# MINUTES OF THE
# SENATE COMMITTEE ON COMMERCE, LABOR AND ENERGY

## Seventy-ninth Session
## May 26, 2017

The Senate Committee on Commerce, Labor and Energy was called to order by Chair Kelvin Atkinson at 8:34 a.m. on Friday, May 26, 2017, in Room 2135 of the Legislative Building, Carson City, Nevada. The meeting was videoconferenced to Room 4412E of the Grant Sawyer State Office Building, 555 East Washington Avenue, Las Vegas, Nevada. Exhibit A is the Agenda. Exhibit B is the Attendance Roster. All exhibits are available and on file in the Research Library of the Legislative Counsel Bureau.

**COMMITTEE MEMBERS PRESENT:**

Senator Kelvin Atkinson, Chair
Senator Pat Spearman, Vice Chair
Senator Nicole J. Cannizzaro
Senator Yvanna D. Cancela
Senator Joseph P. Hardy
Senator James A. Settelmeyer
Senator Heidi S. Gansert

**GUEST LEGISLATORS PRESENT:**

Assemblyman Chris Brooks, Assembly District No. 10

**STAFF MEMBERS PRESENT:**

Marji Paslov Thomas, Policy Analyst
Bryan Fernley, Counsel
Lynn Hendricks, Committee Secretary

**OTHERS PRESENT:**

Robert G. Johnston, Western Resource Advocates
Dylan Sullivan, Natural Resources Defense Council
Ernie Adler, International Brotherhood of Electrical Workers Local 1245
Tom Polikalas
Joe Greco, Senior Vice President, Terra-Gen Operating Company, LLC

Leonard B. Jackson, Director, Faith Organizing Alliance; Associate Minister, First African Methodist Episcopal Church
Jennifer Taylor, Clean Energy Project
Adam Green, Director of Development, SolarReserve
Linda Bullen, Eolus North America, Inc.
Rhonda Mills, Geothermal Energy Association
Judy Treichel, Executive Director, Nevada Nuclear Waste Task Force
Louise Helton, 1 Sun Solar Electric, LLC
Linda Nerstad
Rose McKinney-James, Bombard Electric, LLC; Valley Electric Association, Inc.
Richard Perkins, MGM Resorts International
Matthew DeFalco
Steven Horner
Dane Grover
Jesse Wadhams, Recurrent Energy, LLC
Jane Grossman
Mike Kelly, Chair, Nevada Democratic Veterans and Military Families Caucus
Juan Robledo, Chispa Nevada
Josh Hicks, First Solar
Jessica Ferrato, Solar Energy Industries Association
Kyle Davis, Interwest Energy Alliance
Elspeth Dimarzio Cordua, Sierra Club
Larry Fosgate, Clean Energy Project
Linda Saunders
Natalie Hernandez, Battle Born Progress
Andy Maggi, Executive Director, Nevada Conservation League
Lynn Lanier, Nevada Conservation League
Demi Falcon, Nevada Conservation League
Jessica Scott, Vote Solar
Jackie Stroud
Brian Beffort, Director, Toiyabe Chapter Sierra Club
Ken Evans, Uplift Foundation of Nevada
Virginia Valentine, President, Nevada Resort Association
Eric Dominguez, Caesars Entertainment
Erik Hansen, Wynn Resorts
Judy Stokey, NV Energy
Alfredo Alonso, Ormat Technologies

CHAIR ATKINSON:
I will open the hearing on Assembly Bill (A.B.) 206.

**ASSEMBLY BILL 206 (1st Reprint)**: Revises provisions relating to the renewable portfolio standard. (BDR 58-746)

ASSEMBLYMAN CHRIS BROOKS (Assembly District No. 10):
I am here to discuss A.B. 206, which boosts Nevada's current renewable portfolio standard (RPS), replacing the current benchmark for the State of 25 percent by 2025 with the goal of 50 percent by 2030. I have written testimony (Exhibit C) giving a brief overview of the need for this bill and its effect on Nevada's economy and environment.

Nevada's RPS requires an electric utility or other provider of electric service to generate or acquire renewable energy or save electricity in an amount that is not less than a specified percentage of the total amount of electricity sold by the utility to its retail customers during a calendar year. It was first introduced in 1997 with A.B. No. 366 of the 69th Session, which provided for 0.2 percent increments of solar energy to be included in the energy portfolio as part of utility restructuring. In 2001, the current format for aggressive RPS targets was outlined in A.B. No. 418 of the 71st Session and S.B. No. 372 of the 71st Session. This was revised in 2005 with A.B. No. 385 of the 73rd Session, and again in 2007 with S.B. No. 437 of the 74th Session. In 2009, the RPS was increased by A.B. No. 387 of the 75th Session, which also raised the solar carveout, requiring utilities to meet 6 percent of their portfolio requirement through solar energy.

Assembly Bill 206 revises the RPS for calendar year 2018 and each calendar year thereafter so that by calendar year 2030 and each year thereafter, each provider of electric service in the State will be required to generate, acquire or save electricity from renewable energy systems, efficiency measures or energy storage systems by a measure not less than 50 percent of the total amount of electricity sold by the provider to its retail customers during that calendar year.

As noted on page 2 of Exhibit C, clean energy is the best jobs multiplier of any industry listed. For every clean energy job, there is a 3.12 job multiplier in Nevada. That is the highest job multiplier of any of the industry sectors identified by the Governor's Office of Economic Development (GOED). The GOED indicates Nevada has room to grow. According to the GOED study, we

are 20 percent below where the Governor's Office feels we should be in clean energy jobs.

With regard to the Energy Choice Initiative, one of the main topics I heard discussed when I was advocating on behalf of this bill is the uncertainty associated with the Energy Choice Initiative and how it might affect the RPS. Let me quote from the language of the Energy Choice Initiative itself. In section 1, subsection 3, paragraph (c), it says:

> Nothing herein shall be construed to invalidate Nevada's public policies on renewable energy, energy efficiency and environmental protection or limit the Legislature's ability to impose such policies on participants in a competitive electricity market.

This makes it clear that the RPS was contemplated when the Energy Choice Initiative was proposed to the Nevada voters, and the Nevada voters overwhelmingly voted for it. In October 12, 2016, the Energy Choice Initiative and Clean Energy Project joined with Switch, Sands and MGM Resorts on a press release stating that one of the new principles the Energy Choice Initiative outlines is renewable energy. The press release further stated that Nevada should set a new long-term goal for achieving at least 80 percent clean energy by 2040 with interim milestones to steadily move toward cleaner energy. That is what we are trying to do with A.B. 206.

The issues of energy choice and an increased RPS are completely compatible. When you look at the arguments for and against the Energy Choice Initiative in the sample ballot, the argument for the Energy Choice Initiative says, "A yes vote on Question 3 means you support ... keeping Nevada's renewable energy portfolio standards in place, along with Nevada's other renewable policies." That was what the voters read when they went to the polls.

With regard to the popular support, in a poll from 2017, 84 percent of Nevadans supported an increase in the RPS. We have received several letters of support for A.B. 206, including letters from the Geothermal Energy Association, the large Solar Energy Industries Association, Levi Strauss, and many other businesses across Nevada.

ROBERT G. JOHNSTON (Western Resource Advocates):
I have a presentation (Exhibit D) regarding this bill. This presentation is quite lengthy, so I will just briefly touch on some of the highlights.

One of the benefits we expect from A.B. 206 is that it will diversify our energy supply portfolio. Page 12 of Exhibit D shows NV Energy's projected fuel mix under the current RPS. These numbers come from NV Energy's integrated resource plans filed in 2016. As you can see, we are currently at about 13.5 percent renewable. By 2030, we would be at 25.1 percent renewable and 63.9 percent natural gas. We are heavily dependent on natural gas generation now, and under current planning, we would still be very dependent on natural gas for power generation in 2030.

Page 13 of Exhibit D shows the estimated impact of going to 50 percent renewable by 2030. Under that standard, this bill would take us to 47.5 percent renewable and 41.5 percent natural gas. The change would not be abrupt, just a steady sustained transition away from reliance on natural gas and toward a greater reliance on renewable sources.

Page 15 of Exhibit D speaks to natural gas price volatility. The chart on this page is a 20-year history of natural gas prices from the U.S. Energy Information Administration (EIA). For the period from 1996 to 2016, the high price was $13.42 per million British thermal units (BTU) in October 2005, and the low was $1.73 per million BTUs in March 2016. In January 2017, the price was $3.30 per million BTUs; it has dropped since then. Page 16 of Exhibit D shows the impact of that on electricity rates. This is looking at the fuel costs only for natural gas-fired generation. When natural gas is $3, it costs about $22.50 per megawatt-hour (MWh). When natural gas is $6, the cost jumps up to $45 per MWh. The greatest risk Nevada ratepayers face today is the future trajectory of natural gas prices.

We see A.B. 206 as reducing our carbon emissions and thereby reducing our exposure to carbon price risk. In the chart on page 18 of Exhibit D, the dark red line shows projected emissions under current planning to comply with current RPS, and the lighter red line shows the projected emissions under A.B. 206. Our estimate is that going to a 50 percent RPS by 2030 would reduce carbon dioxide (CO2) emissions from power generation by NV Energy by over 3 million tons per year.

Page 19 of Exhibit D includes a quote from a paper titled "The Conservative Case for Carbon Dividends" that was published by the Climate Leadership Council. It is based on the belief that the most effective and efficient way to reduce CO2 emissions is a carbon tax, in this case starting at $40 per ton. To translate that into electricity prices, a $40 per ton tax on CO2 would add approximately $17.88 per MWh to the price of natural gas generation.

DYLAN SULLIVAN (Natural Resources Defense Council):
I am a senior scientist with the Natural Resources Defense Council.

I submitted two documents to the Committee. The first is our report titled "A Lot for a Little: Renewable Energy, Energy Efficiency a Good Investment for Nevada" (Exhibit E), which models the impact of a 50 percent RPS in Nevada. The second is a table (Exhibit F) showing restructured or deregulated states and each state's RPS.

One of the most important questions about this policy is its cost. We worked with ICF International to look at the impact of a 50 percent RPS in Nevada and compare it to the impact of the current RPS over time. We used standard EIA assumptions about what natural gas prices are going to be in the future. Our renewable energy price estimates are conservative because costs have been falling so much; we got those from the National Renewable Energy Laboratory.

That was our core policy case. We also ran that core policy case with high natural gas prices because Nevada is heavily dependent on natural gas power plants for electricity, so the impact of natural gas prices is very important for understanding potential costs of electricity.

Our results from this modeling exercise are shown in Table 3 on page 2 of Exhibit E. With our core policy case 2, we see cost impacts of 1 percent in 2025 and 2 percent in 2030. For perspective, that is about the cost of a cup of drip coffee per month on average Nevada electricity bills. If natural gas prices increase, the higher renewables, high energy efficiency future would save Nevadans money on their energy bills.

The conclusion of our modeling exercise, that A.B. 206 will cost a little or may save us money, might seem counterintuitive. However, it makes sense when you take into account the steep declines in the cost of renewables. The cost of

solar, for example, has declined in price 85 percent. Renewable energy, especially solar and wind, is very cheap right now.

The next question being asked is whether A.B. 206 conflicts with the Energy Choice Initiative. It is frustrating to hear choice proponents arguing this because the Energy Choice Initiative was described to voters as a way to get more renewable energy. The policy solution for how to do an RPS in an Energy Choice Initiative framework is straightforward. You just apply the RPS to all providers in that competitive market.

Exhibit F is a list of restructured states and their RPS policies. Every state that has restructured its electricity market has an RPS.

ASSEMBLYMAN BROOKS:
I have a handout (Exhibit G) describing in detail what each section of A.B. 206 does.

Section 2.1, subsection 2 defines which industries and providers would get the benefit of the RPS. We worked with quite a few folks to get the language of this right. It has been brought to my attention that this section might need some tweaking. Hopefully, I will get the opportunity to discuss that with you at a later date.

Section 2.2 of the bill has to do with energy storage. This provision is meant to encourage energy storage in the State by giving it a multiplier, which we have done in the past in the RPS to encourage specific technologies or applications. Energy storage is one of Nevada's biggest industries, with the largest battery factory in the world in this part of the State and the solar thermal storage project out by Tonopah. We are poised to be the leaders in that industry, and this is meant to encourage that. It is also meant to help the *Nevada Revised Statutes* (NRS) 704B customers comply with the RPS by using storage technologies on-site.

Section 2.2, subsection 2 is trying to make sure that we are actually getting the value of renewable energy input, whether it is physically connected or not, for the increased value of renewable energy output from an energy storage system.

Section 2.3 assigns an increased value to energy coming from geothermal systems. Our geothermal industry has done an amazing job of helping us reach

our portfolio goals over the years. As we get more and more market penetration and our RPS ramps up higher, we need to encourage storage and baseload energy so we do not find ourselves in a situation where we have an overabundance of cheap midday solar. This is meant to address that through portfolio compliance multipliers.

Section 2.4 of the bill describes how compliance with the RPS would be reported. Section 2.5 also covers which entities will be under the jurisdiction of the Public Utilities Commission of Nevada (PUCN).

Section 2.7 of A.B. 206 would be revised to include "any qualified energy storage system" as part of the existing definition of a "portfolio energy system or efficiency measure," again incorporating energy storage into our RPS.

Section 2.8 defines "provider of electric service" to exclude the State or an instrumentality of the State, a rural electric co-op, a municipal utility or a cooperative association. These entities would not be subject to the RPS until they exceed 1 million MWh. None of them are currently at that threshold. This provision gives them the opportunity to plan for growth. We worked closely with the Nevada Rural Electric Association, the Valley Electric Association, the Southern Nevada Water Authority and the Colorado River Commission of Nevada on that provision.

Section 2.9 changes the definition of a "renewable energy system." That speaks to some of the existing energy efficiency measures in place from large users and how they would help comply with the RPS.

Section 3 of A.B. 206 revises the RPS and lays out the incremental increases in the percentage of electricity to be produced by renewable resources. Section 3, subsection 2 defines how those percentages would be established, based on peak loads from the previous calendar year.

Section 4 of the bill discusses how energy efficiency measures could be used to achieve RPS compliance. Energy efficiency has always been part of the RPS. It was meant to go away in 2025, and the amount of energy credits that could be used to meet the RPS were to decline over time. Some of the large consumers, specifically the NRS 704B customers and the Nevada Resort Association (NRA) had a concern about the energy efficiency programs they had in place. This was meant to address that and also to line up well with the energy efficiency

legislation coming out this Session. This would incentivize energy efficiency, create more markets around that and be beneficial for some of the low-income energy efficiency programs that have been suggested.

Section 4.3 speaks to what are commonly called station credits for geothermal power producers. This was suggested by NV Energy to help the geothermal industry so its portfolio credits would line up with other industries and states. This would also be part of them getting the 1.5 multiplier. Currently, some of the loads associated with geothermal are not deducted from the portfolio credits. Removing this gives them less portfolio credits in their original format per kilowatt-hour (kWh) of electricity generated than they currently get, but the 1.5 multiplier is above and beyond that and still gives an incentive to that while achieving the goal of getting rid of the station credits.

SENATOR HARDY:
Section 3, subsection 1, paragraphs (a) through (m) refer to "... the total amount of electricity sold by the provider ... ." As we get more rooftop solar, the household under the rooftop is not paying anything for the electricity the solar panels produce. So production is going up, but the amount of electricity sold is going down. In other words, the amount produced is not equal to the amount sold. Is that right?

MR. JOHNSTON:
That is one of the existing distortions in the RPS, though it is not a big one. Rooftop solar generates portfolio energy credits that can be used for compliance for all of its production, even that production that never sees the grid. If the homeowner uses all the electricity generated by the rooftop panels, it still generates portfolio energy credits that can be used for compliance. The utility takes those credits and uses them for RPS compliance.

You are right: production that never gets into the grid does not appear as electricity sold. There is a discrepancy there, but it is fairly minor. Those numbers are tracked, however, and they are included in the utility's resource planning. They know how much energy is being produced behind the meter and not sent into the grid, and NV Energy can speak to that. But you are correct that the credits in the numerator do not match the kWh of renewable energy produced in the denominator.

SENATOR HARDY:
My basic question is does it help the 50 percent? Because it does not count as energy sold.

MR. JOHNSTON:
Yes. There are distortions that go the other way, such as the green energy tariff, which A.B. 206 tries to address. One of the provisions of this bill would exclude sales under NV Energy's green energy tariffs from the denominator, so we do not create a disincentive to offer these green energy tariff deals to your customers who desire them.

SENATOR HARDY:
It is a multifactorial equation.

SENATOR SETTELMEYER:
I appreciate the discussion of the Energy Choice Initiative. My constituency is different from others. A lot of them voted for the Energy Choice Initiative to promote renewable energy, but most of them voted yes because of the line that said, " ... provisions that reduce costs to customers ... ." So I am concerned about the cost aspect of this bill.

At a previous meeting, the Committee discussed the concept that producing 3 percent of electricity via renewable energy creates about 22 cents of cost. What would this bill cost our constituents on their average power bill?

MR. SULLIVAN:
In our analysis in Exhibit E, we found that the average cost to customers, using standard assumptions of costs and prices, would be around 2 percent in 2030. The average electricity bill in northern Nevada is around $80 a month, and 2 percent of that is $1.60.

In terms of why they might be different from what you heard in that previous meeting, in a rooftop solar context, the cost of these resources are different. We mentioned the steep cost declines in utility-scale solar. The Techren project for which NV Energy has a purchased power agreement (PPA) came in at 3.4 cents per kWh at the start. Solar is a very inexpensive energy resource. We do more of it, and it ends up having a small impact on bills.

SENATOR SETTELMEYER:
Is that 2 percent in addition to the 3 percent that was stated? I am confused.

MR. SULLIVAN:
No. However, I should note that our analysis in Exhibit E did not analyze rooftop solar specifically.

ASSEMBLYMAN BROOKS:
The 3 percent you were referring to was based on NV Energy's rate case that it assessed on net metered systems only in the Sierra Pacific Power Company's rate case. The 2 percent incorporates rebate programs for hydro for ranches and farms, wind turbines and solar systems. It included cash rebates given to consumers and some costs that the utilities stated were associated with some of those systems. This is the portfolio of the State's energy in its entirety. It is a different issue.

SENATOR SETTELMEYER:
I am still confused. I will follow up on this with you later.

Energy efficiency is probably the best thing out there. We all agree that the most efficient watt is one you do not have to produce. You said we have not done anything with the RPS since 2009, but I remember a few bills that have drastically changed the RPS since 2009. One of them dealt with the concept of taking energy efficiency away from Nevada Power because it was too successful. The company did such a great job of finding energy efficiency, it was basically eating all of the RPS, and the Legislature wanted more of it to go toward solar, wind, geothermal and other resources.

We have heard that this bill talks about changing how energy efficiency is calculated, yet I am having a problem finding that particular section. Maybe you could help me. How do you plan on changing how energy efficiency measures are used to comply with the portfolio standards in sections 3 and 4? Will energy providers such as NV Energy be allowed to once again count energy efficiency, or is that only for the large casinos?

MR. JOHNSTON:
In this current draft of the bill, there is no change to the phaseout of the use of energy efficiency. Utilities can meet up to 20 percent of the RPS requirement with energy efficiency through 2019. From 2020 through 2024, they can meet

up to 10 percent with energy efficiency. From 2025 on, you can no longer use energy efficiency credits to apply toward the RPS. There is no change with respect to NV Energy in A.B. 206. The change had to do with the NRS 704B customers who had left NV Energy's bundled retail service. When S.B. No. 252 of the 77th Session provided for this ramp-down in the use of energy efficiency credits, it excluded the NRS 704B customers, of which there were only one or two at the time. Their carveout was left at 25 percent. Assembly Bill 206 as introduced proposed rolling them back into the same RPS as NV Energy. That caused concern by some of the resorts that have left NV Energy's bundled service in the last couple of years, with the expectation that they had a 25 percent energy efficiency carveout. This bill essentially says, "You get that 25 percent energy efficiency carveout until 2024. There will be no ramp-down. You just get 25 percent until 2024, and then it's gone."

SENATOR SETTELMEYER:
I disagree. I think energy efficiency is so key, we should leave it to the ones who have been so successful.

Can you tell me about states that have retail choice and an RPS? The states I have researched with energy choice do not have an RPS. People choose to do it or they do not.

MR. SULLIVAN:
That information is contained in Exhibit F. It should be noted that restructuring and energy choice is not necessarily a binary thing where it is either on or off. Often, there are some customers who can buy energy on the open market and some customers who cannot.

Exhibit F shows states that have substantially restructured their energy market, where utilities have divested of generation assets and where there is a substantial market for energy choice. Every state that allows energy choice has an RPS. The RPS varies in size, but generally the policy framework is for competitive suppliers and the default service provider to be subject to an RPS. The most recent example is New York, which has an active retail market, and this year they are implementing a 50 percent RPS by 2030.

SENATOR SETTELMEYER:
I am still concerned about the possible price increase to the retail customer.

CHAIR ATKINSON:
Could this higher RPS lead to higher electricity prices for retail customers and families?

MR. SULLIVAN:
It potentially could, though the increase would be small, in the range of 2 percent. If natural gas prices increase, that small increase could turn into a small savings. To be specific, if natural gas prices stay the same, we predict an increase of 1 percent in 2025 and an increase of 2 percent in 2030. If natural gas prices rise, we predict no change in 2025 and a decrease of 3 percent in 2030. Our reasoning for those predictions is included in detail in Exhibit E.

CHAIR ATKINSON:
I have had conversations with people from NV Energy, and they believe the company will need to build more renewable generation systems sooner. If the Energy Choice Initiative is passed, we probably will not need them. Was that used in the model, and is there any explanation for that?

MR. SULLIVAN:
Our model did look at the cost of expansion of renewable energy resources. The cost is so low because the basic cost of large-scale renewable energy systems is very low right now and will be in the future.

CHAIR ATKINSON:
How about the systems we will not need after Energy Choice Initiative goes through?

MR. SULLIVAN:
I disagree that we will not need these systems. The Energy Choice Initiative is compatible with RPS. We are probably still going to want a policy that requires a minimum amount of renewable energy in an energy choice future. The amount of renewable energy that would be required pre-energy choice in this bill is the equivalent of two large solar plants. Those would be purchased, given the investment tax credit for solar, at very low cost. That is why we are talking about low cost between now and when energy choice might be implemented in 2023.

CHAIR ATKINSON:
So the answer is we really do not know.

MR. SULLIVAN:
I do not think that is the answer, no.

MR. JOHNSTON:
We submitted an application for the most recent solar project that is now pending before the PUCN. You can see it listed on page 22 of Exhibit D: Techren Solar 2. That is a 25-year PPA. The levelized cost of energy over the term is $37.09 per MWh, which is 3.7 cents per kWh. On page 23 of Exhibit D, you can see that the first-year price is 3.1 cents per kWh. In an energy choice environment, the issue is what happens to that 25-year agreement, which NV Energy is willing to do today. I am confident Techren 2 is going to be a valuable asset. It will not be stranded, and it will not be valued at less than what ratepayers are paying. However, you are right that no one really knows what will happen in the future because no one knows what the future cost of renewable energy or natural gas will be.

CHAIR ATKINSON:
Would there be any potential system reliability issues with A.B. 206 as drafted?

ASSEMBLYMAN BROOKS:
There are some issues right now with the security of the grid and our electrical transmission systems in Nevada and around the U.S. There is quite a bit of concern amongst utility operators and national security experts about what could happen moving forward with a highly centralized utility model. As we move toward a distributed generation model that uses renewable resources located in Nevada and incentivizes storage, we insulate ourselves to a certain extent from many of the issues associated with grid stability and grid security. There are technologies that move quite a bit faster than we can even imagine, and definitely faster than public policy does, that are addressing these issues every day. A system that is more decentralized and much less reliant on outside sources is a more stable, more secure and safer electrical system. Right now, around 70 percent of the electricity generated in Nevada uses natural gas that comes in on just a couple of pipelines. We are incredibly reliant on one very fragile delivery system of fuel for our electricity. As an economy, we would be crippled if we lost power. Can you imagine the Las Vegas Strip without electricity in the middle of summer? That is why having indigenous resources and storage incorporated into our mix increases the security and stability of electricity in Nevada.

CHAIR ATKINSON:
One of you mentioned the RPS applying to NRS 704B customers. Why is the RPS applying only to NRS 704B customers who have exited the system, except for the Barrick Gold Corporation?

ASSEMBLYMAN BROOKS:
In effect, NRS 704B was created because of the situation that Nevada and NV Energy found themselves in at the time of its creation. Barrick Gold left the system and invested millions of dollars in generation based on the needs of the State as much as the needs of Barrick Gold. The customers who have left since then have left for different reasons. That is why A.B. 206 differentiates between those different time periods.

CHAIR ATKINSON:
That did not quite answer my questions, but we can talk about it later. What was the reasoning behind the exclusion or carveouts in the bill, such as the co-ops? Are they still carved out in here?

ASSEMBLYMAN BROOKS:
The bill includes the co-ops, but it puts in a floor of 1 million MWh a year. Once a co-op exceeds that, it has to comply with the RPS above 1 million MWh a year in the year it exceeds that. That is considerably more than most of the electrical co-ops, municipal power companies and public power companies in the State produce. None of them have generation. They enter into long-term contracts based on serving the loads of their member-owners or consumers. This bill addresses their inability to change that. But if they were to exceed that, the bill would help them understand what type of portfolio mix they would need to acquire, purchase or generate.

CHAIR ATKINSON:
Is there a floor number for Barrick Gold?

ASSEMBLYMAN BROOKS:
Barrick Gold is an NRS 704B customer, not a co-op or a municipal power company.

SENATOR GANSERT:
How close are the co-ops now to 1 million MWh?

ASSEMBLYMAN BROOKS:
There are two that are in the 800,000 MWh range. The vast majority of them are under 500,000 MWh. There are about 12 public power companies, electrical co-ops, municipal power companies and state agency power providers in Nevada.

SENATOR GANSERT:
I would like to better understand the intersection of choice and the RPS. When you have choice, individuals can decide whether they want to purchase more renewable energy. They are doing it incrementally, one individual at a time, rather than as a group. Who tracks that to make sure we are meeting certain standards as a State?

MR. SULLIVAN:
The short answer is that the competitive suppliers would track their compliance with the RPS. The way it works in a lot of these markets is that the renewable energy option is 100 percent renewable. Some customers might choose that. The minimum requirement would be 50 percent by 2030.

SENATOR GANSERT:
But someone may choose to buy 100 percent nonrenewable, and someone else maybe 30 percent. At some point in time, you have to mandate that different providers have to meet a certain level so they balance to 50 percent.

MR. SULLIVAN:
The way to think of this is not as an obligation on the individual customers but as an obligation on the providers. To the extent that some customers choose different things, it is up to the provider to make sure the mix adds up to 50 percent.

SENATOR GANSERT:
Would each provider have to provide at least 50 percent renewables?

MR. SULLIVAN:
Yes, but that is up to the Energy Choice Initiative decisions. In the states that have energy choice, that is what they did in their transitions. They applied the existing RPS or the equivalent to all providers.

SENATOR GANSERT:
By requiring a standard, you are changing the market. Will the price for renewables go up because you have mandated demand?

ASSEMBLYMAN BROOKS:
There is a very competitive global market in renewables. That will not be a captive market, so I do not know that we will move the needle on the price of renewables just by our demand. We would see some pretty vigorous competition, which in recent years has produced some of these incredibly low prices. In 2003, when I first came here on a renewable energy bill, I would never in a million years have imagined we would be sitting here with the RPS we currently have met at the prices we are getting. I can only imagine what it will be 13 years from now.

SENATOR GANSERT:
Right now, we are in a competitive environment. But if there is certainty that we must have X MWh of renewable energy, the advantage flips to the seller because the sellers know you have to have it. It has been suggested that it might be a 2 percent increase, but I am not sure that is going to work. However, I do know that there is strong motivation and support in Nevada for renewable energy.

The NRS 704B customers paid exit fees, which I thought included stranded assets. We are still requiring them to meet the same portfolio standards, but basically they paid to exit. Could you help me with that?

MR. SULLIVAN:
Those exit fees include what is called a non-bypassable component. That is the amount providers continue to have to pay for some of those stranded assets. Some of that pays for old renewable energy contracts NV Energy signed. To the extend that those customers are paying for those investments, they also get the renewable energy credits from those.

SENATOR GANSERT:
We may have to talk off-line. I know substantial fees were paid, but I am not sure what is in them. There is also the option with energy choice, whether you are a corporation or an individual, to purchase more renewable energy versus mandating it.

CHAIR ATKINSON:
If the Energy Choice Initiative does pass, will this legislation need to be significantly changed or even overturned?

ASSEMBLYMAN BROOKS:
I do not anticipate that it would need to be overturned or significantly changed. It is a framework that presently exists in the State, and A.B. 206 proposes to expand that same framework. Energy choice could fit neatly into that framework and operate within it. As Mr. Sullivan said, in every other state that has choice, there was or is some form of RPS that operates in conjunction with that.

CHAIR ATKINSON:
Pat Wood III, a former chairman of the Texas public utilities commission, testified in a hearing of the governor's committee on energy choice that he did not believe major changes in energy legislation such as changes to the RPS should happen before deregulation occurs, and any change should be a part of the deregulation process. I would assume you disagree.

ASSEMBLYMAN BROOKS:
I would not necessarily say I wholeheartedly agree with that statement. Mr. Wood is currently chairman of the board of Dynergy, which is a company with 31,000 megawatts (MW) of coal and gas generation. One of the objectives of that conversation was to talk about how Nevada could take advantage of some of those resources. I would have to say that a new RPS might get in the way of those objectives.

CHAIR ATKINSON:
Due to time constraints, we will limit the time given to each testifier this morning to two minutes.

ERNIE ADLER (International Brotherhood of Electrical Workers Local 1245):
The International Brotherhood of Electrical Workers (IBEW) Local 1245 strongly supports A.B. 206. We will be building these power plants in Nevada with predominately union workers at high wages. I believe it will stabilize our energy market and stabilize fuel costs. Currently, 90 percent of Nevada's energy comes from out of the State, and I am including gasoline for cars and natural gas for heating our homes. It does not make much sense for us to continue to invest in those resources when we have abundant natural resources here, such as solar,

geothermal and so forth, that we could promote. This bill would create jobs for Nevadans in construction, operation and maintenance for these systems.

TOM POLIKALAS:
I am strongly in support of A.B. 206, as a Nevadan who is concerned about energy prices. I have written testimony (Exhibit H) expressing my support.

The concerns you raise about the impact on ratepayers are paramount. It is difficult to forecast the future, though we can perhaps look at market trends and some of the probability analyses the experts have addressed. The EIA forecasts that natural gas is going to increase in price because we now have an increasing opportunity to export natural gas to markets in Asia and Europe, where the price of natural gas is much higher. Page 16 of Exhibit D shows how the price of electricity is affected by the price of natural gas. If the price of natural gas is $7 per million BTUs, the price of 1 MWh of electricity will go to $52.50. Right now, the International Monetary Fund forecasts Japan purchasing natural gas at $8.50 per million BTUs through the year 2025. Nevada should not bet on natural gas prices remaining stable, and we should double down on renewable energy.

JOE GRECO (Senior Vice President, Terra-Gen Operating Company, LLC):
We support the 50 percent RPS. We believe development in the State will enhance the economic benefits of the State and increase taxes. We understand that the bill is continuing to progress. We would encourage that the bill stay simple and give fair opportunities across the renewable portfolio base. We would also encourage that the sooner this occurs, the better economic advantages can be taken for the production tax credit and the investment tax credit.

SENATOR SPEARMAN:
I have been looking at NASDAQ and the Energy Information Administration with respect to natural gas prices because the greatest threat of a hike to ratepayers is the fact that we only have one baseload. If natural gas goes up, electricity goes up. We cannot predict the price of natural gas or solar in 2030. But some of the hedge fund folks are encouraging people to invest in natural gas. In 2017, natural gas was $3.17 per million BTUs; in 2018, it is forecast to be $3.43 per million BTUs. That suggests the people who are working investment portfolios are confident the price of natural gas is going up.

SENATOR HARDY:
When do the investment tax credits expire?

MR. GRECO:
The investment tax credits for solar go away in approximately four years. The intent is to work through those. For wind, the production tax credits have a declining base, so in order to get the 100 percent you have to start development now. There is a four-year base for that as well.

SENATOR HARDY:
Is that why you are interested in this happening sooner rather than later?

MR. GRECO:
Yes. It is critical to get this done so ratepayers can save money significantly.

LEONARD B. JACKSON (Director, Faith Organizing Alliance; Associate Minister, First African Methodist Episcopal Church):
We support A.B. 206. The room here in Las Vegas is full to capacity with supporters for this bill, as is a second overflow room. We have spoken to this Committee before about why clean energy is important to communities of color, and we are disproportionately impacted by the negative health impact of air pollution. The single greatest thing the Legislature can do this Session to reduce fossil fuel pollution in Nevada is to pass A.B. 206 and ensure half of Nevada's energy comes from clean sources by 2030. We have spoken to thousands of community members who want access to clean energy and the benefits it creates, which includes jobs. We as concerned citizens, and you as elected officials have an obligation to future generations. This bold but achievable policy will accomplish those goals, so that we may leave this earth better than we found it.

JENNIFER TAYLOR (Clean Energy Project):
We are the business voice of Nevada's clean energy economy. I am also here on behalf of Advanced Energy Economy, one of our national partners. We support A.B. 206 for Nevada to continue its bipartisan clean energy leadership that started in 1997 when we were the second state to adopt an RPS. This will help implement Governor Brian Sandoval's vision for a new Nevada, which includes our State becoming the leading consumer and producer of renewable energy.

We know that 71 percent of Fortune 100 companies and 43 percent of Fortune 500 companies have commitments to renewable energy and sustainability and are demanding direct access to renewable energy. One example is Walmart, which is committed to sourcing 100 percent of its electricity from renewables and to producing or procuring 7,000 gigawatts of renewable energy by the end of 2020. These corporate renewable goals stem not necessarily from environmental concerns, but because it is a good decision for their bottom line. A company like Apple can sign a long-term PPA for solar because it is the cheapest way for it to get power and to have business certainty over 20 years for managing what is one of its biggest expenses. In February of this year, Apple partnered with NV Energy through NV Energy's innovative and robust GreenEnergy Rider program and began to get its power through the 50-MW Boulder Solar II power plant.

Pat Egan, NV Energy Senior Vice President of Renewable Energy and Smart Infrastructure, said about the Boulder Solar II project:

> All Nevadans benefit from the economic development associated with the construction of another new renewable energy facility in our state, and the renewable energy credits help encourage major customers with impressive sustainability goals to locate in or stay in Nevada. Additionally, our company and our customers benefit because these power purchase agreements help diversify our generation portfolio and provide long-term sources of renewable energy and capacity at a predictable and low price.

I would also like to point to Iowa, which has had billions of dollars invested by Google, Microsoft and Facebook because of their wind resources.

ADAM GREEN (Director of Development, SolarReserve):
We support A.B. 206.

SolarReserve developed and operates the Crescent Dunes Solar Energy Project, the 110-MW baseload solar tower near Tonopah. It is Nevada's largest solar project. Crescent Dunes was a massive construction effort, creating over 1,000 construction jobs and using over 1.2 million man-hours of Nevadan labor. Crescent Dunes has 1,100 MWh of energy storage, which is more than all grid-tied battery systems in the U.S. The economic impact on the town of Tonopah has been significant. We have a long-term workforce of 45 in the

town. The $10 million annual budget for operational expenses and the $73 million in total tax revenue will continue to support the local economy for the next 30 years. Tonopah has seen a significant economic revitalization. Our technology uses thermal energy storage, making it as dispatchable and controllable as a conventional coal or natural gas power plant, reducing risk to the utility and to the ratepayer.

We have announced the Sandstone project, a 2,000-MW baseload solar park with 10 of our towers, to be located in Nevada. It is a project on par with the Hoover Dam in scale and regional impact. It would create 3,000 construction jobs during the 7 years of construction, attract $5 billion in capital investment, support 350 full-time long-term jobs in rural Nevada, and generate over $600 million in tax revenues for the first 20 years of operation.

By raising the RPS and incentivizing storage, A.B. 206 makes it more likely that Sandstone will receive a PPA from a Nevada entity. The bill thus makes it more likely that Sandstone will be built and all of the economic benefits will accrue to Nevada.

LINDA BULLEN (Eolus North America, Inc.):
We are in support of this bill. Since 2009, wind energy costs have plummeted over 50 percent to bring it down to prices competitive with fossil fuels. Wind energy and solar energy will, due to their different delivery profiles, provide the needed diversity to Nevada's energy needs and hold electric prices in check by providing long-term economical pricing that will protect Nevada consumers from fluctuations in the cost of fossil fuels. Low-cost renewable energy can and should be an integral part of the energy independence strategy of Nevada.

Renewable energy has already attracted over $5.5 billion in new investment in Nevada and more than 20,000 Nevada jobs associated with renewable energy projects. By increasing the RPS to the levels proposed in A.B. 206, Nevada will attract billions of dollars in additional renewable energy development. It will also provide rural Nevada with good, living wage jobs and bring important property tax income to local governments and municipalities.

Because of the certainty in the fuel source, be it wind, solar, geothermal or hydropower, and in-state generation, renewable generation is homeland security.

RHONDA MILLS (Geothermal Energy Association):
We support A.B. 206. I would like to endorse the comments made by Senator Spearman about price volatility and uncertainty. When you build any kind of renewable energy plant, you are buying all your fuel up front.

I would also like to echo the comments made by Mr. Adler. These projects bring thousands of jobs, mostly in rural areas. Many of the areas where we build are in these rural areas, and our plants become the highest employer and the highest taxpayer.

I would also like to add my comments to those made by Mr. Greco. We are urging you to process this bill as soon as possible because the expiration of some of those tax credits will have a great impact on our ability to deploy inexpensive renewables.

I want to leave you with the example of Iowa, which in the last 13 years has built 4,000 MW of wind generation. That state has not raised rates in 13 years and just put out a statement that the next rate increase is expected to occur in the year 2028.

JUDY TREICHEL (Executive Director, Nevada Nuclear Waste Task Force):
We support A.B. 206.

The Nevada Nuclear Waste Task Force works to help Nevadans stop Yucca Mountain becoming the Nation's nuclear waste repository. Through the 30 years I have worked on this, people from the nuclear industry have told me nuclear power is the future. However, it has become increasingly clear that waste-producing energy will not be our future. For the last ten years, when it was said Nevada should help out the Nation by accepting nuclear waste, I have been able to say yes, Nevada can help meet the Nation's energy needs because we have the greatest resource there is for solar power. We are going to play a very important part in the Nation's energy future, and we can and should be the leader in solar and geothermal production. I support rooftop solar because it provides power where it is needed. It allows the industry and the public to actively participate in clean energy and environmental protection.

LOUISE HELTON (1 Sun Solar Electric, LLC):
We support this bill. Currently, hundreds of millions of Nevada dollars are draining from our State to pay for the fossil fuels we are dependent on. This is

in spite of the volatility they wreak on our public and personal economies. As has been pointed out, experts in commodities right now will tell you that the cost of natural gas is about to escalate dramatically. As a contrast, once installed, renewable energy provides power as an unlimited resource that is free, creating stability for residential and commercial customers alike. At the same time, it is a major job creator, and these are jobs that will not require tax abatements. Instead, we will be leveraging federal dollars for building renewable energy installations.

Monday is Memorial Day. I can think of no better time to pass this bill and take a stand for our brave servicemen and -women for doing what they can. We need to do what we can so that less blood is shed for fossil fuels.

LINDA NERSTAD:
I support A.B. 206.

I wear two hats today. I have solar panels on my roof. I am a retiree. I am reducing 30 percent off my energy bill, and that just makes sense. I want to bring back choice. I vehemently believe that. My second hat is I am an advisor for Powur, which is an Uber-like platform that will help providers in 27 states and 2 countries provide renewable energy to homeowners. Nevada has one provider. In California, we work with six providers, and Nevada has just as much energy as California does.

ROSE MCKINNEY-JAMES (Bombard Electric, LLC; Valley Electric Association, Inc.):
We are here in strong support of A.B. 206. We look forward to generating additional economic growth and creating jobs for local workers in Nevada. I would like to express appreciation to those who worked collaboratively on providing a path to strengthen the measure. Bombard would like to continue to be active in this effort.

I have a letter of support (Exhibit I) from Thomas Husted, CEO of Valley Electric Association, Inc.

RICHARD PERKINS (MGM Resorts International):
We support A.B. 206 because it is consistent with the importance we place on developing renewable energy sources and continues to advance Nevada as a leader in implementing progressive energy policy. We appreciate the sponsor of the bill amending the RPS increases over the next few years, making compliance

achievable. The willingness to adjust the ramp-up in the RPS while moving Nevada toward achieving a goal of 50 percent renewable resources by 2030 is commendable. We also appreciate the added recognition of energy efficiency credits and battery storage systems in the bill, as we believe they create the proper incentives, systems and cost mitigation strategies in achieving these goals.

MATTHEW DEFALCO:
I am a veteran and a Nevadan. When I was in the U.S. Army, I deployed overseas in support of Operation Enduring Freedom. This is a special weekend for America, and it is not about barbecues or pool parties. It is about remembering and honoring the service and the lives of veterans who have fought and died for our Nation for generations, many of whom came from Nevada.

It is with that in mind that I come before you to testify today. America's reliance on foreign sources of energy and fossil fuels has embroiled our Nation in conflict for generations. Often, our money ends up in the hands of countries that do not share our values and people who want to do us harm. Oil money has been traced often through shady front groups to extremists and terrorist groups.

The bottom line is that reducing our dependence on foreign oil increases our security. That is what this bill does. I strongly support A.B. 206, and I encourage you to do the same.

STEVEN HORNER:
I am a retired teacher and a veteran. Clean energy is an important issue for many reasons. National security and the lives and welfare of many young men and women are at risk. By decreasing our dependency on fossil fuels and building clean and renewable energy, we will eliminate the need to send our military into harm's way for oil. On this Memorial Day weekend, please remember those who made the ultimate sacrifice and those who have returned broken and unable to cope. Please support A.B. 206 and make Nevada the leader in clean and renewable energy.

DANE GROVER:
I am a private citizen and a resident of Carson City. I am here to testify in support of A.B. 206. I support clean energy and all the benefits it has. My

primary interest is the economic benefit. I am a person who was employed in the solar power industry selling rooftop solar power systems for a large national chain, and I lost my job. I was severely impacted by that loss. I am personally interested in seeing the solar industry return to Nevada. I know people who have lost their jobs and who were deeply affected by it. The economic impact of this bill is potentially huge. It would make Nevada a leader in the clean energy field and provide livable-wage jobs for citizens including myself.

JESSE WADHAMS (Recurrent Energy, LLC):
You have taken a lot of testimony this morning. We would like to focus solely on the economic development opportunities of this bill. I submit a letter (Exhibit J) from nine TechNet companies listing some of those benefits. We stand in support of A.B. 206.

JANE GROSSMAN:
I am here in support of A.B. 206. I speak to this as a moral issue. To move into the future rather than sticking to the past seems an obvious choice to me. I ask all of you to think of the legacy you are influencing with this bill. We can either make this choice in 2017 and get all the economic and environmental benefits we have heard about, or we can wait and lose out to other states and areas that will move in this direction. I urge you to support this very important bill and secure your legacy as one of the Senators who passed this important bill for Nevada.

MIKE KELLY (Chair, Nevada Democratic Veterans and Military Families Caucus):
I am a member of the Democratic National Committee's Veterans and Military Families Council, with which the Nevada Democratic Veterans and Military Families Caucus is affiliated. I would like to read a letter from one of our members, James Barnett, retired Rear Admiral, U.S. Navy.

> I have reviewed A.B. 206, and I congratulate Nevada on this farsighted and crucial step into the future. I am sorry that I cannot be there to say this in person, but I am a strong supporter of this legislation. Setting a bold visionary course for Nevada's renewable energy makes such good sense from an economic, employment and ecological standpoint, but you may not realize that Nevada's adoption of this legislation also enhances our national security. As a retired rear admiral in the Navy with 32 years of experience, I can say that energy is a key element in national security.

> For too long, we have relied on energy from other nations, necessarily shifting our national interest to other nations and regions. Our service members have gone to war to protect our national interest, including our interest in protecting the supply chain of oil that we must import. Decreasing these imports lowers the probability that we will have to deploy more U.S. armed forces to protect our national interest elsewhere.
>
> Some time ago, the U.S. Navy declared its strategy for renewable energy, stating the security and independence are critical and intertwined. By making Nevada and America less dependent on foreign oil, you are increasing our independence and our security. By making us more self-reliant, you are decreasing international demand and denying ISIS and other terrorist organizations who have access to fossil fuels from obtaining illicitly the funds they need to recruit, train and deploy misguided people around the world to commit heinous acts like the bombing in Manchester, England, on Monday of this week.
>
> National security, protecting our military and eliminating the income stream going to terrorist groups around the world are the main reasons I support and encourage states to increase their renewable portfolio standard, expand the use of renewable energy resources and decrease the dependency on fossil fuels.

JUAN ROBLEDO (Chispa Nevada):
We support A.B. 206 because it creates jobs and reduces pollution from fossil fuels that hurts the health of our community and our environment. A year ago in June, I was invited by a friend to come down to San Antonio, Texas, and learn more about solar energy. He put solar panels on his house. I learned that the City of San Antonio was giving incentives to homeowners. They only had $30 million to give to homeowners, so money was running quick, and they were getting less and less money. I also learned that the federal government is giving a 30 percent rebate to taxpayers when they acquire solar panels, which reduces the total cost of the purchase of the solar panels.

I would like to thank you for your service to the State of Nevada.

JOSH HICKS (First Solar):
First Solar is a builder of utility-scale solar projects. We support this bill.

I would like to make some comments about the economic benefits you see from these projects. We have built six large-scale projects in Nevada, about 760 MW. Over 1,600 construction jobs were created out of that, 83 percent of which were filled by Nevadans. The taxes that get paid on these projects are significant as well. Usually, these projects are located in areas that were overseen by the U.S. Bureau of Land Management, land that was not generating tax revenues. You will see significant sales and use taxes, over $30 million just on those projects, as well as tens of millions of dollars of property tax in the future. First Solar also has other projects under contract right now, about another 280 MW worth. That is another 1,100 construction jobs and tens of millions of dollars more in sales tax and property tax.

First Solar supports these kinds of bills. They help create opportunities for future development. We look forward to doing more work in Nevada.

JESSICA FERRATO (Solar Energy Industries Association):
We are here in support of A.B. 206 because it brings new jobs to the State and reduces energy dependence on foreign products.

KYLE DAVIS (Interwest Energy Alliance):
We support A.B. 206.

Interwest Energy Alliance is a nonprofit trade association that brings the Nation's renewable energy industry together in a consensus-based collaborative approach to market development in the Intermountain West. Our members are proud to have built projects in Nevada, and many others are excited to come and do business here.

As you have heard from several speakers, Nevada is overreliant on natural gas. We send roughly $700 million out of the State every year to pay for natural gas. You heard how volatile prices are. We are vulnerable to increases in fuel costs, and all the risk is on the consumer in this situation. With renewable energy, the risk is on the front end; it is on the developer. Once you sign that PPA, the price is stable and fixed over the life of the contract.

Assembly Bill 206 is Nevada's opportunity to set our future energy path in a way that benefits our State. We know we are headed toward open energy markets, and this bill ensures we will meet our energy needs with Nevada resources rather than out-of-state interests and out-of-state fossil fuels.

ELSPETH DIMARZIO CORDUA (Sierra Club):
I am speaking on behalf of nearly 6,000 Sierra Club members throughout Nevada who support A.B. 206 to increase the RPS. As we saw in the most recent election, clean energy is a priority for Nevadans, and this bill will stimulate the clean energy industry in our State.

As was mentioned earlier, our current RPS of 25 percent by 2025 allows multipliers and bank credits to inflate the energy portfolio as it exists today. This bill would lessen our reliance on polluting and volatile fossil fuels while also stimulating our clean energy economy and lessening Nevada's contribution to climate change. Our members support this bill for numerous reasons, but we have many members who have personally invested in clean energy to ensure they will not be caught on the wrong side of volatile natural gas prices. This bill would expand the personal investment to a statewide level where all Nevadans can access clean energy.

The Sierra Club would like to thank this Committee for its past leadership on clean energy issues. Creating represented clean energy jobs while taking a bite out of Nevada's carbon emissions is something all Nevadans can be proud of.

LARRY FOSGATE (Clean Energy Project):
I support this bill. I have written testimony (Exhibit K) expressing my support.

LINDA SAUNDERS:
I am a registered nurse. I am here to speak for the kids, and I want to save our kids from dirty air. I want to give Nevada kudos for being in the process for closing the North Valmy Generating Station, which runs on coal. I know we think there is a lot less pollution from natural gas, but that is not the case. There are still a lot of pollutants that are getting in our air and harming our kids. I would ask you to think of our children and the children of the next generation and keep them healthy.

NATALIE HERNANDEZ (Battle Born Progress):
I am here today in support of A.B. 206. As the reverend in Las Vegas mentioned, pollution affects communities of color like mine disproportionately, and this bill will help with that issue. This bill harnesses the State's clean energy potential as the second-sunniest state in the Nation and the state with the most geothermal energy opportunities. We can bring in billions of dollars in investment to the State while creating tens of thousands of good-paying jobs for Nevadans. Assembly Bill 206 brings home the money being spent on out-of-state fuels and is a smart investment for Nevada's energy future. A strong RPS will allow us to become and stay No. 1. Nevada has the ability to lead the Country in solar and clean energy, and A.B. 206 is critical for the progress of Nevadans and your constituents.

ANDY MAGGI (Executive Director, Nevada Conservation League):
I am here today representing our thousands of supporters across the State and the over 13,000 Nevadans who have taken action on this issue in the last 6 months to encourage you to pass A.B. 206. Public opinion on this issue is overwhelming. Supporters of A.B. 206 understand that increasing the State's renewable standard to 50 percent by 2030 means not just cleaner air for our families, but more jobs, long-term economic security, utility bill stability and less carbon. Our supporters see cities like Las Vegas going to 100 percent clean energy. They see resorts going green and companies like Switch, Tesla and Apple locating here and committing to using clean energy. All Nevadans deserve that same opportunity, and they are demanding it.

As one of the organizations that supported the campaign for energy choice, I am here to tell you that nothing in A.B. 206 or the Energy Choice Initiative are inconsistent with a strong energy standard for Nevada. They can coexist, and there is little reason to wait. In fact, the campaign for the Energy Choice Initiative agreed that Nevada needed an RPS to spur the growth of clean energy and economic development in the State, and it is one of the reasons we were proud to support it. When we passed a 25 percent goal in 2009, it made Nevada a clean energy leader. Now several states have passed us by. Nevada can and should be the leading producer and user of clean energy. On behalf of the Nevada Conservation League, I strongly encourage your yes votes on A.B. 206.

LYNN LANIER (Nevada Conservation League):
I support A.B. 206. I have written testimony (Exhibit L) explaining my experience with this topic when I worked with the Monsanto Corporation.

DEMI FALCON (Nevada Conservation League):
I am a student at the University of Nevada, Las Vegas, speaking in support of A.B. 206.

Nothing has deterred student populations from coming to Nevada more than the State's lack of a diverse economy. Increasing Nevada's RPS will help students see the economic diversity we have been waiting for. As Assemblyman Brooks stated, international companies like Apple and Tesla invest in states like Nevada where they have access to clean energy. In addition, the clean energy industry has created over 20,000 jobs in Nevada alone.

In 2009, the Nevada RPS increased. With that policy change, clean energy costs also fell dramatically. These statistics are comforting for student populations and certainly incentivize students to remain in the State and be a part of this growing and thriving economy. With A.B. 206, we have the potential to become a national renewable energy hub and welcome an entire economic sector for Nevadans being educated in the State.

JESSICA SCOTT (Vote Solar):
We support A.B. 206.

My husband, Peter Christianson, has been a public school teacher for 16 years. The only thing more important to him than soccer is making sure there is a future for his students to inherit. The man I love is in my home state of Colorado, and I am here because my family feels so strongly about clean energy.

I am not here just because A.B. 206 will determine the future of clean energy in Nevada. I am not here just because I am angry that I spend so much of my life in airport security because terrorism funded by fossil fuels threatens our Country's national security. I am not even here to remember that one in every eight soldiers who was killed or wounded in Iraq between 2003 and 2007 was protecting fuel convoys.

My main motivation for being here today is simple. At this very moment, there are 130 children celebrating their last day of sixth grade at Powell Middle School in Littleton, Colorado. Just like 15 years' worth of students before them, before they walk out of Mr. C's classroom and into their summer vacations, they will tell my husband that he is the best teacher they have ever had. His life's work is educating the next generation of leaders. My life's work is making sure his students get a shot at inheriting the future they deserve.

I ask you to please consider the impact on future generations if we refuse to upgrade an energy system that is virtually identical to the Nation's first electric power plant build by Thomas Edison in 1882.

JACKIE STROUD:
I am a resident of Douglas County and a former employee of the California Energy Commission. A 50 percent RPS by 2030 is a realistic goal. The cost of technical improvements in our society has been improving and will increase, and the cost of clean energy will continue to decrease. The cost of natural gas is unpredictable and cannot be planned for easily.

Nevada needs a diversity of economic development. There is a great job multiplier from solar energy and other clean renewable energies. Nevada needs greater energy security, which distributed energy provides. Renewable energy also promotes public health, as Ms. Saunders noted.

The predictability of energy costs, whether to families, businesses, schools or other public entities, is so important that they must be able to plan. With renewable energy, there is much greater predictability in those technologies than there will be with fossil fuels.

BRIAN BEFFORT (Director, Toiyabe Chapter Sierra Club):
I would like to add a few numbers to the public health comments. I respect your conversation and questions earlier about the impact of costs to the ratepayers, but it neglects the full cost to society from fossil fuels, including natural gas. These costs are often called external costs because they are not reflected in rates. A New York Academy of Sciences study estimated a full life cycle cost from coal-fired electricity generation to be more than $523 billion. This does not include the cost to our military and defense that we spend fighting wars for fossil fuels. These health impacts include asthma, heart disease, cancer, missed work and so on. Natural gas produces 40 percent to 60 percent fewer

emissions than coal, so that is a good step forward, but there is still great impact from nitrous oxide, carbon dioxide and methane. We are still looking at $207 billion of economic impact to the U.S. from the use of natural gas. This also includes impact to the environment, damaged watershed and drinking water impacted by fracking. Most of these impacts are on the production side, but inasmuch as we import natural gas to produce electricity, we are implicit in those impacts where they occur.

The good news is that all of these economic impacts go away the more we transition away from fossil fuels to renewable energy. For that reason, I strongly encourage you to vote yes on A.B. 206 and move us toward a cleaner energy future.

KEN EVANS (Uplift Foundation of Nevada):
We are in support of A.B. 206. We want to make sure communities of color are educated and aware of the benefits of renewable energy. They benefit as ratepayers from the additional supply to reduce their energy bills. They also benefit from the economic development and business opportunities created by these new industries.

VIRGINIA VALENTINE (President, Nevada Resort Association):
We are opposed to A.B. 206. The NRA represents almost 70 resort hotels in Nevada. Our tourism industry directly employs over 300,000 people, indirectly employs over 70,000 people and creates another 97,400 jobs in related businesses. Our members are strong supporters of renewable energy and are committed to increasing the use of renewables and implementing energy efficiency measures on their properties. They are leaders in energy efficiency measures, and we support the use of renewable and sustainable energy sources.

However, A.B. 206 is too much too fast, and there are too many unanswered questions. We have serious concerns about the impact of a mandated RPS on ratepayers, not only on our properties but on our employees and residents. To meet the requirements of this bill, utilities and energy suppliers would be required to purchase additional renewable energy whether or not additional energy resources are actually needed and without regard to the electrical investments necessary to provide stability and import capacity.

Investments in solar energy mean that excess solar energy would have to be sold at cheap rates during times of peak production, which do not line up with peak demand times. California currently pays NV Energy to take excess solar energy. Nevada currently benefits from this imbalance, but a higher RPS could put Nevada in the position of paying another state to take the excess off-peak solar energy. Additionally, the new RPS will require the construction of new facilities and infrastructure that may need to be divested by the utility under a deregulated environment, potentially creating additional stranded costs that ultimately must be paid for by all energy consumers.

We support increasing the use of renewable energy in Nevada, but A.B. 206 is not the right approach. Instead, we offer a proposed amendment (Exhibit M) in support of a higher RPS based on a thorough resource planning process. Working through this process will lower the risk of unknowns while increasing the RPS after a thoughtful, measured approach.

We know that the utility will be adding capacity under its current resource plan and propose that A.B. 206 be amended to use a resource planning process to identify future energy needs and set a standard no less than 50 percent of the new capacity to come from renewable resources. Utilizing this process, we believe increasing the RPS could be prudent if it were more explicitly linked to a need for new energy resources. Consideration is given to grid support requirements, and consideration is given to how new resources contribute to reducing peak energy demand.

ERIC DOMINGUEZ (Caesar's Entertainment):
I am here in opposition to A.B. 206 and to help explain Exhibit M.

We are supporters of a clean energy future in Nevada. We have some of the most ecologically minded businesses in Nevada. We invest tens of millions of dollars each year in efficiency and clean energy resources. We educate employees and encourage them to adopt conservation in the workplace and in their homes. We all set publicly stated environmental goals to reduce energy, water, waste and greenhouse gas emissions. We by no means are opposed to many of the comments made today, and we support a transition to a clean energy future.

We believe the proposed amendment in Exhibit M is a smarter way to do that, especially on the cusp of a deregulated environment in Nevada. We believe

taking an approach that links the requirements for new renewable energy resources to need makes a lot of sense.

Our proposed amendment does not change many of the key provisions of the bill. We support reducing the number of exempt energy providers from the current RPS. We encourage the development of battery storage technology. We think promoting the development of more geothermal resources makes sense. We support many aspects of the bill.

The key challenge is in section 3, which is the core of the bill. Exhibit M proposes that instead of adopting an aggressive and arbitrary set of renewable energy standards, we keep the existing standards in place and add a resource planning requirement mandating that any new resources needed to generate energy in Nevada come from renewable sources. We think that is a much more measured approach and makes a lot more sense in an environment where the entire energy industry in Nevada may be revamped in the next couple of years.

We are very concerned about encouraging the development of resources that are not needed, and then potentially having to divest those resources as the State begins to deregulate. We feel Exhibit M provides a better path to that clean energy future we all want.

Many of us were born and raised in Nevada. We have families here. We have many employees who work in our industry here. Everyone wants a clean energy future for their children. There are economic benefits if we head in that direction. However, we have some legitimate concerns about the approach in A.B. 206 and feel the amendment in Exhibit M gets us to the same place in a much more thoughtful way.

CHAIR ATKINSON:
If the Energy Choice Initiative does pass again, would this legislation need to be significantly changed or overhauled?

ERIK HANSEN (Wynn Resorts):
We do believe there would need to be some changes. The core idea behind Exhibit M is to take away some of the uncertainty associated with what we are about to face with deregulation and the big decisions that would need to be made right away. If A.B. 206 goes through as written, there will need to be a massive investment in resources, and those investments would need to happen

quickly. Nevada would have more stranded assets than we need. If this bill passes as drafted, we would need to address those stranded assets. The Energy Choice Initiative would require the utility to divest themselves of all their generation resources and become a wires-only company. This would merely add more contracts and more stranded generation that they would need to divest themselves of just a few short years after they were built.

CHAIR ATKINSON:
Do you believe higher standards for renewable energy can be met through an existing resource planning process?

MR. HANSEN:
Yes. We believe our amendment is a thoughtful way to keep Nevada a leader in the renewable energy industry using a method that is need-based, rather than just putting out arbitrary percentages, arbitrary targets. It considers the system, Nevada's economic growth and the electric needs within Nevada. It considers power plants that are being retired, such as North Valmy and some of the natural gas plants. As those plants go off-line and we have so-called open positions in the electrical grid, we propose that 50 percent of those open positions would come from renewable resources. It would be technology-neutral. It could be solar, geothermal or battery storage. For the first time in Nevada's history, the resource planning process would require that renewables be integrated and mandated for any open positions.

CHAIR ATKINSON:
Would the resource planning approach allow for the consideration of various new forms of renewable generation being built in Nevada, not just solar?

MR. HANSEN:
Yes, and I would like to point out one example that came up today: the retirement of the North Valmy power plant. Because of the North Valmy plant's unique geographical position, when that plant is either not operational or gone, there will be certain issues with reliability of the system. Some sort of generating resource has to take its place. A normal resource planning model would typically tell the utility to build another natural gas plant, something that can provide voltage regulation support, something that is a dispatchable unit that can provide that support for the grid during certain times of the year. An alternative to that, through our resource planning approach, would say that instead of a natural gas plant, maybe you could install 300 MW of solar with

100 MW of batteries next to it to achieve the same type of thing, a dispatchable resource that can provide those types of ancillary services. This is one of many approaches you could integrate renewables into that same plan.

SENATOR SETTELMEYER:
The current definition of renewable energy in NRS 704.7811 does not include battery storage or things of that nature. What are your thoughts on including battery storage in NRS 704.7811 so they can try to benefit from those technologies that promote Nevada jobs?

MR. HANSEN:
One of the biggest issues we face with the oversaturation of solar in the western states is the duck curve, which is basically oversaturation of solar during the day. California generates so much solar energy that it is paying NV Energy to take electricity during the day, at a cost of more than $100 per MW. We are benefitting from this problem of California's.

You point out a very good solution to the oversaturation of solar. Pairing batteries with solar panels helps fix that to some degree. The issue with battery storage has traditionally been that it is cost-prohibitive. With most technologies, we are seeing the cost of battery storage come down dramatically, and it is an elegant solution to the oversaturation of solar throughout the west. We would support any type of technology that levels out energy and brings reliability and stability to Nevada as a whole, and I agree that battery storage does help in that matter.

SENATOR SETTELMEYER:
I was looking at a multiplier that would be added to get hybrid.

MR. DOMINGUEZ:
The amendment we are proposing does not change the battery multiplier. It retains that language and encourages the adoption of new technology such as batteries. It introduces a framework for resource planning to look at all of these technologies and fill any sort of need or open position the utility may have. The multiplier would remain, as we proposed in Exhibit M.

SENATOR GANSERT:
Can you estimate the trajectory of renewable energy throughout the grid if we use your methodology?

MR. HANSEN:
We do not have exact numbers. The integrated resource plan (IRP) the utility files every three years is public information, and there is a line labeled "open position" on there. I believe that by 2030, our plan would add somewhere in the neighborhood of another 1,000 to 1,200 MW of renewable resources of some generation type. That means a mix of open positions based on other contracts falling away and new load growth coming into Nevada. Depending on the load growth, you would have some variables there, but that is a rough number.

SENATOR GANSERT:
What percentage of the total is that? Is that an extra 10 percent or 15 percent?

MR. HANSEN:
I would have to double-check.

SENATOR HARDY:
People are going to say, "So what's your goal?" Our goal is to have more renewable energy sources. What is your goal?

MR. HANSEN:
We believe in a clean energy future for Nevada. Our goal would be to get to that clean energy future in a measured and thoughtful approach that is need-based. That is the biggest difference between our approach and the RPS approach in A.B. 206. The market and technology have passed up the old concept of the RPS. You are now seeing technology being driven by markets; it is need-based. Here in Nevada, we have huge tech companies coming in, and they want to be green, as do the resorts. We are all doing the same thing: investing in green technologies, including solar and battery solutions, because it makes sense.

The concept of RPS is driven by one technology, one industry that you can get built up very quickly. If you have a saturation of that one particular generation type in southern Nevada, you can meet the RPS. Our approach is more of a global approach. The various technologies that are still under development are becoming less cost-prohibitive. As those technologies become more viable on their own through market additions and changes, through technology additions and changes, they will be adopted. That is our approach to it. We want to look at this issue in this very thoughtful way.

We believe our approach will put Nevada in a position to where it will be a leader. I can almost guarantee that this concept, if implemented, will be copied by other states. Idaho is a great example of that. They are on the verge. They very much want to invest in renewables, but they have been resistant to an RPS because of some of the negative things an RPS-driven mandate does. When it is driven off of a planning basis and a need basis, and you can integrate multiple types of technologies based on the need, that is something other states would definitely follow up on.

SENATOR HARDY:
Let me pose a scenario. I have five buildings that draw electricity from different sources that are not as green as they could be. By 2030, this group of buildings wants to get 75 percent of its power from renewable sources. How will that affect Nevada's RPS and energy market?

MR. HANSEN:
Different businesses have different energy needs. A data center, for example, has a very high power factor. It is a toaster that does not make toast; it just creates heat and uses a lot of power. For data centers, it is easy to be 100 percent green by investing in a high level of renewable resources, including variable resources that only produce 30 percent during the day because they can use it all. A business that is more weather-dependent on its load has a super-needle peak like we get in southern Nevada.

SENATOR HARDY:
Assume a building that has the lights on 24 hours a day, 7 days a week, 365 days a year. What amount of renewable energy are you going to project in your goal for that building?

MR. HANSEN:
Current use is variable. On hotter days in the summer, usage will be much greater than in March and April.

SENATOR HARDY:
I understand that, and you know what it has been like in the last ten years. What is your percentage goal in your resource management plan?

MR. HANSEN:
Our amendment, the resource planning based, is a system-wide approach. It does not go down to the individual business level.

SENATOR HARDY:
I will accept that. So what is your goal?

MR. HANSEN:
Our goal is 50 percent of the open positions going forward, by year. If there is an 800 MW position open in 2020, we would say 400 MW of that has to be renewable.

SENATOR HARDY:
What percentage of the total would that be? What would that 50 percent translate into in terms of the current percentage? Would that be 12 percent or 20 percent of your total being used for renewable?

MR. HANSEN:
I believe you are looking for the system incremental percentages. I would have to do some math on that.

SENATOR HARDY:
I can loan you a calculator.

MR. HANSEN:
I do not know exactly what it is. I would have to have the resource planning documents in front of me.

SENATOR SPEARMAN:
Is the premise of the amendment to ensure that the utilities' resource planning would include resources in a thoughtful and methodical way?

MR. HANSEN:
Yes, that is the thought behind it.

SENATOR SPEARMAN:
Would this resource plan be something new, or is it an activity that already exists?

MR. HANSEN:
The planning model currently exists, but mandating that a percentage of the new resources be renewable is a new concept.

SENATOR SPEARMAN:
The activity that currently exists for resource planning is more properly called the IRP, so that activity exists currently. As I understand it, your premise is that the IRP should be used to determine how the utility moves forward with renewable energy.

MR. HANSEN:
Yes, that is correct.

SENATOR SPEARMAN:
Are you familiar with Senate Bill (S.B.) 65?

**SENATE BILL 65 (2nd Reprint)**: Revises provisions related to the filing by certain electric utilities of an integrated resource plan. (BDR 58-167)

MR. HANSEN:
No.

SENATOR SPEARMAN:
Senate Bill 65 addresses your concerns. It requires utilities to include all aspects of the IRP. Senate Bill 146 addresses it from a distributive standpoint to take into account not only what is used but anticipatory questions related to what might decrease.

**SENATE BILL 146 (2nd Reprint)**: Revises provisions governing the filing of an integrated resources plan with the Public Utilities Commission of Nevada. (BDR 58-15)

Should both of those bills pass and become law, and I hope they do, that will answer your concerns. I am not sure, but if your plans include additional RPS as part of an IRP, those bills have already been through the Senate and the Assembly.

MR. HANSEN:
Are those bills technology-specific?

SENATOR SPEARMAN:
They give the utility the latitude to meet with stakeholders, and the process starts about four months prior. As it happens, NV Energy testified in favor of both bills.

MR. HANSEN:
Without having read the bills, I believe the difference is that S.B. 65 would allow utilities to integrate future renewables and evaluate on an economic basis. Our amendment to A.B. 206 would mandate that the 50 percent be included in the IRP process, rather than just an economic stack if those resources make sense.

SENATOR SPEARMAN:
Let me read to you from the preamble of S.B. 65:

> AN ACT relating to public utilities; requiring the Public Utilities Commission of Nevada to require certain utilities which supply electricity in this State to provide an overview of the utility's resource plan or any amendment to the resource plan at least 4 months before filing the plan or within a reasonable period before filing the amendment; requiring the Commission to give preference to certain measures and sources of supply when determining the adequacy of a resource plan ... .

The requirement is in there already. Senate Bill 65 is Governor Sandoval's bill, and S.B. 146 is one that I sponsored on the basis of information from the Governor's New Energy Industry Task Force. Your concerns are valid, but they are answered by those two bills in combination. We can talk about this off-line after you look at both of the bills.

MR. HANSEN:
Thank you.

MS. VALENTINE:
We would be happy to talk about that off-line. I would say that we started with a bill that we thought was too much too fast. We offered this amendment as a way of creating an additional mandate on the RPS that would be implemented through a needs-based planning process. If this amendment is not acceptable, we would be in opposition to A.B. 206 as presented.

CHAIR ATKINSON:
Understood.

JUDY STOKEY (NV Energy):
As the incumbent electrical utility, our role is to provide information to the policymakers so you can make informed decisions. We are not taking a position on A.B. 206. We are very supportive of renewable energy. We understand residents want choice, they want a cleaner environment, and they want low-cost, reliable energy. We believe that with the Energy Choice Initiative out there, there is a lot of uncertainty about what will happen. We do not want to create additional stranded assets during that process.

NV Energy has currently met and exceeded the required RPS. We are not required to have over 20 percent renewable energy, but we have more than that because the cost of renewables has come down dramatically. We will continue to purchase or build more renewables if the price remains low. We currently use a least-cost planning method, which benefits all of our customers by keeping their rates low. As renewables continue to stay low in price, we will continue to build them.

It should be noted that California has a higher RPS requirement than Nevada does. Because of that, they have built a lot of renewable plants to meet that requirement, resulting in excess energy at certain times of the day and month. Nevada has benefited greatly from that excess energy. At times, we have even been paid to take excess energy from California. That helps our rates stay low.

One of our concerns is if we have a high RPS requirement, we might be in the same situation as California. If we have excess energy in our system, we will be trying to get rid of it to other states and will not be able to take advantage of California's situation.

ALFREDO ALONSO (Ormat Technologies):
We thank Assemblyman Brooks for his hard work on A.B. 206. We are in support of any method that encourages additional geothermal production in Nevada. However, it is important to point out a section of the bill we have concern with. Section 4.3 of the bill removes pumping energy as a method by which we would get portfolio energy credits. In this process, pumping is analogous to the fuel that goes into any facility. That is an important piece to us. It is also inconsistent with Federal Energy Regulatory Commission policy,

which considers that neither pumping energy nor compression energy falls into what is considered station usage, which is the lights, the normal station facility usage. That is an important piece for us.

Every time you build a new geothermal facility, it has a huge impact for that county. It is 500 jobs in employment. It is good-paying jobs in perpetuity. Unless the earth's core starts cooling, you have geothermal energy all the time 24 hours a day. We think it is important.

SENATOR HARDY:
Do you have enough geothermal production to make up for the coal-fired plants that are closing?

MR. ALONSO:
There is probably 1,500 MW in the pipeline right now. These are small 25 or 30 MW facilities on federal land. The impact is huge. Yes, we can replace coal. We would be glad to.

SENATOR SPEARMAN:
California pays us to take its excess energy, and we heard on Wednesday that we import $700 million worth of energy into Nevada. Is there any way to square what we get from California and what we send out? Is there a delta or is there a surplus with respect to money?

MS. STOKEY:
The money we pay to get for out-of-state energy goes to buy natural gas to run some of our power plants. The current excess energy we get from California does not count toward our RPS right now because we do not know if, when or how much we will get. I would have to find out the monetary difference you are talking about.

I would like to briefly touch on a geothermal issue. We recommended an amendment to Assemblyman Brooks with regard to geothermal to allow the station credits to count toward the RPS. I wanted to clarify that we did not suggest taking away the pumping load to be counted toward the RPS.

CHAIR ATKINSON:
Are you saying the energy from California is too unpredictable to give an accurate number?

MS. STOKEY:
Yes. We do not know from day to day what we are going to get.

ASSEMBLYMAN BROOKS:
Thank you for giving this important bill such a thorough review. I would like to address the amendment in Exhibit M. This amendment eliminates the RPS and puts in place a long-term planning process for the same utility model currently in place. It does not achieve the goals the RPS is trying to achieve. I should note that it has been a pleasure working with the NRA, Wynn, MGM and Caesars on these issues, and I look forward to continuing to work with them.

The bill before you is the result of many conversations and many proposed amendments—some accepted, some not—from parties like IBEW, Switch, the Valley Electric Association, the Nevada Rural Electric Association, Southern Nevada Water Authority, Colorado River Commission of Nevada, Barrick Gold and many others to get to the language you have in front of you now. I look forward to continuing to work with those parties and more to get to a final product.

CHAIR ATKINSON:
As the Chair of this Committee, it is my desire to make sure A.B. 206 and A.B. 405 get processed in some form.

**ASSEMBLY BILL 405 (1st Reprint)**: Establishes certain protections for and ensures the rights of a person who uses renewable energy in this State and revises provisions governing net metering. (BDR 52-959)

What form that will be is unsure at this point. Some of the folks on this Committee have some ideas, and I would like to continue the dialogue with you, Assemblyman Brooks, over the next few days. You have done admirable work on both of these bills, and no one wants to water them down, but let us get together and see how we can strengthen them. Our citizens spoke at high volume in the last election about where they would like Nevada to be and the direction they would like to go. We will debate on what they thought energy choice meant; I have talked to 50 people and gotten 30 answers, so that can be debated. What should not be debated is that Nevada should be No. 1 in the U.S. in renewable energy. These are efforts to get us there, and I applaud your efforts.

SENATOR SPEARMAN:
I have talked to several people about A.B. 206 and other bills dealing with renewable energy. I have tried to keep my emotions out of it, but it is very difficult to do that when I know people who have lost limbs in convoys that were hit and other people who have family members killed overseas in wars over oil. When you talk about our dependence on foreign oil and fossil fuels, every time that is going to grab me at my heart. My thoughts with respect to how we move forward on this may or may not set with the majority of people. I would just say to you that I am looking and listening to all of these bills through the lens of the men and women who have given their lives for the lifestyle we enjoy.

SENATOR SETTELMEYER:
I could not agree with Senator Spearman more. We have to get off foreign oil and foreign power. With that in mind, in section 3, subsection 2, paragraph (b), I see no reason to restrict battery storage to 10 percent. I also see no reason to limit geothermal power.

SENATOR GANSERT:
I am not sure we need to scale down energy efficiency measures. We have to keep energy choice and the regional nature of power in mind. We have heard testimony about how we buy and sell power across the borders and get renewable energy from California, so we have to consider the regional nature so we do not end up with excess generation.

CHAIR ATKINSON:
We have received written testimony in support of A.B. 206 from Janette Dean (Exhibit N); Roosevelt Williams, Uplift Foundation of Nevada (Exhibit O); Aurora Driscoll Barker, The Rogich Communications Group (Exhibit P); Karen Griffin, Clean Energy Project (Exhibit Q); James Woodruff (Exhibit R); Anna Aberle (Exhibit S); Margel Dinino (Exhibit T); Josh Molina (Exhibit U); Zappos.com (Exhibit V); Tom Dalzell, IBEW (Exhibit W); and David Gibson, Powered By Sunshine (Exhibit X).

I will close the hearing on A.B. 206 and open the work session on S.B. 538.

**SENATE BILL 538**: Adopts provisions to protect Internet privacy. (BDR 52-1216)

MARJI PASLOV THOMAS (Policy Analyst):
I have a work session document (Exhibit Y) summarizing S.B. 538 and describing Proposed Amendment 4699, which was offered by Senator Aaron D. Ford.

SENATOR SETTELMEYER:
On page 3 of Exhibit Y, does the concept of "fewer than 20,000 unique visitors per year" provide an exemption for the government? If each elementary school has a Website, does that count toward an aggregate for the county, or is that just for each school district Website? How would that work? I am a little worried about exempting out the government. Maybe I should follow up with the bill's sponsor on the Floor.

SENATOR SPEARMAN MOVED TO AMEND AND DO PASS AS AMENDED S.B. 538.

SENATOR CANNIZZARO SECONDED THE MOTION.

SENATOR SETTELMEYER:
Until I get that concern resolved, I will vote no at this point.

SENATOR GANSERT:
I will support the motion. This bill is about notice. Entities can always opt in to provide notice versus having it mandated.

SENATOR HARDY:
I will support the bill until I find out what else is in it that I did not figure out.

THE MOTION PASSED. (SENATOR SETTELMEYER VOTED NO.)

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CHAIR ATKINSON:
Is there any further public comment? Hearing none, I will adjourn the meeting at 11:39 a.m.

RESPECTFULLY SUBMITTED:

Lynn Hendricks,
Committee Secretary

APPROVED BY:

Senator Kelvin Atkinson, Chair

DATE:

| EXHIBIT SUMMARY | | | | |
|---|---|---|---|---|
| **Bill** | **Exhibit / # of pages** | | **Witness / Entity** | **Description** |
| | A | 1 | | Agenda |
| | B | 13 | | Attendance Roster |
| A.B. 206 | C | 4 | Assemblyman Chris Brooks | Written Testimony |
| A.B. 206 | D | 27 | Robert G. Johnston / Western Resource Advocates | Presentation |
| A.B. 206 | E | 6 | Dylan Sullivan / Natural Resources Defense Council | Report |
| A.B. 206 | F | 1 | Dylan Sullivan / Natural Resources Defense Council | Energy Choice States |
| A.B. 206 | G | 4 | Assemblyman Chris Brooks | A.B. 206 Section by Section |
| A.B. 206 | H | 3 | Tom Polikalas | Written Testimony |
| A.B. 206 | I | 1 | Thomas H. Husted / Valley Electric Association, Inc. | Letter of Support |
| A.B. 206 | J | 2 | TechNet | Letter of Support |
| A.B. 206 | K | 1 | Larry Fosgate | Written Testimony |
| A.B. 206 | L | 1 | Lynn Lanier | Written Testimony |
| A.B. 206 | M | 3 | Virginia Valentine / Nevada Resort Association | Proposed Amendment |
| A.B. 206 | N | 3 | Janette Dean | Written Testimony |
| A.B. 206 | O | 1 | Roosevelt Williams / Uplift Foundation of Nevada | Written Testimony |
| A.B. 206 | P | 2 | Aurora Driscoll Barker /The Rogich Communications Group | Written Testimony |
| A.B. 206 | Q | 2 | Karen Griffin / Clean Energy Project | Written Testimony |
| A.B. 206 | R | 1 | James Woodruff | Written Testimony |
| A.B. 206 | S | 1 | Anna Aberle | Written Testimony |
| A.B. 206 | T | 1 | Margel Dinino | Written Testimony |

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|---|---|---|---|---|
| A.B. 206 | U | 1 | Josh Molina | Written Testimony |
| A.B. 206 | V | 1 | Zappos.com | Written Testimony |
| A.B. 206 | W | 1 | Tom Dalzell / IBEW | Written Testimony |
| A.B. 206 | X | 2 | David Gibson / Powered By Sunshine | Written Testimony |
| S.B. 538 | Y | 6 | Marji Paslov Thomas | Work Session Document |