and I have been informed that this is done.

Chair Kirkpatrick:
Are there any questions? Is there anyone else who would like to testify in support of A.B. 150?

Monica Brett, Nevada Program Associate, Southwest Energy Efficiency Project:
We would like to be on record as supporting A.B. 150. The question was raised why it is important to add "or implemented" and "one or more retail customers." The answer would be so that projects are eligible if they are an improved demand-side management program that does not involve something that is physically installed, or if it is a single improved demand-side management program that serves more than one customer.

Chair Kirkpatrick:
Does anyone have any questions? Is there anyone who would like to testify in opposition to A.B. 150? [There was no response.] Is there anyone who is neutral on A.B. 150?

Dan Jacobsen, Technical Staff Manager, Bureau of Consumer Protections, Office of the Attorney General:
We are neutral on this bill, but I appreciate the opportunity to speak with you about it. We would like you to be aware of the implications of expanding the scope of energy efficiency matters. You may recall that last session there was a bill that was approved, Senate Bill No. 358 of the 75th Session, which entitles energy companies to be compensated for the impact that efficiency programs have on their revenues. Under that law, if a company such as NV Energy implements an efficiency program that has a negative impact on the company's revenues, then the company is allowed to seek compensation from customers to compensate for that negative impact. A commission went through a long rule-making proceeding to implement this law. Based on this law, utility companies have already submitted requests to raise their rates by $40 million. For Nevada Power Company customers, this represents an almost 5 percent rate increase.

We are currently going through a very long proceeding wrestling with a $40 million rate increase. There are a lot of issues that we are going back and forth on; we are very far apart on this. One of the issues is, when you look at an efficiency program, how do you decide exactly how many kilowatts are saved? The tariff rates are going to be applied to those saved kilowatts, and the customers are going to be expected to pay. We have had a number of consumer sessions around the state on this and, frankly, it is kind of challenging to explain to customers that their rates are going up because they conserved. In effect, rates are going up to pay for services the company did not provide. I am not being critical of the company in saying this.

Earlier there was mention of the fact that we have a unique situation in Nevada. During the early part of the last decade, energy demand was growing, and the company was building capacity. The demand for energy just slowed down and is not growing to the capacity that was installed. So we are in an overcapacity situation. As a matter of fact, I think we just saw some results from the company that their total kilowatt sales in 2009 to 2010 went down. Part of that is because of the poor economy. But when you have overcapacity, it really weakens the economics that normally prove in efficiency programs. Normally, you could say customers are going to have to pay something to fund this program, but they will make it up because the company will not have to build the next generating unit. They will eventually save because the company will not have to build as much, or they will be able to defer the next build. The problem now is that, in addition to having rates go up a little bit to pay for the program, customers also have to pay the lost sales compensation. They have to pay for increased capacity whether or not it is generating energy. The company has fixed costs that have to be recovered. One of the implications that we want you to understand is, if you decide to expand the scope of what an efficiency program can be—particularly in expanding it to things that are not specifically installed at a customer's house—there could be some pretty intense wrangling about how much money is saved and how much customer rates will increase to compensate the utility. I have provided you a one-page handout (Exhibit F) summarizing this.

I want to emphasize that we are not opposing the bill, because it is possible that there might be efficiency programs where the benefits are so large that they will justify the particular costs the customers will have to bear. However, I did want you to be aware that there is a possibility customer rates will go up as a result of the efficiency programs that are in place now. I appreciate the chance to share this with you.

Assemblyman Atkinson:
For clarification, you spoke about energy efficient products that are not installed at the customer's house. Can you give me some examples of that?

Dan Jacobsen:
Just to contrast, we are having a big argument right now about how much energy a lightbulb saves. In order to decide how much energy a lightbulb saves, the company must make assumptions about how many hours a day every single subsidized lightbulb is turned on. The company claims that figure is three hours a day. I would not allow every lightbulb in my house to be turned on for three hours a day. That is the type of wrangling we are having about things that are

installed at the customer's primary residence. If we suddenly expand this definition to include the software program that was just described, additional assumptions will have to be made. The utility will make assumptions about how much savings the program will generate, and I would speculate that they would ask, "How many customers will get these mailers? Of those, how many will take action? Of those who take action, how many will save?" They will come up with a certain number of kilowatts that will not be sold as a result of a program like this. They will multiply that times the tariff rate they would have received if they had provided the service, and then they will go to the PUC and ask to be compensated through a rate increase. I am not saying there will not be benefits to offset this. However, it will be challenging in light of the current situation with overcapacity. It may well be a very difficult process to identify just how much savings there is and what kind of compensation to the utility will come as a result of that.

Assemblyman Hickey:
Just to clarify, the $40 million applies to a number of efficiency measures and not just this device that has been described today.

Dan Jacobsen:
That is true. As a matter of fact, the program that has been described today has not yet been reviewed by the Commission. I am referring to statewide measures to install more efficient lightbulbs, refrigerators, and air conditioning, as well as commercial upgrade programs.

Assemblyman Goedhart:
I am looking at your handout (Exhibit F). When you aggregate the $40 million and $82 million to total $122 million, it means a 2.8 percent increase for Sierra Pacific. Does that mean a 2.8 percent increase in the total consumer electric bill?

Dan Jacobsen:
Yes, the average monthly bill would go up 2.8 percent.

Assemblyman Goedhart:
Why is there such a large differential between Nevada Power Company (NPC) and Sierra Pacific?

Dan Jacobsen:
Sierra Pacific recently had a rate increase, and Nevada Power has not had one for several years. Nevada Power is reaching back several years, saying that things have been implemented that have not been compensated for.

Chair Kirkpatrick:
If this was done in a pilot program, would you still have to go back and recover those costs?

Dan Jacobsen:
I do not think the utility would agree to do an efficiency program unless they were going to be compensated. In all fairness to them, they are not having the opportunity to sell what they thought they were going to sell as a result of the efficiency programs. We are not being critical of the utility; we just want you to understand the implications.

Chair Kirkpatrick:
Does anyone else have questions? [There were none.] Is there anyone else who would like to testify as neutral to A.B. 150? [There were none.] We will allow Mr. Clark to come back up for final comments.

Tom Clark:
We are fully willing and able to respond to the Consumer Advocate's concerns. I personally feel it is apples to oranges, considering they are reaching back two or three years and we are looking at implementing a new program that could be considerably more efficient and cost-effective. We have data from other utilities we worked with around the country to prove that out.

Chair Kirkpatrick:
Could you get us some of that information describing what other states are doing? That would be most helpful.

Tom Clark:
It would be my pleasure.

Jeff Lyng:
Thank you for the opportunity to present today. I would like to point out the nature of how savings are verified in a home energy report neighborhood comparison model. It is not as Mr. Jacobsen was suggesting. It is very much like a pharmaceutical company strategy of controlled tests, where the control receives a placebo and the test group receives the actual medication. The control group in this case represents the baseline. Any savings that is attributed to a test group is incremental from the control. Rather than attributing a certain amount of savings from an installed measure, by using a test and control methodology the utility would know with great certainty what the savings would be from a behavior-change efficiency program.

Chair Kirkpatrick:
It would be helpful to know if other states have the cost-saving piece. The Consumer Advocate's job is to protect ratepayers. He has to be here, and we want to hear from him. We will close the hearing on A.B. 150. We will open the hearing on Assembly Bill 380, which will be presented by Assemblyman Conklin.

Assembly Bill 380: Revises provisions governing certain programs for renewable energy systems. (BDR 58-308)

Assemblyman Marcus L. Conklin, Clark County Assembly District No. 37:
I would like to make some brief introductory remarks and then let representatives from NV Energy talk you through the bill. This bill represents an attempt to stabilize what has been a rather chaotic process relative to distributive generation in the State of Nevada; to make it a little bit easier to understand, a little bit simpler to implement, and in some respects, make it more efficient and easier for consumers, producers, installers, and participants of the program to be able to budget and plan into the future. Currently, it is nearly impossible to do so because of the way the program is being implemented. This is an attempt to clean up much of that. I have spent the past hour speaking to legal counsel and reviewing my notes. It is a complicated bill that removes portions of statute and replaces it with new statute. There are many things that are being repealed but are reintroduced by date. In section 52, subsection 2, the bill repeals *Nevada Revised Statutes* (NRS) 701B.265 and 701B.625. That was not included in my original request; it is not necessary or desired as part of this bill. This bill should not go forward in any fashion with that subsection or any associated intent. Apparently, neither the drafters nor researchers could ascertain why these sections were to be repealed. That subsection needs to be removed.

Chair Kirkpatrick:
Do you know what those particular statutes relate to?

Assemblyman Conklin:
I know exactly what those particular statutes relate to. Would you like me to read them to you? I have been looking at them.

Chair Kirkpatrick:
I would just like a summary.

Assemblyman Conklin:
Both statutes, NRS 701B.265 and NRS 701B.625, deal with public works projects. Currently, the entire program is subject to public works. Section 52, subsection 1 deletes a number of programs that have expiration dates which occur in the middle of 2011. But those programs are reintroduced. Because I have reviewed all of the documents, I can only assume that when those sections are repealed, the trailing provisions are repealed as well, which would be those listed in section 52, subsection 2. The problem is, all the other provisions are reintroduced in amended fashion, except for NRS 701B.265 and NRS 701B.625. So we would either need to delete section 52, subsection 2 or reintroduce it in another appropriate section of the bill. Otherwise, the bill should not go forward.

Chair Kirkpatrick:
I wanted to make sure that those who are listening at home, or those on the Committee who are unfamiliar with those statutes, were informed. Do you have anything to add, Mr. Conklin?

Assemblyman Conklin:
I would be happy to answer any questions or turn the presentation over at this point.

Chair Kirkpatrick:
I do have some questions, but I think they are more technical questions.

Judy Stokey, Executive, Government and External Affairs, NV Energy:
We are in support of A.B. 380 and the required changes just explained by Assemblyman Conklin. We are also unsure why the referenced section was included. I will turn the presentation over to John Owens at this point.

John Owens, Director, Customer Renewable Generation and Energy Efficiency, NV Energy:
I thought I would give you a quick overview of the bill and explain why we believe the proposed changes will improve these programs. To give you a little background, if you will refer to the third page of the handout (Exhibit G), you can see the history of what has been accomplished with the Solar Generations Program. For the benefit of the Committee, these programs essentially provide rebates for customers who install solar systems at their home or business. If you look back, you can see a pattern of dramatic growth. These programs began in 2004, with our first installations occurring in 2005. During that year very small volumes were generated, 149 and 170 kilowatts. There was an

explosive growth seen in 2009 and 2010. I am pleased to report that in 2010, we installed almost 5.3 total megawatts of new capacity in the state. This is a significant percentage of the total 8.7 megawatts that has been installed throughout the history of the program. There have been 904 projects completed, and almost $34 million in rebates have been paid out over that time period to participating customers. The graph on page 4 of the handout gives you a feel for where we think the program is going. We currently have a projected 16 megawatts of solar projects in the pipeline and presently in development. There is another 10 megawatts projected to occur in 2012. As you can see, we are expecting significant growth in these areas.

The Wind Generations Program shows similar data. This is a much newer program, so we have data only for 2009 and 2010. There is currently a total of 259 kilowatts installed statewide. There is a total of 59 projects, and most of those occurred in 2009 and 2010 in northern Nevada. A total of $717,300 in rebates has been paid out. When you look at where we are going, there is also a dramatic increase in the volume that is being realized within these programs. We expect approximately 11 megawatts to be installed in 2011 and another 5 megawatts in 2012.

I think the big picture with Assembly Bill 380 is that we are trying to develop a self-sufficient, small-scale wind, solar, and hydro industry in Nevada over time. The bill basically makes some significant structural changes to make the programs more cost-effective relative to other renewable portfolio standard (RPS) compliance options. Remember, the output that these programs produce counts toward helping us meet the RPS in Nevada. The other options out there are larger scale projects. Traditionally, the smaller-scale projects have frankly been a little more expensive to implement than larger-scale projects. The changes in A.B. 380 are geared toward improving the cost-effectiveness of the smaller-scale market. Sustainability of these programs is all about making these programs efficient and cost-effective relative to other options. How do we do that? Essentially, we will introduce a reverse auction process starting in 2013. Instead of applying for a predefined rebate amount, customers will submit bids during a preannounced period to define what they need in terms of a rebate in order to participate in our program. It will be a competitive process, ensuring that we are receiving market-based pricing for the rebates that we pay to participants in the program. Layered on top of that is a concept where we would limit the rebate amounts to $1 per watt based on prior year actual reported costs. We know what these systems cost, because in exchange for receiving a rebate, customers have to submit documentation showing actual system costs. We take the average of that for the prior year. In this proposal

we are saying we should limit the amount of the rebate to 50 percent of the average cost of a school, public, or residential system, using actual prior year results. That ensures that participants in the program are contributing and it is not just a freebie; they are investing in the system.

Finally, we have heard time and again from the industry that a boom and bust cycle is a challenge. The current structure does tend to create this situation. We are trying to introduce some stability by providing a funding mechanism that defines a budget limit of up to one-half of 1 percent of NV Energy's electric revenues statewide. For example, if last year we reported $3 billion in electric revenues, the authorized rebate limit would be $15 million. This percentage puts a reasonable limit on what all customers are contributing to help this industry become sustainable and move forward.

Additionally, we are trying to maintain the current structure during a transition period. We currently have a significant number of customers who have been awarded rebates under the current structure. They have many projects under development or already under way. We felt it was reasonable to define a budget in the near term that would fully fund all the current projects and also provide a time period for the Commission and all the participants in the industry and utility to come together and work through the details of how this reverse auction process will work beginning in 2013. That will give us 18 months to go through a rule-making process, work through the details of exactly how the auction will work, and preserve the current structure for the current industry participants and customers. The current rebates are funded by $140 million for solar and $30 million for wind.

We are proposing these changes to sustain the economic development opportunities created by these programs in Nevada. It will improve the value that is received by NV Energy customers, who ultimately pay for these programs, and it will preserve the past investments that customers have made in these programs. I would be happy to answer any questions.

Chair Kirkpatrick:
Does anyone from the Committee have questions? If not, I have questions.

Assemblywoman Bustamante Adams:
I want to make sure I understand the reverse auction process. Would priority be given to those who do not necessarily need the most amount of rebate?

John Owens:
Yes, the concept is that the Public Utility Commission (PUC) of Nevada currently defines a rebate amount in our annual plan; a residential customer currently receives $2.30 per watt. That amount is based on a judgment of what a reasonable rebate amount needs to be to attract participation in these programs. We are suggesting changing to a system where participating customers will compete against each other to optimize and minimize the rebate price. There will be a period of time where customers will "bid in" to NV Energy in a very transparent and public process. Someone will say, "If I receive a rebate of $2 per watt, I would be willing to build my system." Someone else may bid $1.50 per watt. All those bids will be gathered from the customers, there will be oversight from the PUC and the Bureau of Consumer Protection, all bids will be ranked from lowest to highest, and then rebates will be awarded up to the budget limits approved by the PUC in our plan. I recognize that is a mouthful, but that is my overview.

Assemblywoman Bustamante Adams:
My only concern is that the constituents in my district may not even be able to apply. They will always be outbid by someone who has more money to put toward his project and who does not need a rebate. I am concerned that there will be an adverse impact on those who may need more of a rebate.

John Owens:
This system is designed to minimize the cost of the rebates paid out to all customers, including your constituents. That could be a side effect. This is one of many programs that we offer to our customers. Your constituents are also eligible to participate in energy efficiency programs we offer that have similar effects in helping customers to reduce their energy bills. Many of those programs come with much smaller required investments. I think in the context of all the offerings we have, there is deliberately a broad portfolio to allow all customers the opportunity to participate in one way or another.

Assemblyman Atkinson:
Referring back to page 5 of the handout (Exhibit G), I notice that there is a significant difference between projects in northern versus southern Nevada. Can you explain that slide?

John Owens:
To date, we have seen that most of the volume of wind generation projects are occurring in northern Nevada. It becomes even more dramatic when you look at projected amounts in 2011 and 2012. The projected 11 megawatts is almost

entirely located within northern Nevada in agricultural settings related to irrigation customers and farms. Since these are rural settings, some of the issues we have seen with wind systems, whether noise or visual issues, are diminished. These systems are also easy to deploy in the rural setting. The volume we are seeing in northern Nevada is really a reflection of the fact that these projects are occurring in agricultural settings. It is easier to do there than in an urban setting. Whether you look at southern or northern Nevada, the volumes are relatively small in urban settings because of those other issues.

Assemblyman Atkinson:
Is that why we are seeing the rebates being paid in those areas?

John Owens:
Yes, the rebates are paid in the jurisdiction in which they occur. If the customers are located in northern Nevada, it affects the rates in northern Nevada and vice versa.

Assemblyman Atkinson:
We talked about customer participation. Is that why the current costs differ so greatly between the south and the north?

John Owens:
I believe that what you are referring to is a discussion we had regarding the current rate effects in the two regions. You had asked what percentage of a residential customer's bill would fund these programs. Today, it varies with every customer depending on consumption, but the range in northern Nevada is significantly higher; it is probably between 3 and 5 percent of a customer's annual bill. In southern Nevada, it is probably 1 percent or less. There are really two reasons for that. First, the volume is a little higher in northern Nevada. The bigger issue is that the sales that go into making a rate are much higher in southern Nevada. The rate is getting divided by a much bigger pool there. One of the intents of this proposal is to create a statewide program so that future cost recovery of these programs could be assessed on a statewide basis. That should bring the rates back down under 1 percent or to one-half a percent for all customers in the state while still providing adequate funding to sustain the programs.

Assemblyman Atkinson:
You mentioned earlier limiting the rebate to 50 percent of the actual cost. Can you explain that?

John Owens:
A good example would be that in 2010, in our schools program, the average system cost was roughly $6.50 per watt installed. In 2013, when we open up our auction, if the average cost for a school project was $7 per watt the prior year, the maximum we would pay to anyone who bid into the auction would be $3.50 per watt. A bidder could bid less than or up to $3.50. It would act as another safeguard to not offer rebates at a level that would drive a volume which might create a boom and bust cycle.

Chair Kirkpatrick:
I have a couple of questions. I am a little nervous about the reverse auction. I have seen bills in this Legislature since 2005 attempting to do reverse auctions. If I wanted to do business on eBay, I would do that. However, we are talking about public dollars, and we have to be careful about how that works. Everyone should have a fair chance. I wonder how this concept came about in this bill. Are other states doing it? I get the point of capping it. I mean, I am paying for my neighbor to have solar if they want it. People should have to make an investment. The biggest complaint I have heard is that the program causes residential customers to compete with contractors. I do not see that addressed in the bill. As a residential customer, you are at their mercy as to what the cost will be. I heard last time that groups were loading up the computer. What happens to residential customers who do not have the staff or time to sit there and monitor it? How does that process work? Where is the long-term benefit for residential customers?

Additionally, regarding water power systems, why is that date pushed out to 2016 and comingled with the annual plan outlined in section 35?

John Owens:
I heard several questions. I will try to answer each, beginning with the last question regarding the hydro program. The hydro program is a relatively new, small-demonstration pilot program. We are including that program in this structure from an aggregate budget perspective. In other words, the limit starting in 2013 would need to cover the rebates paid out under all the programs—solar, wind, and hydro. The hydro program is small relative to the other two programs. It is a very niche, unique, location-driven program. For that reason, we did not feel it was reasonable to change the structure to a reverse auction. We felt it was easier to continue to administer the program as it is currently, where we file a plan with the PUC, they set a rebate level, and we see what sort of interest we get. The bill addresses an extension of the

program because it is scheduled to expire this year. This bill extends the expiration date of the wind and hydro programs. If no action is taken, both programs would expire on July 1, 2011.

With respect to the reverse auction, there are a few safeguards to ensure fairness in terms of equal opportunity for customers to participate in the program. First, we would evaluate and award rebates based upon competition between like customer groups. It would not pit a residential customer against a school or public building, because the scales are totally different and the system costs are probably dissimilar. Residential customers would compete only against other residential customers in terms of bidding in.

Chair Kirkpatrick:
Let me stop you right there. Several sections of the bill list the three different particular categories: school properties, other public property, and private residential property and business property. There is a big disconnect, in my opinion, because a business and residence are different. For instance, a business probably has a staff member who can sit in front of a computer all day to compete in the bidding process, whereas a residential customer has two family members trying to work all day. How are they supposed to compete?

John Owens:
The small business that is referenced in that category is defined as a business that employs fewer than 500 people worldwide.

Chair Kirkpatrick:
There are not fewer than 500 people in my house; there are four. That is a huge difference. Businesses with 500 people have at least 5 secretaries. We should be honest about it. Five hundred people versus four people—that is a big difference.

John Owens:
Under the current program, the contracting community goes out and recruits customers to apply to the program. By the time the customer has applied, they have already gone through the process of deciding they are interested and have gotten a price quote for an installed system from a contractor. Some of the problems referred to earlier, regarding a single homeowner at a computer trying to compete with a company or larger organization, relates back to the first come, first served competition process that is inherent in the current program. That is how we pick customers. There is no other way to distinguish them.

The criterion becomes a race to the starting line, since people are not bidding in a price. With the current method, I cannot objectively say, "Three dollars is less than $3.25." It is a first come, first served process. This bill would fix that. Essentially, we would probably open up the application process for a whole week and do a public opening in a much more rational, calm, and thoughtful way. I believe it will provide a lot greater equity in terms of more people being able to participate.

Chair Kirkpatrick:
I guess I need to understand the reverse auction process a bit better. I try not to allow those bills to happen in other committees. You are saying it is a sealed, one-time bid?

John Owens:
Yes. The concept is that several months in advance we would announce when applications would be accepted. The contracting community and residential customers who are do-it-yourselfers would have time to prepare their bids and proposals. The bids would all come in and be publically opened under the oversight of PUC staff. We would evaluate and award rebates based on the best proposals that we receive. It introduces an objective way of selecting who receives awards, whereas today it is drawn out of a hat, or first come, first served, or some other non-value-based selection criteria.

Chair Kirkpatrick:
I see that it is limited to 12 months. Does that mean that you are going to offer the program only once per year? It seems like we are always behind. My personal opinion is that NV Energy could receive tons of good press by doing them all separately, and giving everyone different opportunities, or perhaps holding them quarterly. I think there has to be better marketing for constituents. If this program is offered once a year, then people will have to wait an entire year to reapply. You will be starting over.

John Owens:
The bill requires that we open applications at least once a year. That would not preclude us from opening multiple times during the year. I think we are receptive to the concept of doing this more than once a year to address that concern. That is an issue with the current program design as well. It is generally a once-a-year process. That can be addressed in the rule-making or regulation process. The other important protection for small business or residential customers is that the bill carves out 25 percent of the budget limits to be used for these customers to ensure that there is a portion of the budget allocated to them. Not only larger projects will be awarded.

Chair Kirkpatrick:
Are there any other questions?

Assemblywoman Bustamante Adams:
We had discussions regarding yearly awards. It was thought that residential could be done in the spring, commercial in the summer, and schools in the fall, or vice versa. This would provide a continuous amount of work for contractors.

Chair Kirkpatrick:
This idea makes more sense because we are constantly moving the process. Regarding the regulations process, regulations tend to take anywhere from three to nine months. What happens to the program during the transition if it is set to expire? What if we do not make it? Honestly, with the executive order from the Office of the Governor, I am not sure if this falls within that criteria. Then what happens?

John Owens:
That is why the reverse auction process and the transition to a budget based on sales does not start until 2013. We annually file our program with the PUC, they review and approve it, and we move forward. That process would continue in 2011 and 2012. Our current plan calls for us to reopen the program later this year. That is assuming other bills that require rule-making, and that would have to be completed first, do not change the structure of the current programs. This bill would enable the status quo, so that we could open again this fall with a capacity that we have had returned to our program. Every year there is attrition, and essentially we rerelease that into the market as we gather it up over the course of time.

Chair Kirkpatrick:
What happens to those who have already received awards in the last year, but have not done the work? Does that go away? Are they still in the pipeline, but anyone after this has 12 months?

John Owens:
The current laws require that customers complete their project within 12 months of receiving an award. If the project is not completed within that time frame, they may still receive a rebate, but it will be the rebate that is in effect at the time the project is completed. If we reopen later this year at a lower rate and someone is running late, he will still receive a rebate, but it might be a little smaller than that outlined in the original award letter. There is also a requirement for the public and schools category that they demonstrate a completed contract to us within six months of the award. There is a 20-day grace period after that. If those entities are unable to comply with those

requirements, we essentially clawback the award. Most of our participants in those categories have complied with those requirements, but we have sent out a handful of letters to different noncompliant entities. Most of them have decided not to pursue the project and simply returned the capacity to the program.

Chair Kirkpatrick:
To clarify, there could still be some folks who would be at the top of the list, but they would have to get the lower rebate amount?

John Owens:
They would receive the lower rebate amount only if they have not completed the project within 12 months. If they complete it within 12 months, they would receive the rebate that is written in their award notice. If they are late, the consequence is a potentially reduced rebate.

Chair Kirkpatrick:
Do we have any idea of how many of those are out there? I am wondering if those might actually consume your new budget proposal, as opposed to allowing new projects to come on board. I am trying to think about long-term consequences.

John Owens:
The $140 million that has been allocated to the program through the end of 2012 is enough to fund 100 percent of the awards that are in the pipeline. Even if all of the projects are completed, we have adequate funding. Beginning in 2013, we would reopen under the new structure with the new budget and new participants.

Chair Kirkpatrick:
Are there any other questions?

Assemblywoman Bustamante Adams:
I understand that the goal is to increase participation, and I also appreciate the 25 percent allotment for residential customers. I am concerned about putting residential and small businesses in the same category. I am interested in knowing what the outcome has been when other states have used reverse auctions.

John Owens:
There are a wide variety of ways in which these programs have been deployed in other states. Some reverse auctions were handled in other ways, such as dollars per kilowatt-hour as opposed to rebates. Frankly, it is a mixed bag.

It is all over the map. What we are trying to do is build upon the success we have already achieved by maintaining a similar structure to the current one-time incentive coupled with ongoing credits against your bill. You already receive a credit against your bill for whatever your system actually produces. It is a combination of both elements that makes this program so successful. That is why we are deliberately sticking with what we see as working. We are trying to improve the efficiency of the current plan as opposed to jumping to a totally different structure. There are advocates of different structures. I am sure you will hear some of them in this meeting. We can give you feedback on those as they come up.

Chair Kirkpatrick:
Are there any other questions? We will now hear from those who wish to testify in support of A.B. 380.

Randell Hynes, representing Nevada Solar Authority, Ltd.:
I also represent several other contractors and solar development companies in Las Vegas. I speak generally in terms of representing the solar industry, but I obviously have not vetted every contractor and renewable energy company in Nevada. I agree wholeheartedly with NV Energy's position that we should be striving toward an industry that is self-sustaining. That is part of our proposal. We are here in Carson City to push an agenda that finds a home in one of the existing bills to suggest a path that will actually get us to the point where we are self-sustaining and no longer need to require any kind of subsidies. I have placed a copy of our overall proposal, which is looking for a home in Senate Bill 184 (Exhibit H), on the Nevada Electronic Legislative Information System (NELIS).

Generally, all the bills that are outstanding right now are focused on fixing the rebate system or replacing it with something else. We have five bills that in some shape or another deal with standardized contracts. Three have very similar language and seek to establish a wholesale rate that would be supplemented by a portfolio energy credit (PC) to increase the total value of the electricity. It would be on a pay-as-you-go basis. The person would install his system and, instead of receiving a rebate, he would receive a payment that is a little greater than the value of the electricity that he is saving. The utility would be paying for the PC, the green attributes of the electricity. In talking to solar investors, that type of system is very attractive. Banks think the assured income of a pay-as-you-go basis actually makes it bankable. Instead of receiving a rebate to help with the up-front costs, a bank or solar investment company pays for the installation, and then they sell the electricity and earn the extra PC to recoup their construction costs.

Chair Kirkpatrick:
I think that is a completely different idea and a different bill. Let us be clear that on this bill, at the end of the day, the ratepayer pays for all of it.

Randell Hynes:
That is correct. Generally, the reverse auction mechanism is another standard contract that seeks to learn how much the proposed system builder will accept as a rebate. Then they move forward with this standard contract afterwards. One of the other fixes for the rebate is to use a contract to establish this pay-as-you-go amount.

Chair Kirkpatrick:
I do want to clarify, because we do have one more bill to hear. Do you like this bill as it is, or do you want to be neutral and propose your own fix?

Randell Hynes:
I think there is a place for a reverse auction mechanism, but I think it fits better in the market segment for a small generator interconnection between 3 megawatts and 10 megawatts. Small generator interconnections also include systems from 10 megawatts to 20 megawatts, but I think the 3-megawatt to 10-megawatt systems are a nice sweet spot for that. I kind of like the idea of a reverse auction mechanism where, rather than the proposed builder offering how much they would accept as a rebate, they actually offer how much they would accept per kilowatt-hour for the generation of the electricity.

Chair Kirkpatrick:
Let me restate. You like A.B. 380 the way it is, but you would like to propose some different options. If that is the case, I am very stern about neutral. I want the record to be very clear. I am more than happy to have you back when we call those who wish to testify as neutral. However, I would like to hear about the merits of this particular bill. I think Mr. Atkinson said it best: we are collecting all the information and taking it back to the full Committee. If we are not clear on the information, we cannot take it back, and then bills die. That is how it works. Do you wish to testify as for or neutral on this bill?

Randell Hynes:
I suppose the definition of neutral would be that I do think there is a place for a reverse auction mechanism, but not with the wording that is presently in place.

Chair Kirkpatrick:
So you are neutral. I will invite you back at that time. Every Chair is different, but in my Committee, you love the bill, hate the bill, or are neutral and feel there are issues that need to be worked out.

Assemblyman Atkinson:
You are correct that each Chair is different; I would not let him come back. I want to be clear. You are in favor of the bill except for the reverse auction portion.

Randell Hynes:
The reverse auction is a competitive process where someone says, "I will take a rebate for this amount," and whoever bids lowest wins. I like that process, but I would prefer that when those bids are opened up, the amount they will accept is for kilowatt-hour to generate the electricity rather than a rebate.

Assemblyman Atkinson:
I am having a difficult time, because I would like an explanation.

Chair Kirkpatrick:
Neutral is a good spot for you to come back and then you can have more time. Is there anyone who would like to testify in support of A.B. 380, who loves it exactly how it is, but with Mr. Conklin's change? [There was no response.] Is there anyone who is in opposition to A.B. 380? If you could speak about specific sections of the bill, that is most helpful for the record and the Committee.

Joe Johnson, representing Toiyabe Chapter, Sierra Club:
We are opposed to the bill as written. We are opposed to the capacity cap in section 45, on page 29 of the bill. We think the particular language used is too limiting, it does not offer a reasonable response to the time it would take to reach 90 percent, the regulation would take too long to develop, and it would interfere with the reasonable progression of a program. In section 46, on page 30, the language dealing with the use of the PCs to offset future RPS requirements might be interpreted to mean that those efficiency credits could be used to meet any of the future obligations the utility had. I do not know if that was the intent or if my understanding is incorrect. I also have the general comment regarding any number of bills dealing with waterpower that there was a very contentious definition of waterpower contained in *Nevada Revised Statutes* (NRS) 704.7811, "'Renewable energy' defined," which goes into a very exhaustive process of elimination for choices on waterpower that are not a qualified renewable energy. Most other definitions are more specific listings of waterpower that are qualified renewable energy. This bill, in section 47, page 32, does include coal and such. We have concerns, in the application of these waterpower programs, that in-stream flow on streams might be diverted. The restriction in NRS 704.7811 prohibits any new application for water rights for the production of hydropower under the renewable portfolio.

Chair Kirkpatrick:
I will stop you for one second. You referred to a definition of waterpower in section 47. I see all existing language there.

Joe Johnson:
On page 32, in section 47, subsection 3, paragraph (b), it says renewable energy includes biomass, fuel cells, geothermal energy, solar energy, waterpower, and wind. The term does not include coal, natural gas, propane, and so on. The definition I cited in the statute on renewable is fairly extensive. It would be my suggestion that we view a consistency of definition of waterpower.

Chair Kirkpatrick:
Let me understand. These sections are existing language. Are you trying to clarify that the definition which is already in statute would apply to anything that said waterpower?

Joe Johnson:
Yes. There was concern in the application of waterpower. It was added in a later section in 2003. Consistency in statue should be of importance, particularly in that we are now getting small hydro developed. It has potential to have environmental consequences that other statutes do not cover.

Chair Kirkpatrick:
Are you referring to the waterpower application currently provided by NV Energy? Or are you referring to waterpower strictly outlined within this statute?

Joe Johnson:
It is the definition of what would be a qualified waterpower project that I am concerned with. We can address that in other bills. However, my concern with the reverse auction is that it is an extension of the existing program, which is more of a first come, first served program that has been less than satisfactory. We have a big game draw that operates quite proficiently, not that I would recommend that type of system. We are in support of a feed-in tariff or other mechanism of advancing the continuation of a sustainable program.

Chair Kirkpatrick:
For the edification of the Committee, there are some other bills out there that deal with waterpower that you will see as we go forward. Legal makes sure when they codify bills that everything is consistent, but we will note that for the record.

Joe Johnson:
I believe that is true and that Senator Settelmeyer has a bill that deals only with waterpower.

Assemblyman Goedhart:
With the reverse auction, would you not have the most competitive pricing, and therefore the limited pool of money would theoretically translate into the greatest amount of renewable energy produced? Why would you embrace a set tariff versus a competitive reverse auction sort of scenario?

Joe Johnson:
All of the incentive programs are, at some level, retrogressive in their nature. We need to look at creating opportunity for other folks to participate. It might not be the singular goal to maximize the development of renewable energy, but social and economic justice issues come into the play.

Assemblyman Goedhart:
Do you believe those goals can be further attained through a feed-in tariff versus a reverse auction?

Chair Kirkpatrick:
That will put you back at neutral, Mr. Johnson.

Joe Johnson:
I will stand in the position that there are more preferable methods than reverse auction.

Chair Kirkpatrick:
We will continue hearing from those in opposition.

Kyle Davis, representing Nevada Conservation League:
In general, I agree with the concept of what the utility is trying to do in terms of cleaning up and streamlining the statute. I think it is well overdue, and it will benefit everyone if we can get this into a more manageable program that is easier to understand. From our perspective, our goal is to get the largest amount of renewable energy installed for the least cost per system, so that we can maximize the ratepayer dollars spent on the program. Specific to the bill, the language in sections 5, 9, and 45 regarding one-half of 1 percent of the utility's annual revenue represents too small a budget to sustain a strong industry in the renewable energy area. With regard to the reverse auction mechanism, although it makes sense in concept, our concern is that it would not stretch the ratepayer's dollar the farthest. It causes people to guess what

the lowest price will be; they may not actually be able to construct at that price. A more preferable method would be to go with a performance-based incentive, with a step-down program. If you reach certain capacity caps, you step down the incentive level so that you are continually expanding the amount of systems that can be installed for the same dollar figure.

Finally, I would point to sections 7 and 20. While this bill changes the program year to a calendar year, we are still looking at the concept of a program year in terms of the starts and stops of installation. Again, a step-down program would allow for more consistency within the industry and allow for us to continually install systems in a more sustainable fashion.

Chair Kirkpatrick:
Are there any questions? [There were none.]

John Hadder, representing Great Basin Resource Watch:
We share the concern that Assemblywomen Kirkpatrick and Bustamante Adams raised about the reverse auction mechanism. We think there is a real danger that this could move us toward an elitist system or limit who can play in terms of the renewable energy market. There is a wide difference in who can play, in terms of residential installation, even within the categories outlined by NV Energy—the well-heeled versus the not-so-well-heeled. We think this mechanism has a great danger of moving us in that direction. Public policy that is supported by the state should open the door to all people while maximizing the efficiency of the program. We do not think this opens the door to all people, but could lead to an elitist situation. That is our main concern. We believe a different mechanism would serve the purposes of cleaning up the program, deploying a greater number of renewables, getting more people involved in the process, and saving the ratepayers the impact experienced under the existing program.

Chair Kirkpatrick:
Thank you. I think I understand the gist of what needs to be fixed. I will now call those who are neutral towards the bill. If you want to propose a new idea, tell me that first.

Randell Hynes:
I think we are all in favor of the idea of doing away with the solar rebate program. It has never worked right and basically takes a big lump of money and spreads it across very few systems. I think the theme of this session is going to be acceptance of the pay-as-you-go model: pay for the performance of the system as it goes, rather than paying a lump sum fee up front. I think this will be the theme for our new Nevada renewable energy policy. If we are going to

use a reverse auction mechanism, it should be for the market segment of 3-megawatt to 10-megawatt systems. It would be up to the utility whether to extend it out to 20-megawatt systems, because 10 megawatts is sort of a break-off point for the standard for IEEE 1547 interconnection standards, which have been set by the Institute of Electrical and Electronics Engineers (IEEE). Instead of bidding for a certain amount of rebate, the bid should be of the actual kilowatt-hour that would be acceptable. This would be like naming our own feed-in tariff. That is my position.

Chair Kirkpatrick:
I think you make a good point with the 10 megawatt cutoff. That is where we draw the line within statute for other programs that are out there. Are there any questions? [There were none.]

Rose McKinney-James, representing The Solar Alliance, Bombard Electric, and Amonix Inc.:
We appreciate the opportunity to work through a subcommittee, so that we have adequate time to present information to you. We have taken the position of neutral on this bill. As you know, it is a fairly comprehensive measure that deals directly with distributed generation. We had the opportunity to meet briefly with the utility today to review this from a conceptual standpoint. The concept is a new one. Consistent with some of the inquiries made by some of the members of the Subcommittee, the notion of a reverse auction mechanism is not something that has been done in Nevada in the past. We are aware that it has been done in Arizona, California, and other states. Mr. Owens was kind enough to walk through the intent of the bill. However, we have not had the opportunity to review it on a provision by provision basis to drill down into what the bill does. I would like to make the assumption that the Committee is going to take a look at this bill along with others as you move through the process. We may well have some very specific suggestions at that time.

I would like to ask Chris Brooks, from Bombard Electric, a local installer, and Claudia Eyzaguirre, with Vote Solar, to offer some observations from a conceptual standpoint on behalf of The Solar Alliance. I also want to indicate that the emphasis on sustaining the program and offering an opportunity to preserve the status quo, so that no one in the pipeline loses his opportunity, are positive steps. We have taken the comments, observations, and suggestions that members of this body have made very seriously with respect to emphasizing cost-effectiveness and mitigating ratepayer impact, and indeed we do have some other suggestions about how we might address a solar generation program. At this time, I will defer to Ms. Eyzaguirre and Mr. Brooks.

Chair Kirkpatrick:
There is a question first.

Assemblyman Atkinson:
You mentioned mitigating ratepayer impact. Do you have some ideas regarding that issue?

Rose McKinney-James:
We do have some ideas. We have given some significant thought to this issue. I will allow Ms. Eyzaguirre to put those forward.

Claudia Eyzaguirre, representing Vote Solar Initiative:
Cost containment is an essential part of any solar bill. While we do believe in revenue and ratepayer cost caps, we think one-half of 1 percent is very small. It is a huge reduction from where we are now. We all pride ourselves on the growth of the solar industry in Nevada. This would essentially level the program and allow it to continue only as a niche industry. Our suggestion would be to switch from a lump-sum, up-front rebate—which goes from being at the discretion of the PUC in the existing bill to being written into statute in the proposed bill under section 45 [see below for correction]—to a performance-based incentive. This would accomplish two goals. The ratepayers would be paying for what they receive, for the true kilowatt-hours that are generated and for the clean air and other values that are associated with that. It also enforces that the developers and installers involved in this still-young industry are installing the best kind of systems. In terms of our ratepayers, a performance-based incentive will pay out cents per kilowatt-hour to each person who participates in the program. That allows the cost to be spread out over time to minimize rate impact. As many of you have seen in other bills, our proposal is a 400-megawatt program modeled to never reach more than a 1.8 percent increase for the average residential customer and just over 1.5 percent of NV Energy's total revenue. Now that we are beyond babying the solar industry, we have matured beyond handing out these huge lump sums of rebates to different developers and customers.

Chair Kirkpatrick:
Does anyone have any questions? [There were none.] I want to drill down on section 45 a little. In section 45, lines 9 through 14, what do you perceive as being so terribly different than what was there before?

Claudia Eyzaguirre:
I apologize; I referred to the wrong section. I meant to say section 9, where rebates become the only mechanism that the PUC allows. It says in section 9, subsection 5, "As used in this section, 'reverse auction mechanism' means . . . proposed total incentive amount for a solar energy system expressed in dollars per watt of capacity." That requires us to pay for solar only by capacity and not by performance. My colleague, Mr. Brooks, made a great comment earlier that Amonix produces a very high-efficiency solar cell, but their nameplate capacity is the same as a cheap solar cell from China. If you are paying by capacity, there would be no advantage although their output is a tremendous increase over a cheaper but same-nameplate-standard, low-quality photovoltaic (PV) panel.

Chair Kirkpatrick:
So, for example, I buy my purse at Target, but my daughter buys hers at Juicy. It is kind of the same thing, which I understand. Who determines the capacity, and where would those regulations be set for the consumer?

Claudia Eyzaguirre:
I should probably defer to Mr. Brooks on this, but nameplate capacity is verified under a standard test condition (STC) or production test condition (PTC), which are two different criteria for nameplate capacity. However, solar panels can have different efficiencies. A sun power panel might have a 21 percent efficiency rating, whereas a concentrating PV panel may have efficiencies in the high 20s or low 30s. They will have different output. If we pay for output rather than capacity, we are paying for kilowatt-hours.

Chair Kirkpatrick:
Back to my question, where is that regulated for the consumer's protection?

Claudia Eyzaguirre:
In this bill?

Chair Kirkpatrick:
Anywhere.

Claudia Eyzaguirre:
Nameplate capacity is regulated by STC. The only way to regulate it for the general public is to pay for output. We can measure output many ways, for instance, at the inverter level or through net metering at the utility.

Chair Kirkpatrick:
For educational purposes for the ratepayer, though, at the end of the day, I am paying for my neighbor to have solar because they can afford it. I guess I do not understand how we would educate the consumer. Going back to my previous analogy, how does my daughter know that she is not buying a knock-off Juicy bag? She is paying $125 for a ridiculous purse, but when she goes to the Juicy store it is $200. Where is the consumer protection in a performance-based model? How would it be regulated?

Chris Brooks, representing Bombard Electric:
Currently, future capacity rebate programs use the California Energy Commission's list of approved photovoltaic equipment. They come up with a method using the manufacturer's information to rate the product with a kilowatt or megawatt capacity. The rebate is applied to that. There are some factors that are not taken into consideration with that method: how the unit was installed and the manner of energy it makes. Using Amonix as an example, although it is photovoltaic and solar, they use a different technology that produces far more kilowatt-hours than a lower-tier photovoltaic module of the same capacity rating. An Amonix unit would qualify for the same amount of rebate, even though it makes more energy than another unit. From a consumer protection perspective, a capacity-based rebate has to predict performance. The rebate has already been awarded. On the other hand, a performance-based system would measure how many kilowatt-hours a system actually makes. The contractor could be held accountable because he most likely will remain a party to the rebate deal.

Assemblyman Goedhart:
Is the rebate amount the same whether the technology is wind or photovoltaic? It is based upon the capacity. Is that correct?

Chris Brooks:
The way I read the legislation, the rebate is proposed to be based upon the capacity of the unit. A wind turbine is a perfect example; sometimes they do not work at all.

Assemblyman Goedhart:
That is why I was going to use it as a comparison. If you are in a desert, where there is sun all the time but only sporadic wind, you could theoretically receive the same amount of rebate on a wind turbine that hardly ever spins. Meanwhile, the solar technology is producing more renewable energy, even though both technologies are rated with the same capacity.

Rose McKinney-James:
Not to confuse the situation, but because Amonix has a concentrated system, they perform beyond the output of other systems. I think that was the point we were trying to make.

Claudia Eyzaguirre:
I think I understand your question better now. When we see financing done by solar companies, it is very common to see a performance guarantee. They guarantee the expected output and pay the difference between what is guaranteed and the actual output. Performance guarantees are very important.

Chair Kirkpatrick:
I gather that Nevada does not have a program like that, which would cause a fiscal impact to the state. We would have to regulate that somewhere. It would either have to go through the Energy Office or the PUC to set standards. Believe me, they will all put fiscal notes on it.

Claudia Eyzaguirre:
Most states piggyback on the California Energy Commission rating system for an expected, performance-based calculator. They allow the State of California to test those, publish their ratings, and use those so they do not have to absorb those costs.

Chair Kirkpatrick:
My constituents would kill me if I told them I was doing something California was doing. There still would be a cost to implement it. You could not simply say on NV Energy's program that you have to use a California basis. There would have to be checks and balances. That would cause a fiscal note.

Claudia Eyzaguirre:
That is typically disclosed on the application form. You list which panels are being used and whether they are on the approved list. In addition, the performance calculator is filled out. There may or may not be a verification system depending on how rigorous you want to be.

Chair Kirkpatrick:
In my opinion, if we are going to do it, we better verify it. The consumer must be protected. If we base the rebates on capacity, someone would get to keep the credits. Is that correct?

Chris Brooks:
I believe, in the proposed bill, NV Energy gets the credits in return for payment of a rebate, whether it is performance-based, capacity-based, or other. The energy stays with the customer. This is all based on the net metering program. That is the exchange that takes place.

Chair Kirkpatrick:
Are there any other questions?

Rose McKinney-James:
We have indicated a willingness to work with the sponsor of the bill and NV Energy. We do have some additional thoughts about how to improve the solar generation program and we would appreciate the opportunity to present those to you as we move forward in the process.

Chair Kirkpatrick:
I would like to see those thoughts by tomorrow night. The process is going to pick up. In order to move forward, we will need to have something to look at first. Is there anyone else who would like to speak as neutral to A.B. 380?

Dan Jacobsen, Technical Staff Manager, Bureau of Consumer Protection, Office of the Attorney General:
I wanted to say that we are neutral on this bill. We expect that you will get a lot of puts and takes, and there will be a lot of back and forth. We have looked at the provisions of this bill and we like the reasonable limits that are included. We are very concerned that ratepayers will ultimately bear all these costs. We like the one-half of 1 percent limit and we think the reverse auction will result in a more efficient process. While we have not evaluated the fairness of the reverse auction, we believe that sometimes people get more subsidies than the cost of the program. We applaud your efforts to keep the ratepayer in mind.

Chair Kirkpatrick:
Could you provide the Committee with some thoughts on reverse auction? I know the PUC and Consumer Advocate worked with Arizona and some other states. I know you all talk. At the end of the day, it is about my constituents and the ratepayers. We are in a time where no one can afford to pay more.

Dan Jacobsen:
We will work on that. Thank you.

Luke Busby, representing Clean Energy Center, LLC:
Clean Energy Center is located in Reno and does both wind and solar. I would like to address the wind versus solar argument for a moment. The capacity factors for both of these technologies are comparable. There is no technical requirement under the Generations Program for the verification of solar equipment. There is for wind. Developers need to be responsible and verify resource standards before they install projects. We would like those provisions to be placed into law.

Regarding A.B. 380, we would like to support Assemblyman Conklin's reinsertion of the provisions dealing with public works. [Mr. Busby submitted prepared testimony (Exhibit I).] We think they are essential in reaching the overall goals of the program, including the creation of an emerging renewable energy workforce in Nevada, of which my client's company hopes to be a part in the future. Addressing the reverse auction mechanism, we are concerned that these provisions may not solve the biggest problem with the program, the land rush problem. Last year, developers in the solar industry had approximately 20 minutes to obtain rebates. That is not sufficient time to develop a plan for the entire year and keeping employees at work. Under this provision, all sales contracts would need to be executed by a date certain and submitted during the yearly bid process.

Chair Kirkpatrick:
Can you help us out and tell us what section of the bill that is?

Luke Busby:
I am specifically addressing sections 5 and 9. We believe this uncertainty could hurt developers and customers. It could hurt consumers by creating a "race to the bottom" bidding process, where bids below adequate costs could be submitted in order to obtain rebates. Rebates are a do-or-die proposition for many of these projects. Furthermore, it would tilt the program towards large customers because of the economies of scale that result from building larger projects. [Mr. Busby continued to read from his prepared testimony.]

Addressing section 45, a net metering cap of 1 percent of the total peak of all utilities in Nevada sets a statewide cap for net metering rather than the existing utility-specific cap. This cap is more important and significant to developers than any other rebate, abatement, or other program. Without it, we are out of business, along with every other distributed generation developed in the state. If we are not allowed to install these systems, these companies will dry up and blow away overnight.

Chair Kirkpatrick:
I think the 1 percent is existing language, so that is an avenue for an existing bill. What part of that section do you not like with the existing language?

Luke Busby:
Section 45 of the bill changes the existing provision. Currently, the 1 percent cap is applied separately to both Nevada Power and Sierra Pacific. This provision creates an aggregate cap for the entire state. Right now, we are running relatively close to the 1 percent number in the north, but not in the south. This would even out the playing field; it would loosen up capacity in the north and slightly reduce it in the south. This provision would change existing law.

Chair Kirkpatrick:
Did you just say that we are meeting it in the north, but not in the south? Can you restate what you just said? It sounded conflicting.

Luke Busby:
Currently, there is a 1 percent cap on each individual utility. The installation rate for net metering systems in the north, Sierra Pacific's territory, is nearing the limit. In the south, it is well below the limit. If you aggregate all of these customers into a global 1 percent cap, it will have the effect of lowering the percentage of available capacity in the north and raising it in the south, because of the uneven distribution of net metering systems across both utilities.

Chair Kirkpatrick:
How does this impact the ratepayers? In my opinion, the ratepayer has to be the primary consideration.

Luke Busby:
Based on a current study conducted by the PUC, the overall impact of all net metering systems is the generation of a subsidy in the amount of $6 million. The utility could verify that. That is a subsidized rate. I am not sure what the rate impact would be, considering the differential between the two service utilities. If you take into account the cost of all net metering systems, I believe it is 5 cents in the north, Sierra Pacific's service territory. I believe the overall aggregate effect on rates would be marginal.

Chair Kirkpatrick:
In my district, marginal is big right now.

Luke Busby:
That point is well taken. Addressing that point, we believe there is middle ground that can be reached over the net metering issue. There are a lot of different proposals this session. We believe one possible solution is addressing net metering from a rate design perspective, thereby eliminating any subsidy that exists for any individual customer who participates in that metering. We would like to work with the company on a provision to implement that, as well as on other provisions of the bill. We look forward to that process. Thank you. I would be glad to answer any additional questions.

Chair Kirkpatrick:
Are there any questions? [There were none.] If you have any information that you would like to submit to the Subcommittee, please have it in by tomorrow night.

Susan Fisher, representing the City of Reno:
I will be very brief. I am speaking this evening on behalf of the City of Reno with a message from Jason Geddes, Environmental Services Administrator. He communicated with NV Energy and sent you the same message. In short, in sections 9 and 37, the one-half of 1 percent of the total revenue cap should not include administrative costs of the program. One-half of 1 percent equals about $15 million per year. This year, the utility spent over $2.5 million dollars in administrative costs. The utility should be allowed to recover these costs, but they should be outside of the one-half of 1 percent limit. Alternatively, the limit could be raised to 1 percent to include these costs.

Chair Kirkpatrick:
Are there any questions? [There were none.] I think it already allows that in the regulations, but I would be curious. I have not checked my email, so I will see if Mr. Geddes sent something.

Ernie Adler, representing International Brotherhood of Electrical Workers Local 1245 and Reno-Sparks Indian Colony:
I have two brief comments. Local 1245 of the International Brotherhood of Electrical Workers (IBEW) does support the amendment proposed by Assemblyman Conklin to include the public works projects the way they are in current law.

On another matter, in section 11, subsection 2, the bill reads, "The Solar Program is limited to three categories of participants." I do not think it is really clear that Indian tribes and colonies would be included as eligible for those programs. The Indian tribes do want to participate in solar programs. We would like some clarification in that section.

Chair Kirkpatrick:
Are there any questions? [There were none.] This program has currently been in place; what have they been doing?

Ernie Adler:
They have been participating, but I do not know whether the change in bill language from "must have" to "is limited to" seems to be more restrictive than the current program.

Chair Kirkpatrick:
Would the Indian colony fit under the "public and other property" language in section 11, subsection 2?

Ernie Adler:
If the language "Indian reservations and colonies" could be added, that would be helpful.

Chair Kirkpatrick:
What if that is just legislative intent? If we insert the Indian tribe, we will have to insert every single public property type.

Ernie Adler:
If you could put a legislative intent that it is included under the public sector . . .

Chair Kirkpatrick:
We could also include that you are already participating in the program.

Ernie Adler:
. . . and that this amending language does not change anything that is currently occurring.

Chair Kirkpatrick:
I am assuming that is the category you currently fit under.

Ernie Adler:
I presume that is the current category.

Chair Kirkpatrick:
If you could just verify that for the Committee, that would be helpful and then we will make the legislative intent.

Paul McKenzie, representing Building and Construction Trades Council of Northern Nevada:
We support the intent of the legislation. We believe the rebate program is important to continue the growth of the renewable energy industry in the State of Nevada. In section 5, we appreciate the fact that the bid process will be open. Currently, the list of the people participating in the bid process is top secret. It is nice to know they are willing to conduct the process in an open-bid scenario. Section 15 addresses the Renewable Energy School Pilot Program, which originated in 2008 and was limited to ten schools. I wonder whether this is a provision that needs to be retained in NRS, or if we have already fulfilled the 10-school obligation created in this section. The PUC is supposed to report on how that is proceeding. While there is amended language in that section, I am not so sure we need that section in the law anymore. I believe that program has been completed since 2008.

The main crux of our issues and the reason we signed in neutral go past the renewable energy rebate program that NV Energy administers. I am sure you all remember the green energy bill, Senate Bill No. 152 of the 75th Session. In section 43, on page 23, is language that was put into statute by that legislation. We strongly supported that legislation when it was moving through the Legislature. However, we spent two years trying to make that language work. To this date it has been successful. We are concerned that if the incentives outlined in section 43 and section 44 are still going to be utilized, changes are also made to ensure the requirements outlined in S.B. No. 152 of the 75th Session are followed through as outlined. There are projects that are currently being done under this legislation which are not following the terms of the law. I hate to see more projects being done that are ignoring the law that was passed last session. The Department of Employment, Training and Rehabilitation (DETR) has never established a training program for renewable energy, which was required by S.B. No. 152 of the 75th Session. I do not know how that can be included in this provision unless we are willing to fix it. I would be happy to take any questions.

Chair Kirkpatrick:
Are there any questions? [There were none.]

Scott Carey, representing Pyramid Lake Paiute Tribe:
The tribe is neutral on this bill, although it is supportive of the state's efforts for solar development and has benefitted from the solar incentive program, constructing many projects on the reservation. In fact, Nixon, Nevada, has more solar panels per capita than any other community in the United States.

The tribe shares similar concerns in section 11 of the bill as was addressed by Mr. Adler. We are also neutral on the bill as it relates to section 5. We are not really sure at this time what the reverse auction mechanism may mean for the tribe to build future solar projects on the reservation, as well as for tribal members to apply this to their homes. Thank you.

Chair Kirkpatrick:
We will clarify that, but if you could find out what they are currently using in the program they are participating in, that will help clarify it on the record. Are there any questions? [There were none.]

Jack Mallory, representing International Union of Painters and Allied Trades District Council 15 and Southern Nevada Building and Construction Trades Council:
We agree with many of the statements by other groups who are neutral on this bill. We are definitely pleased that the provisions in section 52 of the bill, the unintended removal of the listed provisions, will be removed from the bill. We are also concerned about reverse auctions in sections 5 and 9. I think Assemblyman Goedhart made a fairly good comment regarding those sections, in that you can maximize the number of systems that rebates provide for if there is an auction system in place. We are concerned about the impact on the less well-heeled, as someone else put it. I think another way to approach this is, rather than having an open-ended process through reverse auctions, to put a pilot or sunset on it. Let them come back in two years and show that it worked, rather than having a completely open-ended provision.

Our other concern is how much of the money currently paid by ratepayers towards renewable rebate incentive programs is actually going into the programs themselves. A previous speaker commented about the $2.5 million in administrative fees that could be lumped in with the $15 million quote. We would prefer a different type of formula for the amount that the company would infuse into the incentive program on an annual basis. That would be the aggregate of all of the fees charged to the ratepayers, times a multiplier, to protect the utility from a downturn in actual rates received, minus the administrative fees. That amount could be used as the basis for the rebate program itself.

Chair Kirkpatrick:
Thank you. Are there any questions?

Assemblyman Goedhart:
I see where you are coming from. Job opportunities will be maximized relative to the degree that you can take the existing revenue stream and maximize the number of projects built using the reverse auction. Is that correct?

Jack Mallory:
Hopefully.

Chair Kirkpatrick:
Are there any other questions? [There were none.] Mr. Mallory, if you could get us a hard copy of the changes you would like to see by tomorrow night, that would be helpful. Do you have any final comments, Ms. Stokey?

Judy Stokey:
We would like to respond to some of the comments that were made.

John Owens:
I wanted to respond to some of the comments made on performance-based incentives. I would like to note that we are specifically talking about the rebate; we are changing only the rebate. Chris Brooks of Bombard raised a good example where efficient systems that produce more kilowatt-hours might be disadvantaged relative to cheaper systems. I think the reason that is not true is the current structure of the program does provide a credit off a customer's bill for every kilowatt-hour that is produced. So if those systems produce more kilowatt-hours, the purchaser gets a bigger credit off his bill under the current mechanism. The program does not consist of just a rebate; it is a rebate plus an ongoing credit. The more kilowatt-hours a system produces, the bigger the credit that is paid. There is a natural balance that will be taken care of by the market.

Regarding the 1 percent of peak statewide issue in section 45, if you go back to slide 4 of my presentation (Exhibit G), you see that in northern Nevada we are already at a fairly large number of kilowatts. That limit is essentially when you hit 1 percent of the system peak of the utility. One percent of 1,600 megawatts is 16 megawatts. With the installed base currently in the market, northern Nevada will hit that limit this year. However, if we look at the total of Sierra Pacific and Nevada Power, there is a much bigger pot. Together, they provide enough capacity so that the limit will not be reached and projects will not have to be shut down in northern Nevada. That is why we have added that change. We recognize that problem and we are addressing it.

Additionally, regarding the budget, when I review what has been spent historically for rebates as detailed on slide 3—$22 million in 2010, $4.5 million in 2009, $2.4 million in 2008, and less than $2 million in 2007 and 2006—I do not view $15 million as a significant decline. It is quite the reverse. In fact we are accommodating a huge surge. Historically, we have been nowhere near that expenditure level.

With respect to tribal facilities, we currently allow tribal residential customers to participate. We have done tribal school projects, and we would be open to expanding that definition to allow other tribal facilities to qualify under the program. Finally, I believe the issue of residential customers competing with small business customers can be dealt with in regulations by bifurcating those categories and assigning specific budgets to each. Thank you very much for the additional time.

Chair Kirkpatrick:
Maybe reverse auction makes people nervous because it is something Nevada has not historically done. I have personally killed every bill heard by the Assembly Committee on Government Affairs that included reverse auction. Maybe we need to understand where and how it has worked. I am comfortable with going through the regulation process on how it works. For instance, the green building regulation process worked much differently than what the Legislature thought. If you could get us some additional information and specifics from other states, that might be better. The way I currently read it, it is very broad and the regulations could encompass many issues. Are there any questions? [There were none.] With that I am going to close the hearing on A.B. 380 and open the hearing on Assembly Bill 133.

Assembly Bill 133: Revises provisions relating to renewable energy. (BDR 58-152)

Claudia Eyzaguirre, representing Vote Solar Initiative:
I feel I represent a consensus of the solar industry in the state and outside it. Unfortunately, Ms. McKinney-James had to step out. This bill contains some very simple changes and outlines the basic concept that we wanted to bring to the Legislature to solve what we see as the biggest challenges to the solar generations program to date: the burdensome impact to ratepayers of a stop-and-start approach to rebates and not matching the incentive levels with the cost declines that we have seen in solar over time. When the bill went from concept to bill draft, there was one major concept that was confused. That can be found in section 7, subsection 1, paragraph (c) where it reads, “For each category, periodic terms over which the cumulative amount of capacity for which incentives are authorized pursuant to the Solar Program is incrementally

reduced . . ." The word "reduced" should be changed to "increased." Our basic concept is that we will use ratepayer funds to buy solar in smaller capacity steps while it is expensive, but as costs and incentives come down, we will help the state and residents purchase more solar energy. There is simply some language that has gotten confused within the bill draft version. I wanted to make that clear. It is decreasing incentives with increasing capacity steps. It is very simple language right now. We all know that the devil is in the details.

One other larger piece that we would like to see added to this bill is a long-term goal of 400 megawatts by 2020. I think this addition is very important because a long-term guarantee that the market is here to stay will encourage businesses in Nevada to ramp up their business and maintain higher staffing levels. Additionally, I think it is important for out-of-state companies who come to Nevada to see that they should be here to make a long-term commitment and not just to come and use Nevada ratepayer funds and then move back out. We engaged a third-party analyst to look a rate impact from a percentage of residential payers' bills and as a monthly cost to ratepayers (Exhibit J), so that we are not presenting this to you regardless of the associated costs. The 400-megawatt program, with its declining steps, would be a significant reduction in the renewable energy production rate over what it is currently. It would be less than half. We also did an analysis of the revenue that would be needed, which is shown in Table 1 entitled "Cost of the Program per Year, Percent of NV Energy's Total Revenue." We really attempted to structure this as being very reasonable with the economic conditions as they are, using what seems reasonable for ratepayers to bear. In the interest of being brief, we support this bill with a little clarification of the existing language and with the addition of a 400-megawatt goal by the year 2020 for long-term program growth stabilization.

Chair Kirkpatrick:
Are there other questions? [There were none.] Why is the goal number set at 400 megawatts? Last session we were presented with information that we could produce 3,986 jobs if we did some abatement over the course of five years, which we did. However, we have not seen any of those jobs created by those particular pieces of the industry. We did see one job that was already coming on board and there are some more we are trying to get on board. However, I am a little skeptical with the numbers, because Nevada was the only one out of 17 states that did what the industry asked, and we have as yet gotten nothing in return. We have tried to reach out. Knowing that you are based in California and you know the market is exporting, why is your number specifically 400 megawatts by that date?

Claudia Eyzaguirre:
That is a very good question. I would be happy to work with my colleague, Jim Baak, who works with large scale solar, to provide you with a downstream report in response to legislation that passed on job creation. We really pride ourselves on presenting data that we can support. The 400 megawatts number comes from our mission to keep ratepayer impact under 2 percent. We looked at what is the most that we can build with a less than 2 percent retail rate impact. We thought that seemed reasonable in light of the renewable energy production rider, which is much higher, almost triple that right now. I feel that is burdensome, although when I ask around the state I do not hear people complaining about it. It may be different in your district. We do not want people to complain. We want them to feel positive about solar growth in the state. We use the performance-based incentive, paying for production mechanism to spread out the ratepayer dollars. The goal of 400 megawatts is a back calculation from what we view as a reasonable amount to request ratepayers to support.

Chair Kirkpatrick:
Are there any questions? [There were none.]

Claudia Eyzaguirre:
Would you like to see the rate impact tables?

Chair Kirkpatrick:
Yes. What other states are this aggressive?

Claudia Eyzaguirre:
I would say this is definitely on par with many of our neighboring states, such as Colorado, Arizona, and California. We looked at Illinois, which is not nearly as sunny, and they set a renewable portfolio standard (RPS) goal of 740 megawatts by 2016. Unfortunately, their government structure is not quite as functional as Nevada's and it will be harder to get those rules in place. I do not think we are out of step, and if we look at states like New Jersey, which has upwards of gigawatts of all distributed generation installed, we are within that range. You could say, "Everyone should have solar," which would create an uncontained mechanism. We have seen some bills introduced this year like that. I do not support those for that reason. We project program size using a 2 percent ratepayer impact as a guideline.

Chair Kirkpatrick:
I am somewhat familiar with Arizona. They do have a larger number, but they also have trouble transmitting those particular solar pieces because they lose

reliability. They have to go too far, and there are areas within the state where there is no way to move the energy. How is that addressed in this plan?

Claudia Eyzaguirre:
This 400-megawatt plan is different from Arizona's issues. I think you are referring to grid integration issues of having very large solar generation, which is variable by nature, on the grid. Ours would be distributed generation that would be net metered, under the 5 percent of total system enrollment proposed by the Office of the Governor in Senate Bill 59. A recent study done at the PUC evaluated 1, 8, and 15 percent penetration of distributed generation on Nevada's grid and found no significant problems at any of those numbers. When we look at 5 percent distributed generation on the grid, which is what 400 megawatts represents, we are still well below the midrange number that the PUC evaluated just this winter.

Chair Kirkpatrick:
You were talking about reaching 400 megawatts by 2020. I am looking at all the other abatements that we have out there, which the state takes a large risk in trying to move forward. What do you envision being the average ratepayer's project?

Claudia Eyzaguirre:
This would be all distributed generation under the net metered program. All of these projects would be less than 1 megawatt and would have to conform to the individual system size, which currently is evaluated at 150 percent to peak demand. One of our more minor suggestions is that would be better aligned with annual consumption. The systems would be sized to fit load. It would not be exporting to the grid. If you look at net metered systems, the majority of the time that energy is being used on-site.

Chair Kirkpatrick:
Could you get us a list of the potential manufacturers that would come to our state from your group if this legislation was passed?

Claudia Eyzaguirre:
Sure. Amonix is in the process of joining the Solar Alliance.

Chair Kirkpatrick:
They are already here.

Claudia Eyzaguirre:
Examples would be Suntech, which opened a facility in Arizona, and SunPower, which opened a headquarters in Texas, banking on the size of those markets. What we have seen from many of the national players is that they move their manufacturing to be near a market. It takes a sizeable market to pique their interest.

Chair Kirkpatrick:
Since your last visit I did some research. You spoke about Missouri, Texas, and Arizona. Their RPS standards legislation is no different than ours. I do not understand. What market are they going to? We have the same statutes. We are one of 17 states that actually passed legislation.

Claudia Eyzaguirre:
SunEdison in Missouri is a unique thing. SunEdison is a company previously headquartered in Maryland that has a very large, successful distributed solar generation operation which trades into the Pennsylvania, Jersey, Maryland Power Pool (PJM), also known as the Northeast regional energy market. They were headquartered there when it was opportunistic. A Missouri silicon manufacturer purchased SunEdison two years ago.

Chair Kirkpatrick:
Going back to my initial question, when I looked at Arizona's legislation—and I frequently follow it because I am often in Laughlin—they were scaling back some of their legislation during their last legislative session. Our legislation is equal to theirs. Arizona, Texas, and Colorado are in fact doing a big turnaround. Those manufacturing companies went to those states, but we are on equal footing. What would get them to Nevada? If we keep doing everything everyone else is doing . . .

Claudia Eyzaguirre:
I would have a two-point answer to that. I try not to provide answers for things I do not know about. I would have to evaluate how Arizona's 4.5 distributed generation solar carve-out compares to California. Arizona has a tremendous amount which comes in below the level of wholesale power. Those are one-off projects. They ship their payrolls in and people move out. That is a unique situation. The second response I would make is when you look at job numbers—there is a lot of debate over what the number of jobs per megawatt of solar is—75 percent of those numbers are in installation sales and project

development. If we take the number projected by the Solar Energy Industry Association, which is 25 jobs per megawatt, 75 percent are in installation and project development. You will get those jobs in Nevada. That is all we model for you when we model jobs. I cannot promise you manufacturing jobs. I can say that those construction, installation, sales, and induced jobs will be here if there is a program to build it here.

Chair Kirkpatrick:
I mean no disrespect, but I will agree to disagree, because we are at a point in Nevada where we have to make it or break it. We cannot keep speculating. We have been speculating for the past 20 years. We have been saying, "If we do this, the companies will come." Arizona, Colorado, Missouri, New Mexico, and Texas are doing nothing different than Nevada. Yet, the companies are still not coming to Nevada. I know you represent a large alliance. That is why I am asking. Can you go back to them and say, "Who is going to move here tomorrow, if this legislation is passed?" Assemblyman Goedhart and I spent many hours on Assembly Bill No. 522 of the 75th Session. I probably spent more time with him in the space of 120 days than I did with my husband. However, we did not get those 3,986 jobs that we were promised.

Claudia Eyzaguirre:
Were the jobs that were promised in manufacturing?

Chair Kirkpatrick:
It came from the Solar Alliance. I have the paper they presented, which said, "If you do this, we can bring this." I understand the model, that for a certain square footage of office space you should expect to have one employee. I understand that. But we got zero, even though we were the only state to pass legislation last session. I want you to go back to your group and say, "Hey, we're moving to Nevada tomorrow no matter what, because they are actually more competitive." I think there has to be a commitment before I tell my 67-year-old constituent who literally does not know how she is going to pay her power bill in the summer. Her thermostat is set at 84 degrees, she makes too much money to qualify for financial assistance, but she is trying to meet a $325 per month payment. That is the reality of it. How do I tell her not to buy her medication or not eat so that she can pay her power bill? I am saying that I will make the case for solar energy, but I need something in return which I have not yet received. I have been doing my part.

Claudia Eyzaguirre:
Those are really valid points. I will work with Jim Baak of Vote Solar, who does our large-scale solar development policy work, to see about a downstream report. I can tell you that reports we do for large-scale job studies we do not project any numbers for manufacturing, because that is not within our control or an element about which we can make promises.

Chair Kirkpatrick:
It is a policy decision for us. We have to figure out the big picture. Are there any other questions? [There were none.] With that, we will continue testimony on A.B. 133. Anyone who is in support of A.B. 133, please come forward.

Luke Busby, representing Clean Energy Center, LLC:
I am here because of this legislation. My boss, Rich Hamilton, established Clean Energy Center at the worst possible time—just as the housing market was crashing. He started off with three employees. Now he has 15. These are good, high-quality jobs in Reno. We are doing our part. We are doing all we can to expand, to hire people, and to build this market in the state. We need your support to do this. Net metering is absolutely crucial. The Generations Programs help out substantially. In answering your constituent, the percentage she pays to keep these programs alive is worth it, because they employ a substantial number of people in the state and they help build this new energy economy that everyone is talking about. We hope that burden is worth it. From my perspective, it is. I work with these people every day, and we think we are doing good things for the state, for the cities we live in, and for the country.

Addressing section 7, subsection 1, paragraphs (a) and (b) of A.B. 133 in particular, I do not see a 400-megawatt cap here; I see a price cap. Those are the existing cost caps. My understanding is, we are not asking to change those through this bill. This changes the mechanism through which the rebates are allocated. It gives the PUC a large degree of flexibility, so it can adapt to the market reflexively. It can change with the changes. It can reduce the incentives as needed, as prices go down. We think the 2 percent overall capacity increase for net metering is critical. We would like to see more, if possible. As we approach the hard cap, a Commission investigation is appropriate so the PUC can help the Legislature make an informed decision whether to move forward with that metering. I would be glad to answer any questions.

Chair Kirkpatrick:
Does anyone have any questions? [There were none.]

Kyle Davis, representing Nevada Conservation League:
We are supportive of the concepts that are in A.B. 133, especially in creating a system that pays for performance. That is one of our four priority bills for this session. We are obviously in support of that. I agree with the corrections that would be needed to make sure we are expanding the capacity but spending the same amount of money. I do agree that 400 megawatts is a good goal to have for this program. I know we will be discussing these issues as we move through the process with the various bills you will be hearing.

Chair Kirkpatrick:
Are there any questions? [There were none.] Would anyone else like to testify in support or opposition?

Judy Stokey, Executive, Government and External Affairs, NV Energy:
We are opposed to this bill. We believe that Assembly Bill 380 is a better way to go. Nevada has one of the most aggressive RPS standards in the nation. I think we have been very good at trying to hit those numbers, and we will surpass the numbers that we are required to meet. We are at 15 percent for this year. With our growth being flat, 15 percent of our load is an automatic increase in renewable requirement. We also believe that the 5 percent that is already carved out for solar is sufficient. Solar is more expensive, and that is why the carve-out was put there. If you increase that, you will keep us from entering into some lower-cost contracts with other renewable energy resources. The 400-megawatt goal mentioned in regard to distributed generation will compete with wind and geothermal energy. There is no competing when it comes to price. If you carve out another 400 megawatts, it will make us enter into higher-cost solar contracts while preventing us from contracting lower-cost renewable sources.

Regarding production based incentives (PBI), it all depends on when the PBI would be set. We do not believe in setting something you are going to pay for far into the future when we have seen some of the costs come down on these systems. We do not think a price should be set right now to be paid throughout the next 10 years. The 150 percent number is one that we are sure we can handle. That is the same rationale when discussing a 400-megawatt goal. We are not sure where that would be in the system, but we would have to make sure that could be handled throughout the system. Most consumers will not even notice these impacts until we go through a rate case and then all of a

sudden their rates will increase. They get upset with the power company, not realizing that we are ordered to do a lot of these things. They will not notice it right up front. Actually, if we look at other countries such as Germany, Spain, and France, they are all reducing their feed-in tariff (FIT) requirements. I know this is not a FIT requirement, but we feel they are similar. I think we should learn from what they did and not go down that path right now. Also, there would be high administrative costs associated with this. I know there is a fiscal impact on the state, and we believe there would additionally be a fiscal impact on all customers, including local governments.

Chair Kirkpatrick:
Are there any questions? [There were none.]

Randell Hynes, representing Nevada Solar Authority, Ltd.:
I am slightly confused. Ms. Eyzaguirre seemed to be explaining A.B. 416, another bill that we are neutral on, instead of A.B. 133, which we are in opposition to. We feel that there are standard-offer contract bills out right now that would satisfy the goals held by the solar industry. We do not feel that fixing the rebate is a good option. We want to see something done with standard contracts and pay-as-you-go programs. As an example, we are in a position with our partner, Main Street Power, where whether or not we can make approximately 150 megawatts of solar projects actually pencil out hinges a lot on legislation. I can say now, if we can get standard-contract legislation, that first project with Main Street Power will create 150 megawatts of power. They have the full confidence of Morgan Stanley bank behind them. I believe there are literally hundreds of similar power companies that want to come to the market. If you refer to the handout titled "Market Capacity" (Exhibit K), it might answer some of your questions. Independent power producers and solar investors look at a few different principles when they are looking at a market, with market capacity being one of those. Market capacity is referenced in our market by the items included in the bullet point titled "Portfolio Standard." Just to let you know, that list is kind of backwards. The portfolio standard establishes our market. In order to satisfy the 2010 compliance requirements, a lot of our portfolio energy credits were bought from outside the state. You have the 25 percent for energy efficiency, a piece of the pie from Nevada Renewable Energy, and less than 100 megawatts from solar energy.

Chair Kirkpatrick:
So, within A.B. 133, you want to give us additional information on fixing this particular bill? Is that correct?

Randell Hynes:
No, my position is totally in opposition to doing anything to fix rebates. I am neutral on A.B. 416, which you will be talking about later.

Chair Kirkpatrick:
No, we are not today. Please do not muddy the water, and stick to the bills that we are discussing.

Randell Hynes:
This is very self explanatory.

Chair Kirkpatrick:
Is this handout for A.B. 416?

Randell Hynes:
It is actually in response to questions that were asked earlier.

Chair Kirkpatrick:
The Committee will take that and note that you are opposed to A.B. 133. Are there others opposed to A.B. 133? [There were none.] Is there anyone who would like to testify in the neutral position?

John Hadder, representing Great Basin Resource Watch:
We are neutral on the bill. We do think that net metering has its place and has been effective. I would like to point out that it appears that the bill raises from 500 kilowatts up to the commercial level of project size to get incentives for net metering. We think a feed-in tariff type policy, which is not net metering, is a better way to address the incentive gaps in the commercial market.

Chair Kirkpatrick:
I think Senator Schneider has a bill in the Senate dealing with this. We can talk about feed-in tariffs all day long, but if it is not germane to this meeting or these bills, we cannot help you.

John Hadder:
I just wanted to mention it in passing. For clarity, it was mentioned that this legislation looked like a feed-in tariff, and it is really very different. I did not want there to be any confusion about that.

Chair Kirkpatrick:
Is there anyone else who is neutral on this bill? [There were none.] With that we will close the hearing on A.B. 133. This meeting is adjourned [at 8:14 p.m.].

RESPECTFULLY SUBMITTED:

_____
Jordan Grow
Committee Secretary

_____
Mitzi Nelson
Transcribing Secretary

APPROVED BY:

_____
Assemblywoman Marilyn K. Kirkpatrick, Chair

DATE: _____

EXHIBITS

Committee Name: Committee on Commerce and Labor

Date: March 23, 2011 Time of Meeting: 5:05 p.m.

Bill	Exhibit	Witness / Agency	Description
	A		Agenda
	B		Attendance Roster
A.B. 150	C	Assemblyman David Bobzien	Letter from Jon Wellinghoff, Chairman of FERC
A.B. 150	D	Jeff Lyng	Prepared Testimony
A.B. 150	E	Jeff Lyng	Sample OPower Home Energy Report
A.B. 150	F	Dan Jacobsen	Bureau of Consumer Protection Briefing
A.B. 380	G	John Owens	Presentation on A.B. 380
A.B. 380	H	Randell Hynes	SB 184 Solar Industry Proposal
A.B. 133 A.B. 380	I	Luke Busby	Prepared Testimony
A.B. 133	J	John Hadder	2011 Solar Proposal Costs to Utility and Ratepayers
A.B. 133	K	Randell Hynes	Nevada Energy Policy, Market Capacity