

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

**Seventy-Fifth Session
April 6, 2009**

The Committee on Commerce and Labor, Subcommittee on Energy was called to order by Chair Marilyn Kirkpatrick at 6:21p.m. on Monday, April 6, 2009, in Room 4100 of the Legislative Building, 401 South Carson Street, Carson City, Nevada. The meeting was videoconferenced to Room 4406 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/75th2009/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 Chad Christensen
Assemblyman Marcus Conklin

COMMITTEE MEMBERS ABSENT:

None

GUEST LEGISLATORS PRESENT:

None

STAFF MEMBERS PRESENT:

Dave Ziegler, Committee Policy Analyst
Dan Yu, Committee Counsel
Patricia Blackburn, Committee Secretary

OTHERS PRESENT:

Ernest K. Nielson, representing the Washoe County Senior Law Project, Reno, Nevada
Dylan T. Shaver, representing the City of Henderson, Nevada, Las Vegas, Nevada
Lisa Corrado, representing the City of Henderson, Nevada
Kyle Davis, Policy Director, Nevada Conservation League, Las Vegas, Nevada
Rose McKinney-James, representing The Solar Alliance, Las Vegas, Nevada
Judy Stokey, Director, Government Affairs, NV Energy, Las Vegas, Nevada
Joseph Johnson, representing the Toiyabe Chapter of the Sierra Club, Reno, Nevada
Tom Clark, representing Cogentrix and Sempra Generation, Carson City, Nevada
Alfredo Alonso, representing Ausra, Inc., Reno, Nevada
Joshua Bar-Lev, Vice President, Regulatory Affairs, BrightSource Energy, Oakland, California
Holly D. Gordon, Vice President, Legislative & Regulatory Affairs, Ausra, Inc, and the Large Scale Solar Association, Palo Alto, California
Jim Baak, The Vote Solar Initiative, San Francisco, California
Michael Alastuey, representing Applied Analysis, Las Vegas, Nevada

Chair Kirkpatrick:

We will open the hearing on Assembly Bill 522.

Assembly Bill 522: Makes various changes relating to energy. (BDR 58-1139)

Chair Kirkpatrick:

Since we just received these proposed amendments, and our staff as well as this subcommittee has not had the opportunity to review them, I would like to invite those who have submitted proposed amendments to come forward. I also have staff working on some abatement numbers. We are going to do some work because I just received four amendments.

Ernest K. Nielson, representing the Washoe County Senior Law Project, Reno, Nevada:

I submitted some information by email ([Exhibit C](#)). My concern is three or four-fold. I am one of five or six people who have worked very diligently with the Housing Division and the Welfare Division and the utilities to try to get those

three entities to coordinate their low-income energy programs more effectively. I am quite interested in that part of this bill.

One of the things that we are concerned about is splitting up the money that the Housing Division now gets for weatherization services. I understand that there may be some other thoughts about that, but that program within the Housing Division works very well. The amendment that I would propose is leaving the Housing Division money where it is in terms of the weatherization work that is funded by the Universal Energy Charge (UEC). Some of you may remember that about ten or eleven years ago we worked very hard to move the weatherization program away from the Welfare Division and into the Housing Division because we thought we would gain a lot of leveraging, and I believe Mr. Horsey spoke about that a few days ago. We are able to leverage low-income housing trust funds and other funds and have been working with the utilities for a long time with respect to their demand-side management programs.

One of the things that would be wonderful in this bill, which is listed on page 2 of my email under "Bill objectives," is number 4. That is, if the Energy Commission could be empowered to forge the coordination and leveraging that is already built into *Nevada Revised Statutes* (NRS) Chapter 702 among the Housing Division, the Welfare Division, and the utilities. I cannot tell you how many examples of missed opportunities there have been between the three of them on various levels. There has been a lot of discussion on this point, but it has not been successful in getting the three major players of low-income energy programs to work together and get outside of their own silos. That would be a big help if this Energy Commission could have that role.

The last point that my email addresses, and I have not talked to everybody I need to, but we all believe that the Welfare Division's energy systems fund is no longer going to have a surplus. We have been told by the Director of that Division that he has now turned the corner on the surplus. We have heard about the surplus for many years but the major change that has occurred is that he is now using operational dollars to pay for his intake workers, whereas before he was paying those workers out of administrative dollars. Now, he is putting about \$600,000 on the street each week, which translates into about a \$30 million per year, which vastly overspends the revenue coming into that fund. The worry about having a surplus in the Energy Assistance Program should be no longer. Premised on that, and also because the costs of putting in more transmission lines and sparked grid technology is going to increase rates regardless of what we do, I would propose that we consider indexing the UEC. In other words, use the UEC as it is right now as a base, and as the rates go up,

the UEC annually would be recalibrated based on an index formula that I provided in item 6 of the handout.

Those are the three things that would be wonderful if this bill could accommodate them.

Chair Kirkpatrick:

Are there any questions? We have energy stuff throughout every different arena. We have agriculture energy in one place, we have green building energy in another place, and I would like to see it come together.

Assemblyman Christensen:

Is there a particular group that you represent?

Ernest K. Nielson:

I work for the Washoe County Senior Law Project and within the energy context I work with a group of people that include the Sierra Club, Progressive Leadership Alliance of Nevada (PLAN), Legal Services and the AARP. We have been working as an informal group over the last eight to nine years to try to get the low-income energy programs to be what they can be.

Chair Kirkpatrick:

I do not think that by moving the funds it will be detrimental to you. We are trying to get them together because there is a lack of communication and there is a lot more we could do if we were all on the same page. As far as indexing the UEC money, I am not sure where the appetite is on that. I am having a hard enough time, as it is now. I am not sure I could get everyone to sign on to that. We can take these points into consideration. Will you be available by email within the next 24 hours? We are on a deadline. On Wednesday we have to have it so that our staff can at least put together a mock-up for Friday.

Ernest K. Nielson:

The answer is yes.

Chair Kirkpatrick:

Is there anything else from the Committee?

Dylan T. Shaver, representing the City of Henderson, Nevada, Las Vegas, Nevada:

After the last Subcommittee meeting you expressed concerns about our original proposed amendment by removing any sort of Commission oversight or policy direction. We have added what we believe is pretty clear policy direction in the amendment here ([Exhibit D](#)) which we submitted to you on Friday. Essentially,

it would require the locality, if they are adopting more stringent standards, to do so on evidence of greater energy efficiency or cost savings. What that would then allow would be for any sort of private right-of-action if those standards were not met. Hopefully, this addresses the Committee's concerns. We are here at the Committee's pleasure, so please let us know.

Assemblyman Conklin:

Where do you get a private right-of-action? We could add that language if you want, but I do not believe that would be what the city would want.

Dylan T. Shaver:

Well, my understanding is if this direction is in here and the municipality or the county were to adopt a more stringent standard or any standard not based on those criteria, then the court would have the opportunity to overturn that.

Assemblyman Conklin:

If that is the case, than this amendment did not add anything at all. The whole issue that I was bringing up was that somebody other than the city be the judge on whether or not those standards are more stringent. That is what I want. That was the whole point in asking the question of who decides. The city should not decide for itself or without any back up because if they decide on their own then there is no point in having a standard. They could do whatever they want. We have to go on trust and faith which does not get us very far sometimes. There needs to be some objective oversight that allows somebody to come in and say this does not meet the criteria, you have to try again. That does not mean that they have to go and get approval from someone, but at some point in time there has to be an entity that can stamp it and say that is right or that is wrong. That should not be in the court.

Lisa Corrado, representing the City of Henderson, Nevada:

That is what we were trying to do. To figure out what that determination would be. That is why we threw in energy efficiency or cost savings. If someone were going to evaluate whether or not those standards were more stringent, it would have to be based on something that had to do with building materials or that type of technology.

Chair Kirkpatrick:

I did some research and there are current energy standards nationwide. These change every so often. You could not specify standards in the bill because they do change. The 2009 standards are now being adopted that will go into effect in 2011. The bill has to be flexible because it is always going to be changing as technology changes. Currently, local government is very different from where

we are trying to go as a state. We need to have the highest standards, but also have the flexibility.

The example I will use is the Leadership in Energy and Environmental Design (LEED) standards which are always being updated every two years. Within our state they have to be in place for up to two years before we can even consider it. On the national energy website they have some stringent standards that will be adopted across the nation. I do not know how you could be above those standards.

Lisa Corrado:

I am not a building code professional, but there could be some cases, in terms of a LEED project, that certain things would not be allowed based on the current code that we have. We have the 2006 version of the International Energy Conservation Code (IECC) adopted now, and we are in the process of doing the technical review of the 2009 version. We are always trying to keep up with the most up-to-date version. Because the technology changes so quickly there could be instances where we might want to improve something, like some kind of building material that may not yet be addressed in that version of the code.

Chair Kirkpatrick:

Once your project starts, no matter who you use or whatever standard you use, you have to take that standard all the way through your project. For instance, if you are going to use a LEED standard, you will have to use that standard in order to be certified as LEED. You cannot change the parameter whatsoever. I believe it to be the same with the IECC because it takes some time for it to be adopted. I am not a building code professional either, but I am a researcher and that is my understanding of how it works.

Does anyone have anything to add to this amendment? Does anyone have the amendment? I will make sure that we can distribute them.

Assemblyman Conklin:

I am trying to come up with the right wording. What I am really getting at is the city does not want the Commission to have to approve the code. I do not have an issue with that as long as the Commission retains the right to let you know when your code does not meet the standard. What we need is some language that gives the Commission the right to decide if you are out of compliance or not. They may come back and tell you that you are out of compliance and here are the things that do not meet the compliance. You can deal with those any way you want. But somebody else, other than the city, needs to be the judge of whether or not you meet a standard that is not your

standard to begin with. Otherwise you are running amok, or would have the potential to.

Lisa Corrado:

Thank you, that makes sense.

Kyle Davis, Policy Director, Nevada Conservation League, Las Vegas, Nevada:

I think Assemblyman Conklin's concepts sound good to me. The only concern I have is we want to be sure that we do not end up with a different kind of Energy Commission than we are all thinking of and there is an opportunity for an Energy Commission in the future to keep a locality from having too stringent of building codes. I think this would address that.

Chair Kirkpatrick:

Okay. Is there anyone who would like to add to this amendment? So, Mr. Shaver, please get me the language first thing tomorrow morning.

Dylan T. Shaver:

I will get it to you the first thing in the morning.

Rose McKinney-James, representing The Solar Alliance, Las Vegas, Nevada:

I would like to take a moment to clarify the documents that I shared with you. They are the documents that we used as the basis for our discussions at the last Subcommittee meeting, in written form so that you and your staff could review them ([Exhibit E](#)). At the end of the last meeting you did indicate, to the extent that we had things outside of the more significant issues of the bill, that we should share them. On page 5 you will see an item 6 which delineates a number of minor adjustments that we are recommending because A.B. 522 also covers the solar generations program. That is the program that is used most directly by the members of The Solar Alliance and the photovoltaic industry. These are fairly modest adjustments but they are consistent with what I put on the record at the meeting last week. I think the most significant point that I would like to make is on page 6, which would be to request the addition of a definition of "distributed generation," so that we would always have that as a basis for discussing distributive generation going forward.

Chair Kirkpatrick:

Are there any questions from the Committee about the definitions? I think that is your key point. Can you read your definition, because only I have a copy.

Rose McKinney-James:

Distributed generation shall refer to electricity generated from "renewable energy" as defined in *Nevada Revised Statutes* (NRS)

704.7811 and sited at a customer's premise and connected on the customer's side of the electricity meter, providing electric energy primarily to offset customer load on that site with periodic excess generation exported to the grid under applicable net metering tariffs.

Chair Kirkpatrick:

Is that definition consistent with someone else's or is it unique to Nevada?

Rose McKinney-James:

It is not unique to Nevada and would be a definition, generically, to describe distributive generation, but we do not have it in statute at the present time. We did attempt, prior to the session, to gain some consensus in terms of a definition. We were not able to come to an agreement, so this is what we are bringing forward from The Solar Alliance.

Chair Kirkpatrick:

But this is not language from another state?

Rose McKinney-James:

I would have to check because it may well be. I will let you know for sure.

Chair Kirkpatrick:

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

Rose McKinney-James:

I apologize that I do not have copies for everyone.

Chair Kirkpatrick:

I will make copies for everybody and if everyone could at least sign in then I will make sure you get copies of everything we have here. Are there any other pieces that you are concerned about? I thought you were really concerned about the 10-kilowatts.

Rose McKinney-James:

Yes, that is a repeat of the discussion we had wherein we look at the sizing of eligibility for participation in the abatements.

Chair Kirkpatrick:

I will say that I have looked at all the states and that is pretty low compared to what some of the other states have. What I saw in California, New Mexico, and Arizona was consistent. If you went larger, for instance a 50-kilowatt

system, then you could get a production rate reduction. I am wondering where you would get the smaller amount.

Rose McKinney-James:

Currently, it looks as if it requires at least 10 kilowatts. You are saying that is consistent in other states?

Chair Kirkpatrick:

And that is currently what we have in our statutes. Am I not looking in the right place?

Rose McKinney-James:

I do not know.

Chair Kirkpatrick:

After you look at all those numbers, sometimes they run together. I did not see any smaller numbers is what I am saying. I have seen much bigger numbers for their abatements.

Rose McKinney-James:

I believe that the 10 kilowatt number relates to an effort to distinguish between the smaller residential applications versus what will likely be larger commercial and industrial applications. We had that discussion in an effort to figure out what exactly makes sense for the average residential customer versus a commercial customer. I may have to defer to others that may have more experience with this and help both of us figure it out, because I do not know.

Chair Kirkpatrick:

Okay. Is there anything else?

Rose McKinney-James:

Not at this time.

Judy Stokey, Director, Government Affairs, NV Energy, Las Vegas, Nevada:

I emailed both you and Mr. Conklin our proposed amendment ([Exhibit F](#)) in regard to the decoupling language that we had discussed at the last meeting. I also attached a list of things I thought might be issues. Did you want me to go through that specifically?

Chair Kirkpatrick:

Can you please go through it so that everyone knows what we are talking about?

Judy Stokey:

I will start with the Energy Commission that we had mentioned before. Our preference would be to expand the Public Utilities Commission of Nevada (PUCN) rather than creating another entity, so I will not go through every single one of these. We are concerned about some of the overlap that we have seen in California, where we have the California Public Utilities Commission (CPUC) and a few others that we need to go through for different approvals and authorizations. There is a lot of overlap and confusion on where to go and how things get done.

On the energy efficiency programs, we want to be sure we are not competing; that we can work together so that the benefits are greater for the customers.

Number 6 allows for the abatements. We were not sure about limitations of those abatements and we are still researching some more on that. We want to make sure that the utility is eligible for the same abatements as the other people.

The Task Force responsibilities are being transferred to the Energy Commission and we want to be sure who is going to do what. We have some requirements that are still in this bill that are going to the Energy Commission and my understanding was that the Energy Commission would not be where the utility would go, it would be the PUCN. I wanted to make sure there was no overlap there.

Section 62 is on the decoupling, trying to narrow it and not have full decoupling, and I know we had discussed putting it into a study. We still would like to have this language which is in between our proposed amendment and the current language in the bill.

Section 27 indicates that the Energy Commission will establish a program to offset consumer utility costs. We do not think it is identified exactly how that would happen. I think it needs to be more identifiable as to how that will happen.

Assemblyman Christensen:

I think you said something about section 62 that sounded to me like you were talking about the area in section 28 with regard to the Commission.

Judy Stokey:

There were a lot of questions we had on the Energy Commission itself and who would do what and where the utility would go for approvals on certain things. Section 62 was in regard to decoupling language.

Assemblyman Christensen:

The point you were addressing before you got to section 62, what was that?

Judy Stokey:

Right before that I spoke about the Renewable Energy Task Force responsibilities.

Assemblyman Christensen:

That was it. What section were you addressing there?

Judy Stokey:

I do not have a section. I think it is in where we were talking about the Energy Commission.

Assemblyman Christensen:

So, it is just in general?

Judy Stokey:

Right.

Assemblyman Christensen:

Tell me again, please, what did you call that?

Judy Stokey:

The Renewable Energy Task Force. They have quite a few responsibilities that are going to be incorporated into the Energy Commission.

Chair Kirkpatrick:

Are there any questions from the Committee? I see none. Mr. Christensen, I will send you the email I received from Ms. Stokey.

Joseph Johnson, representing the Toiyabe Chapter of the Sierra Club, Reno, Nevada:

My comments refer back to what The Solar Alliance had to say rather than Ms. Stokey. Historically, there was a cap to the net metering at 10 kilowatts and there is a very small separation between net metering which now is much larger and the utility scale projects that you are addressing in this abatement.

Also, I have a question about the new definition of distributive generation. We have in statute a "customer generator" which is eligible for the 2.4 multiplier and there is at least one venture, the Barrick Goldstrike Shelf venture, which claims a customer generator multiplier to their photovoltaic system which probably would not qualify under the new definition of distributive generation. I

do not know if that is intentional but "customer generator" is in the statute. Distributive generation definitely needs a definition.

Chair Kirkpatrick:

I do not know the answer so I will look it up and try to get you the answer. We can move on to abatements because I know that is what you are all here for anyway.

Those who would like to come to the table, let me tell you where I am trying to go with abatements, so if you want to give me any input, I am all for it. Trying to take money from the counties would be a big fight. That is not going anywhere, anytime soon. I do not know if there is another way and I tried to figure it out and tried to get numbers. The state gets a lot of money from property tax on the short term, but for long term it would taper off as soon as the abatements went away. That money belongs to the counties and not the state. We would have to make large changes in our statutes in order to get any of the money. The Local School Support Tax (LSST) has to be a big concern because the state would have to go back and replace those funds. I have staff running me some numbers on net proceeds. I am not sure how that would work in the long term. The goal is to get power bills down and if you can come up with some ideas I would not worry if you got an abatement for 100 years. My goal is to make sure that power bills are reduced in a short time frame and that we change the mind-set of Nevadans.

I have looked at net metering and I should have some numbers on that. I looked at the property tax, I looked at the excise tax. We met with the Senate today to work together so that we do not do this at the end of session in a mad scramble because that would be bad public policy.

Would you be amenable to the proposition that you would not receive the abatement next year unless you produced those jobs? The numbers need to mean something. If you have any other suggestions, I would appreciate it. When I researched abatements on the Internet, the first 25 were from Nevada. I compared some of the other taxes. There was some miscommunication about my wanting to get 39 cents and 55 cents as a solar tax. That is not true; it is one third of a cent, not 39 cents.

I understand you do not want to tie job numbers to the abatements.

Tom Clark, representing Cogentrix and Sempra Generation, Carson City, Nevada:

On the job numbers to the abatements, are you saying that if we go to the Nevada Commission on Economic Development and we say we estimate that

these are the number of jobs that we are going to create for Nevada, short term and long term, and therefore we qualify for the abatements based on that? If our estimates are that we are going to do a certain thing to acquire those abatements, I think you should hold our feet to the fire and say this is what you told us you would do, and this is what you need to do to qualify for the abatement. We do not have an issue with that. We are making a contract with the state saying that we will do certain things to receive certain incentives.

Alfredo Alonso, representing Ausra, Inc., Reno, Nevada:

We have discussed this and the dilemma is a very difficult one. On the one hand we understand where the state is trying to get, but if you include the LSST both on the sales tax and on the property tax, that diminishes that number significantly. With that number below the 50 percent we have now, the question to you then, is with an additional tax, will that lower it further to the point that it makes no sense to come here? That is the concern everybody has. I think you still get a significant amount of money. Jim Baak did the studies that you heard about this morning, and I can have him come up and go through that again for the committee if it helps or if you have specific questions. Again, as you know, on the property side the concern that we have is that you have county money, so how do you dislodge the two other than to simply say the abatement is "x," whatever that ends up being, and living with that. The job side of it is a concern because, again, we do not know if there will be enough trained individuals who can take those jobs. There has to be some methodology in which you can say to a company if those individuals do not exist, then you can go outside of the state. We have had that on other projects and I think it is the only way you can do this in this fledgling industry.

Again, our concern overall is the job side of it. Other than the construction side and the ultimate creation of this industry, the jobs are minimal. I think that is a good thing with respect to the amount of capital investment per job once that plant is actually working. We submitted some of our comments on some of the issues that are of concern to us. We still believe that the 75 percent is the threshold that gets you there. As you know, the existing numbers, with respect to those abatements, keep us competitive, but do not take us above that. It places us in a position where we can play, but I do not think we can dominate. That is the concern of the industry. You and I have talked about how to balance those two.

Chair Kirkpatrick:

What kind of brownie points do we get for our regulatory process being fast? I went on the California docket and I was tracking a few of the projects to see where they are at. I also checked the Utah docket. It is taking a long, long time. We are more advanced in Nevada on how we can get through that

process. So, does that not weigh in on the abatement part? Time costs companies a lot of money.

Alfredo Alonso:

It does and there are people behind me that are a lot smarter than I am on this issue; however, I think I can tell you that what I am hearing across the board is there are individuals that say they will go to Arizona because it is faster in some cases. It depends on the company. While we may have some areas where we can excel, we have transmission issues. Other states have more feeder lines at this point or more accessibility. That all has to play into the mix. At the end of the day it is about financing.

Assemblyman Conklin:

Is there a trade-off between the production fee and the abatement? In other words, the production fee is small. The abatement is an up-front opportunity cost. How does the industry view the production fee versus the abatement?

Joshua Bar-Lev, Vice President, Regulatory Affairs, BrightSource Energy, Oakland, California:

We are first up in the California regulatory system. It has not been easy. I completely agree with you, but a lot of the difficulties are because of the Bureau of Land Management (BLM). I would expect that same problem would exist in any state. The other problem is transmission. It is very difficult for the entire west to get its act together. I think there is some legislation now that is going to assist. It is hard to tell what the California problem or the Arizona problem is. On the production fee issue, to have a production fee imposed on renewable energy just seems wrong. It is the very thing that you want to be encouraging. To impose a fee on that seems to us to be almost discriminatory as to renewable energy.

Assemblyman Conklin:

I feel the same way about subsidies on coal and gas.

Joshua Bar-Lev:

All renewable technology, particularly solar, is capital intensive. You put all this investment in up front and then you end up being taxed much more heavily than fossil fuel.

Chair Kirkpatrick:

I did go to the California docket and saw that as of January 15th you had made it to a certain point and then every six weeks after that you had to submit your paperwork to keep going. I think the way it was listed, it identified the project as the Ivanpah system. Nevada has a piece of that Ivanpah system, correct?

Joshua Bar-Lev:

Yes. I was speaking only to the California side.

Chair Kirkpatrick:

So there would be some nexus to Nevada as you made your way, correct?

Joshua Bar-Lev:

Absolutely.

Chair Kirkpatrick:

I am not picking on you, but I have done the research and I have tried to figure out whether you would come regardless of whether or not you got the abatements. Mr. Clark received my wrath because he said he was going to Arizona. I am trying not to do that, but when I trace back that one project it was very expensive and it seemed frustrating because of all the various studies you had to go through. I did the same thing for Utah with geothermal. They also have quite a bit of process. My thinking with the Energy Commission was we could streamline things. When you do get those federal permits it then takes, in California, another two to three years to get through their state process. In Nevada, if you could get through it in one year, that would be a huge savings.

Joshua Bar-Lev:

But a lot of the processes in California are parallel. I am not sure of the source of your information on why it would be sequential, but it is a long process.

Chair Kirkpatrick:

All I did was just follow the process through the individual dockets.

Joshua Bar-Lev:

It is hard to tell right now, since we are the very first one out. A lot of people are learning and a lot of criteria and standards are being set through our project. I would expect in the future, and the Governor of California has made this a very high priority, not to repeat the mistakes and that the length of time related to Ivanpah would be shortened. We expect that there will be major improvement. I think that is a tremendous opportunity for the State of Nevada to show the whole southwest, in terms of the tax abatements, regulatory process, transmission, and land, how it can be done in a way to create an entire green economy. The entire West is struggling with how to do it. Nevada could be the model for every other state and in that process, also create tremendous amounts of economic benefits to its citizens. I would ask that when you look at the California process, recognize this is a part of our application for construction. It is called socio-economics. You will see in this that we are

saying we expect to get most of our labor from Las Vegas and most of the benefits will actually go to Nevada. We break down all of our employees by trade. We would expect that to be repeated again and again once we are here.

Chair Kirkpatrick:

I am not debating that. There is some economic benefit, but when we give you the sales and use tax, minus the LSST, for four or five years the amount of money that is returned to the economy is a wash. I understand the property tax is more than what the counties were getting. That is the risk that you took and that is your benefit. I understand that. Initially the jobs will be a benefit, but still it is a wash because we gave you the entire sales tax abatement. Where does the Nevada utility ratepayer get their benefit? I know it sounds simple, but it is very complicated. I did run initial numbers and it tends to be a wash.

Joshua Bar-Lev:

The one disagreement I have and I heard it from Assemblyman Conklin this morning, is that these are short lived projects. I do not understand that. If Ivanpah, as an example, is going to be constructing for the next three years, even if it is just over the border, and then if our Coyote Springs project goes right after that, that does not even use up all the contracts that we have right now with Southern California Edison and Pacific Gas & Electric which is 2,200 megawatts. If other companies come in because of your favorable conditions, then I can see construction going on for years and years. When one puts into context what is being set up at the national level, with a potential national Renewable Portfolio Standard (RPS), California alone is 60,000 megawatts. If it has to produce 33 percent of that from renewables there is a huge market. If you then take advantage of Nevada's incredibly good position on transmission, then potentially Nevada could be providing solar energy to major load centers throughout the West.

I do not see this as a short-lived benefit. I see this as years and years of construction with a very trained workforce that can move from site to site as we build out.

Chair Kirkpatrick:

I am not disagreeing with you. Perhaps I am not saying it right. I will try it this way, let us say you have 150 pipefitters, the average wage is \$50. Those dollars that those workers generate are going to be spent on goods and services within our state and that is comparable to the sales tax abatements that the state is giving you. It is a wash. If we give you the property tax, the county benefits, but the state is still picking up that one piece. That is as simple as I can state it. The state is the one that has to make up the difference for education, if nothing else. You make a good point that you do not bring a lot of

traffic, because they are good short-term jobs, however, the state still has to make up that portion that we abated.

Joshua Bar-Lev:

I think I understand your point. I do not have the math to refute what you are saying. I think you are saying that even if these construction workers continue to be employed in project after project, and they will pay sales tax on all they buy, under this sales tax abatement it becomes a wash and the state does not get net sales tax. I do not know the math well enough to be able to answer you. Perhaps Mr. Baak knows the answer to that.

Chair Kirkpatrick:

I really tried to do my homework on this to understand it. We have not had time to look at the economic impact. Perhaps there is something I am not seeing.

Holly D. Gordon, Vice President, Legislative & Regulatory Affairs, Ausra, Inc., and the Large Scale Solar Association, Palo Alto, California:

One of the questions you asked earlier concerned the benefit to the ratepayer. Solar capital costs are so intensive up front, because the fuel is free, so the cost of our electricity is predictable. The cost of natural gas is not predictable. For the ratepayer, they understand what the cost of that electricity is going to be. We have all seen the volatility of natural gas in the last year.

Chair Kirkpatrick:

So, our utility company within our state would have to buy the solar back to lower our rates, correct?

Holly D. Gordon:

If NV Energy were to be the off-taker for the electricity, they would enter into a power purchase agreement with the developer and the prices for that electricity would be set up front in the agreement.

Chair Kirkpatrick:

The ratepayers are paying twice because we are giving our tax dollars away and then paying NV Energy for the energy.

Holly D. Gordon:

I see what you are saying, but if we have a tax abatement that would help us lower the cost that we would charge to NV Energy for the electricity.

Chair Kirkpatrick:

So, if it is currently 12 cents, would it end up being maybe 8 cents? How does that work?

Joshua Bar-Lev:

Between the two of them, the sales tax and property taxes, it would probably be about 2 cents per kilowatt hour.

Tom Clark:

We have talked a lot about how we need to let Nevadans know what they are getting by allowing us to have the 50 percent abatement. When you look at the numbers, the counties and the state are making a profit on these projects. We do not require a lot of services so you do not need to repave roads or build schools or do things when these jobs are up and running. So, we do pay some property tax and sales tax. If you talk to the people in Boulder City, they have a different view of all this because Boulder owns the land that we lease. We make a lease payment to them in addition to property taxes. Our budget last year included \$47,000 in charitable giving. They understand that there is a positive to these abatements. It may not be on their electric bill, but there is a positive for these kinds of projects being in their community. I think it is incumbent on us to educate Nevadans as to the benefit that we bring to this state. It is not just on your electric bill, but it is across the board, being good corporate neighbors, with good paying jobs.

Joshua Bar-Lev:

May I just say one other thing about the utilities? We are at a phase in our industry where the technologies are competing with each other and the utilities are not yet ready to say let us switch from power purchase to rate basing. I think that will come very soon. When they do rate base it, I think there will be benefits to the ratepayers in the form of a diminishing rate base and in the form of very stable rates. There have been a lot of studies that show that renewable energy acts as a hedge against the volatility of fossil fuel prices.

Jim Baak, The Vote Solar Initiative, San Francisco, California:

I would like to address your concern about the sales tax being a wash. The other thing to consider is there are, in addition to the direct jobs that are employed during the construction and operation and maintenance of the plant, other jobs that are indirectly created. These are other industry sector jobs that are created or supported by the development of that plant. Even though you might have one construction worker or one plant maintenance worker and you are looking at that salary, there are ripple effects through the economy because the expenditure from that plant generates supporting industry jobs and

generates additional spending throughout the economy that creates those induced jobs as well.

Chair Kirkpatrick:

I know it is all about a model. You can put whatever numbers that you want to in there, to produce whatever number that you want. It is all in how you ask the question. What would those other types of jobs be? Let me give you an example. If my husband were to have one of those jobs, are you talking about if we go out to eat, that counts as a job because now there is a waitress and one food distributor person? I know that your model is unique to Nevada. Because it is new, what is the trickle-down effect?

Jim Baak:

In terms of the direct jobs, in addition to the plant workers there are other jobs in industries that directly supply that plant. In construction, for instance, you would have the manufacturing of glass, which typically will be close to where the development is taking place because you do not want to ship glass. They are considered direct jobs that are related to the construction of that plant. All of the manufacturing jobs that would be local would be associated with that plant. There would be other industries supporting such as consultants, engineers, and bankers.

The indirect jobs would be when you have a concrete supplier, the raw materials that go into that concrete supplier. He is ordering more concrete so those are the kinds of ripple effects that are the indirect jobs throughout the rest of the economy. The induced jobs are the kinds that are further out. That means that you now have these construction workers or plant employees who have more money in their pockets, they are going out and getting services from restaurants and that sort of thing. Those are the induced jobs. The greatest impact comes from the direct jobs followed by the indirect jobs and thirdly, the induced jobs.

Chair Kirkpatrick:

Currently, within the bill it says that 30 percent of the materials have to be manufactured in Nevada. I know that is not very clear. We do not want to have a lot of these materials shipped in. This idea came from the LEED language which stated you needed to purchase your materials within 500 miles of the project. How do we guarantee that some of that glass manufacturing comes to Nevada? What is the reality of that happening? An example might be, when they did the CityCenter project they were shipping in their concrete from Japan for a little while because it was a certain kind of grade that they needed. They ended up putting a batch plant on their own facility. That took some time and in the meantime we lost a lot of that revenue to our state. It

never came back into our economy. Once they figured out it was expensive to put it on a container ship, it made more sense to have it done locally.

Jim Baak:

Right now the solar industry is very young. Other than the solar electric generating systems in southern California, the Nevada Solar One plant, and a handful of large scale photovoltaic (PV) facilities, there is not a lot of large scale solar that is being built and is operational. There are a lot of contracts in California and in other places for power. As they work through that process, they will need to get suppliers for that. The industry is really developing. There is a lot of activity going on right now in Europe. One of the major suppliers of the tubes that are used in the parabolic trough technology is Schott Solar. I believe they have a facility now somewhere in New Mexico or on the East Coast, but they are the only supplier right now of those tubes. The ability to support the development of this industry will require more manufacturing. If you have a significant enough renewable portfolio standard that is going to encourage the development of these large scale solar plants, it will attract that manufacturing. These manufacturing jobs are not included in the study that I presented this morning. Those will be significant additional jobs and benefits that accrue to the state for developing that.

There is the real opportunity for ensuring that if you have these policies that support large scale solar development you will attract the manufacturing. It will be close to most of where the development will be.

Tom Clark:

I think about a week and a half ago I had Goldman Sachs out, who is my client and is the parent company of Cogentrix. When we had dinner that evening I learned that Goldman Sachs is also a big shareholder in First Solar. First Solar is the company in Arizona that supplied Sempra with all of their thin solar panels. They are looking at Nevada as a very positive place because when we expand that facility by 50 megawatts you are looking at over one million panels. If other projects like that are located in the region they are going to have to move closer to their supplier because Wall Street will tell them to. They will say that you have a responsibility to the shareholders of the parent company, which is the bank, to do this in a more price-effective manner. We will get there and these companies will come here.

I also want to look at how we can grow the Nevada model too. There are people in their garages working on this technology. They are looking to where they will find their market place as well. We hope that Nevada is that place.

Chair Kirkpatrick:

I have one more question on my excise tax. I did the numbers and if you take the Coyote Springs project, on 40 megawatts the tax would be \$1,600 per year. That is peanuts. I offered to put it in statute that when you signed your Memorandum of Understanding for your abatement, that would be the rate that you got. There would be some type of guarantee that in the future it would not be raised until your project was done. Going back to that, I am trying to understand how it becomes a problem when it is such a small number, unless, of course, at the end, it is a bigger number. That is why I am trying to weigh whether it is worth taking the fight to the county and take 10 percent of their money and get all of my money up front and not have a risk.

Tom Clark:

There are two points to that. One is it sounds like a big red flag to the rest of the country if we start taxing renewable energy. The second part is because the number is minimal my clients are concerned that it will not fund the office enough to accomplish the goals that you have set forth. What if the tax is established and it needs to be raised to meet the objectives? We all know we have done this a long time. When you put in a tax, it only goes up, it never goes away. That is why I threw out the property tax idea. It is a more regular level of income, it is a check that we are currently writing, and it could be used as a revenue source in lieu of the excise tax.

Chair Kirkpatrick:

If you can get all the county commissioners across the state to sign on, I am sure I could get the votes.

Assemblyman Christensen:

As I sit here and try to understand this topic, I am always looking at where are we now and how do we bridge the gap to where we want to go. With the five of you I am sure you will be able to help me understand. First, regarding the land, I am curious from our presentation this morning. We are looking at 2,000 megawatts and we are not quite to 200 megawatts right now, right?

Jim Baak:

Right now we are at 64 megawatts with Nevada Solar One and 14 megawatts for Nellis Air Force Base, and then there are some additional small scale solar projects. I think it is less than 100 megawatts total. I do not have the exact figure.

Assemblyman Christensen:

So, clearly we have a way to go. One of my questions is in regards to land use because I know that these installations are intensive on land use. We have a lot

of land here in Nevada, but the land that we have is controlled by the federal government. For the installations that we have now, what percentage of the land is on private land and are we already using federal land? I am trying to separate out how much land is private and how much is on federal land.

Joshua Bar-Lev:

Until recently when we just negotiated a land deal for Coyote Springs, all the applications we have made are on BLM land—Mormon Mesa, Jean Lake, and other places like that. Virtually every one that I am aware of is doing the same thing. The BLM land is out there and it is in a great location for installations. You can put about 100 megawatts per square mile. It is a rule of thumb. All of the technologies have different needs for land.

Assemblyman Christensen:

Okay. So, if we are looking at a six-year window on these solar projects or to be able to get to the 2,000 megawatts, dealing with the federal government tends to be lengthy process. My understanding is that it takes about five years to be able to work out a land agreement with the BLM.

Joshua Bar-Lev:

I do not think it is that long and I think it will get much shorter over time. Senator Reid has proposed a solar reserve bill that is being considered right now in the Congress. The BLM is showing every sign of trying to figure out how to staff properly and shorten the process. Even now, which is at its slowest because we are just learning, it is probably a two-to-three- year process.

Assemblyman Christensen:

What role do we see the Energy Commission playing?

Tom Clark:

I think what we see this entity doing would be helping through that regulatory process especially if you are a new company that wants to develop in the state. It is no surprise that the three big projects that have been built in southern Nevada are either on government controlled land that they leased to a private developer or on the Nellis Air Force Base. In Boulder City they have already gone through the environmental processes necessary. My clients did not have to go through that process. That was on the Sempra side. On the Cogentrix side we have six existing BLM leases in the southern part of the state and we have been going through that process now for over a year. It is another of those ancillary benefits. We have spent a little over \$2 million in environmental scientists and others to help us work through those federal programs. The process can be lengthy. Hopefully the federal government will allow us to go through this system considerably more quickly so that we can get these

projects up and running. I think you will see that the projects that are in development are looking at either private land or land where you have a local government that controls the land and is looking to lease it. Those are the projects you will see first. After that will be the BLM projects.

Joshua Bar-Lev:

May I just add that one of the things that has happened in California that we are learning from is the jurisdiction over various parts of these projects has been split. You go to the California Energy Commission for part, you go to the California Public Utilities Commission for another part, you go to the California Independent System Operator (ISO) for another part, and you go to the California Fish and Game for another part. Whatever solution you come up with here we just hope that if Nevada is to become the hub, we have clarity on who has the jurisdiction to see what their responsibilities are because I think that has been a major learning process in California.

Assemblyman Christensen:

And it is an obstacle and a nightmare. Dealing with government and even being in government is a challenge. I guess this statement is more to my colleagues sitting up here with me, or all of us here in this room. If we are trying to make Nevada "the" place to come to, and that is the whole purpose of this Committee, I would like to see us create rules and policies that are going to make that happen. We want to make sure that if the Commission's purpose is to streamline the process that we figure out how it is going to do that so that it is not just these enormous players that get to dominate this market. Nevada has always had that small, entrepreneurial spirit with the first gamers who came here, the first miners, and the fur trappers before that, et cetera. Then they became players. I guess that answers my question.

Assemblyman Conklin:

I still come back to the same issue I had in this morning's presentation. That is the fact that like much of what has gone on in southern Nevada for many years, the working portion of this, the real massive economic driver of this, happens early on in the project and it is temporary. There is a sustainable portion that will last, but it is not the economic driver portion of the business. We need to get our hands around how we can best benefit the state. If you bring on three construction guys and that generates another job in the community, that job is just as transient as the construction jobs might be. If you look at the carnage that is the Las Vegas economy right now, you wonder if it is a good thing for us to be considering something that is as transient as the construction industry has been. We would really like to have our hands around something that is far more long term and high in job growth that is permanent.

That is not really the industry that we are talking about. We just need to do a better job of understanding what we are going to do for our citizens.

Michael Alastuey, representing Applied Analysis, Las Vegas, Nevada:

I have some response to that. I appreciate the continuation of the discussion earlier. Getting back to the point that was raised earlier, under certain scenarios the sum of these abatements might actually equal, if you will, the sum of the additional tax revenues that might be gained at some stage. There are two ways to look at this. First, if you look at each plant, if there was simply one major plant open on a stand alone basis, as we discussed this morning and as Mr. Conklin reiterated, there is a significant construction period in terms of jobs followed by a more labor efficient period where the benefit takes place in the long term.

The sales tax driver of these particular plants occurs during the construction phase. That is when 80 percent, give or take, of the value is put into place in terms of taxable, tangible property that is subject to sales tax at whatever abatement level you may elect to provide. This is followed by a depreciation period in which not only does the impact of the abatement go away but it begs the question, is that really an abatement or is it an investment that would have been entirely foregone if it were not for the availability of the abatement? That personal property base then gets depreciated according to schedules promulgated by the Nevada Department of Taxation.

So the impact of abatements is in the forward period, and you may argue that it is a wash, but the benefit, long term, with a relative light social footprint in terms of public costs, infrastructure, et cetera, follows that. That is why these projects are relatively unique in a fiscal impact. Should you elect to take a further step and in effect create an incentive for an industry, what you are talking about is a stacking, or a continuum of projects. Construction phase at first, operation phase to follow, and you could even model the things. Our construction workforce may be relatively constant over time. Therefore the social footprint may be constant over time in terms of need for infrastructure, public services, et cetera. The base of capital investment that continues to foster energy independence as a matter of policy and as a matter of national and global economics is, in effect, gained with a relatively small labor force in the operation phase and a small social footprint. So the modeling of this particular phenomenon could be somewhat different. The wash give-and-take during a certain period may in fact be a reality, but you have to balance that against the various components that you administer from this building. I cannot think of another industry where the capital investment is followed by a period where the benefit is gained with a relatively passive effort. It is not like building a hotel or something of that nature. I submit that the model has two parts to it.

Assemblyman Conklin:

Have you got some airtight philosophy of how we can adequately and accurately stack these so that we get the benefit for a long period of time and it is consistent?

Michael Alastuey:

Obviously you have industry representatives that are very enthusiastic about accelerating the process as quickly as possible. I think you are asking is if there an ideal model at which everything would be optimized. There may be in some parallel universe. The notion is that you have a vigorous private sector very anxious to get going. It is your responsibility, in terms of policy, to put together the statutes to make that work.

Assemblyman Conklin:

Does it not make you wonder why they are so eager to get going? There must be something good going on.

Michael Alastuey:

I think there are a number of bills that make everybody eager.

Jim Baak:

May I address Assemblyman Conklin's comments? As the other numbers guy, I just wanted to add that in terms of the benefits, the study that I have modeled is 2,000 megawatts of solar potential. The actual potential for Nevada is significantly greater than that. The potential need, if you look at the RPS requirements in surrounding states, is pretty great and it is growing. There are bills to increase the RPS in California, and there is desire to increase it in Arizona. There is going to be a lot of solar development happening and it will happen in the desert southwest and we think that Nevada can share in that tremendous potential. I think that will create a long term, sustained construction period. This will not be for the six years that are modeled in my study. Those are modest compared to what the potential is and what the need is and what the nation is driving towards. With the transmission plans that Senator Reid and other federal legislators are looking at, it looks as though there is great potential for large scale transmission lines to carry the solar power outside of Nevada into other places, so that you actually have loads that are peaking in the east earlier when the sun is just peaking in the west. You could have the potential of exporting this power east as well with this new transmission.

We really think there is tremendous potential here. We think that the construction jobs will be sustained and as to the actual economic benefits, if you look at the accumulated earnings that I presented, roughly half of the

accumulated earnings over the \$2.5 billion over the life of the plants accrue during the operation and maintenance phase and not just the construction phase. About 40 percent of the nearly \$11 billion in economic output occurs over that operation and maintenance phase as well.

Chair Kirkpatrick:

I am conservative. Would it be your intent to come in and get an abatement for your Ivanpah project and then get an abatement for your Coyote Springs project, and then another abatement for something else? If we are constantly having these new abatements come onboard and even if yours go away in five years, somebody else would be coming in. It could be a long time and we are being asked to take a 25-year risk. If we could take the county's money we could get the money up front and then I would not have to worry about if the technology changed in 20 years. Would that be your intent or would you have a problem with legislation that said you could get only one abatement for the life of the project?

Joshua Bar-Lev:

First of all, Ivanpah is not going to be making a claim for a Nevada abatement at all. It is located in California. It already has a property tax abatement, or exemption as it is called in California. Ivanpah will just benefit employees who are coming from Las Vegas.

Chair Kirkpatrick:

Okay. Could I say that you could only get one lifetime abatement and that would be okay with your company? What I do not want to happen is for companies to come in and get an abatement for each one of their projects. Has anyone thought about that?

Holly D. Gordon:

I want to clarify your question. Are you asking if BrightSource or Ausra were going to build three different projects in three distinct locations would we be asking for abatements on each of those projects?

Chair Kirkpatrick:

Yes.

Holly D. Gordon:

Yes, we would. The abatements expire within each project. You can only take the sales tax abatement for the first several years and then it would end. It is the same with property tax. We would anticipate that the projects would last longer than the property tax abatement would last.

Chair Kirkpatrick:

I can see people coming to our state all getting the sales and use tax abatement and the state still having to make up that difference. You could stagger them so that you would never have to pay sales and use tax.

Holly D. Gordon:

I do not know how you would stagger them so that you would never pay sales and use tax. It would be applicable to each individual project. You would always have to pay. If it were a 75 percent property tax abatement you would always be paying the minimum 25 percent for the first 20 years for instance.

Chair Kirkpatrick:

To the county.

Holly D. Gordon:

If the plant would last for 30 or 40 years, you would be paying 100 percent after those first 20 years.

Chair Kirkpatrick:

If you were trying to build your own transmission, would it be possible to come in and have three different phases of your project and you would get an abatement for each phase?

Holly D. Gordon:

That was a different question than I was answering earlier. I was answering if we built three different projects in three different locations. Are you asking if you build a 500-megawatt project and then added on another 100 megawatts to the same project?

Chair Kirkpatrick:

Either way. I am curious.

Tom Clark:

I think that my client has a very good example of what you are getting at. We came in and built the original 10 megawatt of solar photovoltaic in Boulder City, for a couple of reasons. We got the land at a reasonable price and we wanted to test the technology. Now that the technology has proven itself, we have gone back to the Nevada Commission on Economic Development and applied for and received abatements for our next expansion of 50 megawatts, if we should desire to build that. The abatements and the incentives that we got on the first project will expire sooner than the abatements and incentives will expire on the second part of the project. We hope to fill that whole valley with solar panels

at some point. At each phase of the project we would come in and meet the criteria of the state to allow for the different abatements that are available.

I appreciate the question because you are demonstrating that we have a really big concept of re-multiplying these projects. When we are done with our final phase we need to go back to the first phase and reinstall new mirrors. There is a constant life cycle to these projects.

Chair Kirkpatrick:

We could probably have this debate all night and I have given my best starting points. On Wednesday you do not want me to present only my ideas to the Committee to get it out of Committee. The bottom line is it has to be out of Committee on Friday and rereferred to Ways and Means so that we have more time to work on it. I need to know where you want to be. I have asked three times for your suggestions in the last 30 days. I do not know how you are all willing to come to the table. I am more than willing to work with you. All of you will have to agree on something. There are a few Senate bills that might work with this bill, but I do not want to be working on this on May 25th. We have been down that road in this building. We paid a dear price on green building because we just let it happen, so I would like us all to work together now so that by May 1st both sides can meet in the middle.

Tom Clark:

We are committed to fulfilling your request.

Chair Kirkpatrick:

I will make copies for everyone who signed in tonight and I will work with Mr. Christensen and Mr. Conklin. We need your suggestions so that we can develop a mock-up for Wednesday for everyone on the Committee to review.

[The meeting was adjourned at 7:59 p.m.]

RESPECTFULLY SUBMITTED:

Patricia Blackburn
Committee Secretary

APPROVED BY:

Assemblywoman Marilyn Kirkpatrick, Vice Chair

DATE: _____

EXHIBITS

Committee Name: Subcommittee on Commerce and Labor

Date: April 6, 2009

Time of Meeting: 6:21 p.m.

Bill	Exhibit	Witness / Agency	Description
	A		Agenda
	B		Attendance Roster
A.B.522	C	Ernest Nielson	Suggested revisions
A.B.522	D	Dylan T. Shaver	Proposed amendment
A.B.522	E	Rose McKinney-James	Written testimony
A.B.522	F	Judy Stokey	Proposed amendment