MINUTES OF THE MEETING OF THE ASSEMBLY COMMITTEE ON GROWTH AND INFRASTRUCTURE

Eightieth Session April 18, 2019

The Committee on Growth and Infrastructure was called to order by Chair Daniele Monroe-Moreno at 1:41 p.m. on Thursday, April 18, 2019, in Room 3143 of the Legislative Building, 401 South Carson Street, Carson City, Nevada. The meeting was videoconferenced to Room 4406 of the Grant Sawyer State Office Building, 555 East Washington Avenue, Las Vegas, Nevada. Copies of the minutes, including the Agenda (<u>Exhibit A</u>), the Attendance Roster (<u>Exhibit B</u>), and other substantive exhibits, are available and on file in the Research Library of the Legislative Counsel Bureau and on the Nevada Legislature's website at www.leg.state.nv.us/App/NELIS/REL/80th2019.

COMMITTEE MEMBERS PRESENT:

Assemblywoman Daniele Monroe-Moreno, Chair Assemblyman Steve Yeager, Vice Chair Assemblywoman Shea Backus Assemblywoman Shannon Bilbray-Axelrod Assemblyman Richard Carrillo Assemblyman John Ellison Assemblyman Glen Leavitt Assemblyman Glen Leavitt Assemblyman Rochelle T. Nguyen Assemblyman Tom Roberts Assemblyman Greg Smith Assemblyman Howard Watts Assemblyman Jim Wheeler

COMMITTEE MEMBERS ABSENT:

None

GUEST LEGISLATORS PRESENT:

Senator Chris Brooks, Senate District No. 3

STAFF MEMBERS PRESENT:

Michelle L. Van Geel, Committee Policy Analyst Jessica Dummer, Committee Counsel Lori McCleary, Committee Secretary Alejandra Medina, Committee Assistant



OTHERS PRESENT:

Robert G. Johnston, Senior Staff Attorney, Western Resource Advocates Dylan Sullivan, Senior Scientist, Climate and Clean Energy Program, Natural **Resources Defense Council** Judy Stokey, Vice President, Government and Community Strategy, NV Energy Gail Tuzzolo, representing Locals 1245 and 396, International Brotherhood of **Electrical Workers** Ann Silver, Chief Executive Officer, Reno Sparks Chamber of Commerce Katherine Lorenzo, Senior Community Organizer, Chispa Nevada Andy Maggi, Executive Director, Nevada Conservation League Richard Perkins, representing MGM Resorts International Elspeth DiMarzio, Beyond Coal Campaign Representative, Sierra Club Robert S. Uithoven, representing Las Vegas Sands Corporation Ray N. Fakhoury, State Policy Manager, Advanced Energy Economy Alfredo Alonso, representing Ormat Technologies, Inc. Richard "Hank" James, Executive Director, Nevada Rural Electric Association Katie Robbins, representing Nevadans for a Clean Energy Future Jessica Ferrato, representing Solar Energy Industries Association Kyle J. Davis, representing Interwest Energy Alliance Lucas Foletta, representing Nevada Resorts Association Christopher W. Mixson, representing Tides Advocacy/Vote Solar Action Fund Michael Alonso, representing Caesars Entertainment; and Peppermill Casinos, Inc. Paul J. Moradkhan, Vice President, Government Affairs, Las Vegas Metro Chamber of Commerce Steve K. Walker, representing Truckee Meadows Water Authority Laurel Saito, Nevada Water Program Director, The Nature Conservancy Hawah Ahmad, representing Local 1245, International Brotherhood of Electrical Workers

Chair Monroe-Moreno:

[Roll was called. Committee rules and protocol were explained.] We have only one bill on the agenda, <u>Senate Bill 358 (2nd Reprint</u>). I will open the hearing and invite Senator Brooks to the table.

<u>Senate Bill 358 (2nd Reprint)</u>: Revises provisions relating to the renewable energy portfolio standard. (BDR 58-301)

Senator Chris Brooks, Senate District No. 3:

In 2018, the voters of Nevada decisively advanced, by a 60-40 margin, Question 6—a constitutional amendment that would move our state toward a 50 percent renewable portfolio standard (RPS). If approved again in 2020, it would become part of the *Nevada Constitution*.

I am introducing <u>Senate Bill 358 (2nd Reprint)</u> in the spirit of this ballot initiative. It declares that this Legislature is committed to a robust renewable portfolio standard and establishes a more comprehensive ramp-up to 50 percent within the next decade.

I have said many times that I believe climate change is one of the most serious emergencies that our state, our country, and our planet are facing today. Greenhouse gas emissions caused by fossil fuels burned to create electricity are helping to drive this emergency. A strong RPS in Nevada has already led to decreased greenhouse gas emissions in the electricity sector. Fighting for a more sustainable future is what this focus is about, and we need to give this effort everything we have. The industries that help drive our economy, including technology companies, data centers, convention centers, and the other nations we trade with, demand it. The same goes for the millions of tourists who come into this state and drive our economy.

Twenty-nine states, including Nevada, have already set RPS frameworks. Many of those are far more aggressive than this measure. With this bill, we have the opportunity to try to catch up with those states that are leading the way. Let me be clear: it will not be hard for Nevada to accomplish this goal. We receive a lot more sunshine than most other parts of the country, we have plenty of opportunities for geothermal sources in our state, and we already have an existing hydropower infrastructure. Why would we not use our naturally endowed resources to create a better future for our children? I would also call to mind that we have virtually no fossil fuels within our borders and have to import them from out of state to the tune of billions of dollars a year. We need to keep that money in Nevada.

I appreciate the partnerships that I have forged with the Office of Energy, Office of the Governor, and Governor Sisolak himself, in advocating for a robust renewable portfolio standard. I also want to thank NV Energy for their cooperation, along with environmental groups such as the Nevada Conservation League, Western Resource Advocates, the National Resources Defense Council, the Sierra Club, and each person who is here today in favor of <u>S.B. 358 (R2)</u>. I truly appreciate both the labor and business communities in Nevada. They have been at the table since day one in crafting this bill.

The hard work that everyone has put in was reflected when the Senate unanimously passed <u>S.B. 358 (R2)</u>. Both Democrats and Republicans understood the importance of expanding renewable energy. I strongly urge my colleagues in the Assembly to vote in favor of this legislation.

Joining me today to briefly talk about the bill are Bob Johnston, the Senior Staff Attorney for Western Resource Advocates, and Senior Scientist Dylan Sullivan from the Natural Resources Defense Council. We have included for your review a few slides (<u>Exhibit C</u>) that help demonstrate what this bill does and we are available to answer any questions members may have.

Robert G. Johnston, Senior Staff Attorney, Western Resource Advocates:

Western Resource Advocates is a regional, nonprofit environmental law and policy organization operating in the interior West, including Nevada. Western Resource Advocates' clean energy program works to transition electricity production away from fossil fuels toward clean, renewable energy in order to prevent catastrophic climate change, improve air quality, and protect public health.

I am here today in support of <u>S.B. 358 (R2)</u>. At the time Nevada's RPS was increased to the target of 25 percent by 2025 in 2009, Nevada was the national clean energy leader. A decade later we have fallen behind. A standard of 50 percent by 2030 would put Nevada back among the top ten clean energy states. By doing that, we can reduce our overreliance on natural gas generation with its associated fuel price risks, reduce our carbon emissions that are driving climate change, provide new clean energy jobs, and provide stable electricity rates for Nevada customers. It is really a win-win for Nevada, and we urge this Committee to pass this bill.

For the Committee's reference, I have provided some slides comparing <u>S.B. 358 (R2)</u> to our current law and also to Question 6 [The Renewable Energy Promotion Initiative]. This page [page 2, (<u>Exhibit C</u>)] shows the comparison of the state RPS requirements among states at 25 percent or higher, with Nevada's existing and proposed RPS shown in blue. Currently, 16 states and the District of Columbia have higher standards. <u>Senate Bill 358 (2nd Reprint)</u> would move Nevada back into the top ten.

This page [page 3] shows a comparison of the current RPS steps versus <u>S.B. 358 (R2)</u> with the current law in light green and <u>S.B. 358 (R2)</u> in darker green.

This page [page 4] shows the same comparison but adding in the percentage steps toward a 50 percent goal under Question 6, shown with the blue line. As you can see, <u>S.B. 358 (R2)</u> closely aligns with what voters approved on the Initiative's first vote last November.

This page [page 5] is the same comparison but backing out the allowed use of energy efficiency credits for RPS compliance, which Question 6 does not anticipate and which, under current law and <u>S.B. 358 (R2)</u>, will be phased out after 2024. This comparison shows the percentage of renewable energy credits providers will need after they have taken full advantage of the use of energy efficiency credits through 2024. As you can see, there is very close alignment with Question 6.

This page [page 6, (<u>Exhibit C</u>)] shows how the allowed use of energy efficiency credits for RPS compliance will be phased out under the existing law and this bill. The percentage carve-out drops from 20 percent this year down to 10 percent for years 2020 through 2024, and then disappears in 2025.

Finally, this page [page 7] shows how the allowed use of energy efficiency credits for RPS compliance will be phased out only for the providers of certain *Nevada Revised Statutes* (NRS) Chapter 704B customers whose applications to exit NV Energy were approved prior to January 1, 2019. Under existing law, these providers get the 25 percent energy efficiency carve-out forever. Under this bill, they are allowed to use the full 25 percent energy efficiency carve-out through 2024, and thereafter on exactly the same RPS as NV Energy and any NRS Chapter 704B providers whose application was approved after December 31, 2018.

Thank you for the opportunity to address the Committee today. I am available to answer any questions.

Chair Monroe-Moreno:

Are there any questions from the Committee before we proceed to the next presenter? [There were none.]

Dylan Sullivan, Senior Scientist, Climate and Clean Energy Program, Natural Resources Defense Council:

The Natural Resources Defense Council (NRDC) is a member-based environmental group with three million members and activists nationwide, and 19,000 here in Nevada. I worked closely with Senator Brooks and Mr. Johnston on the bill and its amendment. The NRDC strongly supports passage of <u>S.B. 358 (R2)</u>.

The Committee has been provided a fact sheet (Exhibit D) regarding S.B. 358 (R2), put out by NRDC, Western Resource Advocates, and the Sierra Club. The fact sheet has summarized analysis commissioned by our organizations, but largely undertaken by respected, independent consultants into a 50 percent renewable portfolio standard in Nevada.

The key points of this are as follows: First, because a new solar power plant in Nevada produces some of the cheapest electricity of any new power plant in the United States, getting to a cleaner electricity mix and 50 percent renewables is actually a money saver when we compare it to the alternative or relying more on out-of-state natural gas.

Second, using Nevada renewables will create a lot of jobs here in Nevada. Analysis using IMPLAN, which is a widely used regional economic model, shows that the robust renewable energy sector needed to get to 50 percent renewables will add another 11,000 jobs to the Nevada economy in 2030.

Finally, getting 50 percent of our electricity from renewables such as solar, wind, geothermal, and hydroelectricity, will reduce greenhouse emissions, helping to leave a better future for our children and grandchildren.

There are two big changes I want to focus your attention on. First, for a long time, for reasons that may have been justifiable when these sections were first written, some renewable energy resources were given extra credit, and some things that are not renewable electricity, like energy savings, counted toward the standard. With today's renewable energy

prices and other policies that undergird strong investment and energy efficiency, these provisions of law are no longer necessary. This bill phases out the use of multipliers and energy efficiency credits so by 2030—50 percent is going to mean 50 percent.

The other big change in <u>S.B. 358 (R2)</u> is the treatment of hydro. Small hydroelectric systems have long been able to be used by providers for compliance, and NV Energy has contracts with several small units. For the first time, this bill allows existing large hydro, already under contract to a provider, to be used for compliance. You can see that in section 19, subsection 1, paragraph (b), of the bill. As we move to 50 percent renewables and potentially pull in electricity providers that have a lot of hydro on their systems but have not previously been subject to the RPS, this makes sense.

I will end my comments there, and I am available to answer questions.

Chair Monroe-Moreno:

We do have a few questions.

Assemblyman Wheeler:

I am glad you included hydro, and we have discussed this a little bit offline. I want to make sure we have it on the record that, because of the amendments, Hoover Dam, for instance, which generates 2,000 megawatts a year, is to be included. I do see that, since it is before 1997. If you could answer that, I do have a follow-up question if the Chair will allow.

Senator Brooks:

It does include all the existing federal hydro in the state and delivered into the state, including Hoover Dam.

Assemblyman Wheeler:

As I look at the bill, it says that we include Hoover Dam hydro because it is the pre-1997 portion of this bill. If someone wants to build a new hydro off the Truckee River to supply all the new people moving into Reno, et cetera, it would not count because it would be new and it would be over 30 megawatts. I am wondering why we would not include new hydro since it is a renewable energy source that has no pollution, et cetera.

Bob Johnston:

Systems constructed after July 1, 1997, that generate electricity from water power have been prior to this law, under current law, and under <u>S.B. 358 (R2)</u> will be eligible for renewable energy credits. There are some restrictions on that with respect to section 21 of the bill, and that is where they are found. Those systems would still have to meet the requirements under section 21 to meet the definition of water power, so they could not be over 30 megawatts. You are correct. It is my understanding that the existing hydro facilities on the Truckee River are under 3 megawatts. They are in the 1 to 3 megawatt range, so 30 megawatts would really be a huge unit.

Senator Brooks:

You are absolutely correct. If it is existing hydro of any size, it counts toward the portfolio standard. Moving forward, new hydro under 30 megawatts would count toward the renewable portfolio standard. Large-scale, brand-new dams or hydropower projects would not. By the way, I do not envision that we will have any large-scale hydropower projects in the state of Nevada.

Assemblyman Wheeler:

I do not envision it either, but what if it happens? I am wondering why you are taking that possibility out of this bill.

Senator Brooks:

Many people, myself included, think large-scale hydropower projects in Nevada are not a good idea.

Assemblyman Yeager:

Thank you, Senator Brooks, for your continued work on this issue, and for the other two who are at the table presenting as well. I was looking at the presentation and the first graph about the other states' RPS [page 2, (Exhibit C)]. Obviously, if we are going to enact this bill and have 50 percent by 2030, that puts us at No. 6, assuming no one jumps us. I understand Hawaii is a unique situation and will have 100 percent by 2045. How did we arrive at 50 percent? It looks like some of the states, and one of our neighboring states, New Mexico, will be at 80 percent by 2040. I would like to see us go as far as we can potentially go. I know you have done a lot of work on this bill, and I was hoping you could shed some light on how 50 percent was arrived at and whether there is some room to work in future sessions to potentially increase that percentage.

Senator Brooks:

There have been a lot of outside studies and documentation showing that getting to 50 percent with the current ramp we project in this bill, and also what was in the Question 6 ballot initiative, is something that would have no cost impact to the state of Nevada. Based on current technology, current pricing, and what we feel the grid could accommodate, 50 percent by 2030 at its current ramp is no cost to the state of Nevada and, under certain scenarios, would have savings associated with it. What I have found in 17 years of coming to the building and working on this issue is that the technology is always advancing far quicker than our policy does and the prices have always dropped far quicker than I ever anticipated they would. Obviously, future legislative sessions can revisit this issue, but 50 percent based on where we are at right now, where technology is at, and where the pricing is at, the modeling shows we would have some cost savings and it would have zero impact on ratepayers.

Chair Monroe-Moreno:

Going back to the question from Assemblyman Wheeler, I know you have done a lot of work in this industry, but you made a personal comment earlier. Could you put on the record your experience and knowledge about the subject matter that brought you to your decision on hydropower?

Senator Brooks:

There is no new hydro projected to be built anywhere in the country. As a matter of fact, there is spirited debate, even in this legislative body, about removing some existing hydropower projects. The significant cost of a new hydropower project of any size, as well as the environmental damage that new hydropower projects and existing hydropower projects have on ecosystems and communities around the country, actually takes hydro off the table for consideration. That is why we are realizing the acknowledgment of those facts, and that is why the policy in <u>S.B. 358 (R2)</u> does not include or contemplate any new large-scale hydro.

Dylan Sullivan:

In addition to the environmental impacts of new large hydro, all the good sites have been taken. There is really not much more resource to be wrung out of that. No big, large new dams are contemplated in the United States, and because of the environmental impact, they are not included in the bill.

Of course, if something new and big were to be built, future legislatures could come back and make a decision about whether it should be included. However, we do not anticipate that that would occur.

Assemblywoman Bilbray-Axelrod:

Thank you, Senator Brooks, for bringing this important piece of legislation to us. You had mentioned that there might even be a cost savings to the state of Nevada. Could you expand on the economic benefits, what you anticipate, what we could see, and what kind of numbers we are looking at?

Senator Brooks:

Currently, the contracts that are being signed or the pricing that is being proposed for new renewable energy projects in the state of Nevada, specifically large-scale solar, are the lowest prices of any pricing we have seen in the energy sector. About 75 percent of the electricity in the state of Nevada is generated by natural gas. Natural gas is a volatile fuel supply moving forward, and we have seen it all over the map as far as pricing goes. Any modeling we have done looking forward over 20 years has a 50 percent renewable energy portfolio standard having the lowest cost for Nevada for energy production.

The wild card is energy storage. As you know, some renewables, like wind and solar, are intermittent. Solar does not produce at night, but the peak load for Nevada is right around 6 p.m. in the middle of summer. That does not necessarily coincide with wind or solar. Energy storage pricing is coming down at rates that the industry never predicted. That could show even greater savings to the state of Nevada because we will need large energy storage projects to integrate 50 percent.

Assemblyman Ellison:

I know you talked about this a few minutes ago. I cannot remember when Nevada made the switch from coal power plants to the natural gas plants, but it is going to cost billions of dollars to do. Where are these natural gas plants going to be in the study? Are you going to try to phase them out, or is natural gas included in the equation?

Bob Johnston:

Your reference is to <u>Senate Bill 123 of the 77th Session</u>, which provided for the retirement of 800 megawatts of coal-fired generation and its replacement with 550 megawatts of unspecified, nontechnology-specific generation, plus 350 megawatts of new renewable energy projects. NV Energy ended up replacing just about 500 megawatts of coal-fired generation with existing natural gas generation. They did not build new gas generation, they bought gas generation that was already in place, which was not new but not middle-aged either. They were about 10 to 15 years old. That generation is being used, and under the projections Mr. Sullivan referred to, most of that will still be online in 2030, but it will be used less because it will only be used as needed to fill in. The big advantage for renewable energy is, once you have built the plant, the incremental cost of running it is virtually nothing. Renewable energy will displace fossil fuel energy for any hour in which it is available in sufficient quantity to meet demand.

Assemblyman Ellison:

In section 17 of the bill, I am glad you included geothermal energy. I think that is a major deal we could tap into as far as energy savings and the future. There is a lot of geothermal in Nevada that could be used. However, under section 17, subsection 2, it says, "The term does not include coal, natural gas, oil, propane or any other fossil fuel, or nuclear energy." Based on this, those will be excluded in any kind of energy application. Is that correct?

Senator Brooks:

Those would be excluded from being defined as renewable energy. If we are at 50 percent, the other 50 percent could come from what would be considered nonrenewable, or it could be renewable based on pricing. We are setting minimums in the bill, not maximums. Those technologies and fuel supplies you just mentioned in section 17 are, while still energy and while still could be used, would not be defined as renewable energy for the purposes of complying with the portfolio standard.

Assemblyman Leavitt:

You mentioned 11,000 jobs [page 2, (<u>Exhibit D</u>)], and that is always a good thing. Are those 11,000 sustainable jobs or are they construction jobs that may end at a certain point after we build the infrastructure? What types of jobs are we talking about?

Dylan Sullivan:

The IMPLAN model basically shows a flow of new work from an investment. That is looking at a sample of the Nevada economy in 2030 with the change in the RPS and what the difference is between a no-RPS scenario and this RPS scenario. You are right. What we are talking about is an investment program over the 2020s, so the impact of that construction work will fade over time. However, we are still going to have jobs in project development, project finance, and maintaining renewable energy systems, so it is going to be a flow of work that gets more intense for a while and then it will go down. Of course, we fully expect Nevada will continue to be a renewable energy leader. A few sessions from now we will be thinking about other policies to encourage even more renewable energy in the future. This bill will create a flow of work, but I think, over time, that flow is going to be replenished.

Senator Brooks:

There are thousands of renewable energy jobs in the state right now, even when nothing is under construction. Those jobs are in design, maintenance, development, and finance law, all very specific to renewable energy projects. For instance, I have had a renewable energy job for 20 years now. Even when things are not being built, there is the development of projects throughout the state. Because southern Nevada has become a solar hub for the Southwest and northern Nevada has become a geothermal hub for around the world, we have seen companies locate in southern Nevada and northern Nevada that are there to service those industries. International headquarters for some companies have moved to Nevada because of the construction and the development. Those areas have turned into the hubs for those technologies.

Chair Monroe-Moreno:

Are there any further questions from the members? [There were none.] I will open the hearing for those in support of the bill. I do have a list of supporters, and I will call you up in order of my list. I ask that you keep your comments to two minutes or less. Here in Carson City, Ms. Stokey, Ms. Silver, and Ms. Tuzzolo. In Las Vegas, Ms. Lorenzo and Mr. Maggi. We will start in Carson City.

Judy Stokey, Vice President, Government and Community Strategy, NV Energy:

We are here in support of <u>S.B. 358 (R2)</u>. We appreciate all the work Senator Brooks has put into this bill. He brought all the parties together. As you can see, this has been amended and he took everyone's thoughts into consideration in putting this bill together. We think it is a really good bill.

We did announce last year that NV Energy is supportive of 50 percent by 2030, so this was not a surprise to us. We would like to go even higher if we can. As Senator Brooks mentioned, we are now signing the lowest-cost solar contracts that we have ever seen, and I think it is the lowest cost in the nation. Lower-cost renewables without any fuel component is definitely a benefit to our customers.

We have complied with the RPS that has been in statute by this body for a number of years, and we intend to continue to comply. We just filed our annual report on our renewables and we are, by statute, supposed to have 20 percent renewables as of this year, and we have just over 24 percent. We will continue to grow that renewable portfolio as prices decrease.

Gail Tuzzolo, representing Locals 1245 and 396, International Brotherhood of Electrical Workers:

We have been at the table since the very beginning, and we wholly support this legislation and look forward to continuing to work to make our air cleaner and our environment better.

Ann Silver, Chief Executive Officer, Reno Sparks Chamber of Commerce:

I am representing our 1,700 members who employ over 75,000 residents. I am here today to support raising Nevada's renewable portfolio standard. By increasing the RPS to 50 percent by 2030, Nevada would match the current market demand for clean energy by using our state's renewable resource potential. Nevada boasts some of the best potential for solar and geothermal resources in the nation, and now is the time to capitalize on our existing assets. A higher standard will also bring new investments and workforce development to our community, continuing to increase the number of Nevadans employed in clean energy.

Lastly, our chamber members are always looking to use energy efficiently. Deriving half of their energy from renewable resources will help reduce power bills and lower costs across the marketplace. The Reno Sparks Chamber of Commerce urges this Committee to do as the Senate did and pass <u>S.B. 358 (R2)</u> with your unanimous support. [Written testimony was also submitted (<u>Exhibit E</u>).]

Katherine Lorenzo, Senior Community Organizer, Chispa Nevada:

Chispa Nevada is a program of the League of Conservation Voters, here today also as part of RenewNV, a broad coalition of clean energy advocates. Our organizations advocate for clean energy and climate solutions in Nevada and collectively represent tens of thousands of Nevadans as members and supporters. We share a commitment to building and maintaining our state's clean energy leadership and believe a strong RPS will create good jobs, improve our air quality, and protect our environment for future generations. We have collected 4,125 petitions from Nevadans on paper and over the phone calling for an RPS of 50 percent by 2030.

Many of the representatives of our coalition are here in Las Vegas and Carson City today to express our strong support for <u>S.B. 358 (R2)</u>. Out of respect for your time, we will not all speak today, but I would like to ask that those here in support briefly stand. I am not sure if the camera can zoom out so you can see we have a packed room.

Chair Monroe-Moreno:

Thank you for that.

Katherine Lorenzo:

I would like to ask that you please take notice of our supporters in Carson City also. We would like to commend the Nevada Legislature for taking up this important issue and for moving quickly to make this bill a law. We were grateful to see this bill pass unanimously in the Senate, and we urge the Assembly to also show strong support for this bill. Thank you for the opportunity to speak.

Andy Maggi, Executive Director, Nevada Conservation League:

The Nevada Conservation League is proud to support <u>S.B. 358 (R2)</u> to increase Nevada's share of clean and cost-effective renewable energy to 50 percent by 2030. We would also like to thank the sponsor, the Chair, and the Committee members for taking up this critical issue so quickly.

Increasing the RPS will grow our economy, save money, help air quality and public health outcomes, and help fight climate change. Nevadans have been asking for a higher RPS since 2017, and voters reiterated their preference for clean energy by overwhelmingly supporting Question 6 in 2016. The Governor has called for this policy, and very recently, the Nevada Senate expressed their unanimous support for this policy. We ask today that you do the same. Thank you for your time, your consideration, and your support of <u>S.B. 358 (R2)</u>.

Chair Monroe-Moreno:

Would Mr. Perkins and Ms. DiMarzio please fill the seats in Las Vegas? In Carson City, could Mr. Uithoven, Mr. Fakhoury, and Mr. Alonso please step up to the table? We will continue in Las Vegas.

Richard Perkins, representing MGM Resorts International:

As an industry leader in renewable energy and many other sustainability programs, MGM Resorts International applauds Senator Brooks and this Committee. We are pleased to support <u>S.B. 358 (R2)</u>.

Elspeth DiMarzio, Beyond Coal Campaign Representative, Sierra Club:

This year, the Sierra Club is proud to support <u>S.B. 358 (R2)</u> to increase the renewable portfolio standard. We are grateful to Chair Monroe-Moreno, Speaker Frierson, and this Committee for expediting consideration of this important piece of legislation, especially after the unanimous vote coming from the Senate.

This legislation will ensure that all Nevadans benefit from the amazing opportunity clean energy technology brings to our state. States with clear and consistent renewable energy standards create policy certainty and predictability, attracting businesses, and increasing private investment in their local economies. Through smart policy, we can create good jobs and, once again, make Nevada a leader in the clean energy sector. We appreciate your time, and we are looking forward to seeing this policy implemented.

Robert S. Uithoven, representing Las Vegas Sands Corporation:

I am here today on behalf of our thousands of team members in Nevada at the Venetian Resort Hotel Casino, the Palazzo at The Venetian Resort, and the Sands Expo and Convention Center to offer our strong support for <u>S.B. 358 (R2)</u>. Six months ago you probably could have started a joke about a Sands lobbyist, an NV Energy lobbyist, and an RPS bill walking into a bar. Today, we walk out together thanks in large measure to the bill sponsor and his work with all of the interested parties. We walk out together unified on this legislation.

The Las Vegas Sands Corporation has been an industry leader here in Nevada and worldwide in advancing environmental responsibility and sustainability. Through our award-winning program, the Sands ECO360 Global Sustainability strategy, we have been making a difference in advancing this effort. Why? Quite frankly, our customers demand it, and we have responded to them.

As we know, the best education is experience, and I know many of you have had the opportunity to experience a tour of our ECO360 program in all three of our LEED-certified [Leadership in Energy and Environmental Design] buildings on the Strip in Las Vegas. For those of you in this body who have not, we look forward to showcasing this wonderful program at your earliest convenience.

The Sands ECO360 Global Sustainability strategy is designed to help minimize our environmental impact, and it reflects our vision to lead the way in sustainable building development and resort operations. Driven by an aspirational idea made possible through the dedication and hard work of our team members, we continue our journey to a more sustainable future. Madam Chair, we believe, through this legislation, the state will be a great partner in this journey.

Ray N. Fakhoury, State Policy Manager, Advanced Energy Economy:

The Advanced Energy Economy is a national business organization that works to make the energy we use here in Nevada more clean, secure, and affordable. Advanced energy technologies encompass a broad range of innovative products and services that all work to make the grid here in Nevada more reliable. Among these renewable energies are things like geothermal, wind, solar, energy efficiency, demand response, energy storage, and transportation electrification. We work across the technological spectrum to advance these policies.

Today, I just want to voice our strong support for <u>S.B. 358 (R2)</u>. This bill is going to create significant jobs and investment opportunities for folks here in Nevada. We look forward to continuing this process in making sure this bill moves forward with your strong support.

Alfredo Alonso, representing Ormat Technologies, Inc.:

Ormat Technologies, Inc. is headquartered in Nevada, has a manufacturing facility in Nevada, and currently has about 325 megawatts of geothermal energy in the state of Nevada. That is important to note because, regardless of whether they are exporting energy or energy is being used here, those are dollars that are going back into the state in new revenue. These plants are being built almost primarily on federal land, where there would never be any additional revenue coming unless there is a mine.

For every plant that is built for a 20-megawatt facility, that is about \$500,000 in tax revenue per year to the county, plus the portion of the federal lease. Many of you do not know that geothermal also pays a royalties tax under the mining law, so the counties get a significant amount of money coming back every time one is built. That is very important because, as you know, this bill will encourage that development in rural counties in particular, which is where most of the geothermal is located today. We believe there is probably another 900 megawatts available almost immediately, with thousands still undiscovered.

We strongly support this bill and thank the sponsor for his hard work, not only this year but last session as well. I know he has been tireless at this, and we appreciate his hard work and efforts.

Chair Monroe-Moreno:

Could Mr. James, Ms. Ferrato, and Ms. Robbins fill the chairs here in Carson City?

Richard "Hank" James, Executive Director, Nevada Rural Electric Association:

I am here to speak in full support of <u>S.B. 358 (R2)</u>. Members of Nevada Rural Electric Association (NREA) proudly support the development and use of cost-effective, clean energy resources. On average, 75 percent of the electricity NREA has delivered to our consumers comes from clean energy generation sources. Several NREA members have decades-old, wholesale power supply contracts for clean, affordable, and reliable hydroelectricity which allows them to serve sparsely populated communities throughout the state.

<u>Senate Bill 358 (2nd Reprint)</u> promotes responsible development and use of cost-effective clean energy resources which will boost Nevada's economy, especially in rural communities. <u>Senate Bill 358 (2nd Reprint)</u> enhances consumer value and will put the state on course for a sustainable, affordable energy future. Finally, <u>Senate Bill 358 (2nd Reprint)</u> retains the local board control of power supply decision making for rural electrics. The NREA appreciates the bill sponsor for including our members in the process of developing this important legislation.

Katie Robbins, representing Nevadans for a Clean Energy Future:

Nevadans for a Clean Energy Future is the campaign supporting Question 6, the Constitutional amendment on the ballot last year, which would raise the RPS to 50 percent by 2030.

The people of Nevada made a clear statement last November about the future they want, and they should not have to wait for that to become a reality. Many legislative leaders, as well as Governor Sisolak, have all recognized the need to guarantee a cleaner, healthier future for our state. We saw that again with the unanimous passage of <u>S.B. 358 (R2)</u> earlier this week. Many have asked if we are prepared to go to the ballot again in 2020, and the answer is yes, but we should not have to do so. We urge you to support <u>S.B. 358 (R2)</u> for a cleaner, healthier future.

Jessica Ferrato, representing Solar Energy Industries Association:

The Solar Energy Industries Association represents 1,000 member companies across the United States. We are here today in support of <u>S.B. 358 (R2)</u> and would like to thank Senator Brooks for all his incredible work on this measure.

This bill will bring energy independence, improved security, reduced fuel transportation costs, comprehensive environmental benefits, and expanded economic development. Jobs that we anticipate include system design and engineering jobs, permitting, project development, construction, supply and distribution, marketing, and maintenance. We urge your support on this bill and thank you for your time. [A letter of support was also submitted (Exhibit F)].

Chair Monroe-Moreno:

Those not on my list here to testify in support of the bill, please fill the chairs. Mr. Davis, you may proceed.

Kyle J. Davis, representing Interwest Energy Alliance:

Interwest Energy Alliance is a 501(c)(6) nonprofit trade association bringing together the leading renewable energy developers and manufacturers with the nongovernmental environmental community to promote renewable energy throughout Nevada and the intermountain west.

We are in support of <u>S.B. 358 (R2)</u> and appreciate Senator Brooks bringing the bill forward. The bill will allow Nevada to continue to tap into its exceptional solar, wind, and geothermal resources to generate electricity, which we believe is best acquired through competitive acquisition processes which ensures that the ratepayers are getting the best deal. A stronger RPS will create thousands of good jobs, generate billions of dollars in economic activity, continue to diversify Nevada's economy, and attract innovation and investment.

For example, NV Energy's recent decision to acquire six new solar and battery storage purchase power agreements will stimulate over a billion dollars of capital investment around Nevada. With the passage of <u>S.B. 358 (R2)</u>, this economic progress will continue by building a strong foundation supporting these business decisions into the next decade. [Written testimony was also submitted (<u>Exhibit G</u>).]

Lucas Foletta, representing Nevada Resorts Association:

Like the individual members of the association who have already spoken today, the Nevada Resorts Association is happy to support this bill, and we appreciate the efforts of the bill sponsor to work with us over the last couple of months to develop this piece of legislation that is before you.

Christopher W. Mixson, representing Tides Advocacy Vote Solar Action Fund:

Tides Advocacy Vote Solar Action Fund supports <u>S.B. 258 (R2)</u> and thanks Senator Brooks for his efforts. [A letter of support was also submitted (<u>Exhibit H</u>).]

Michael Alonso, representing Caesars Entertainment; and Peppermill Casinos, Inc.:

Caesars Entertainment and Peppermill Casinos, Inc. are here in support of <u>S.B. 358 (R2)</u>. We want to thank the sponsor for bringing this bill and for all the work he did, especially with the Nevada Resorts Association and Eric Dominguez from Caesars. We appreciate all the time he spent going through that and making changes.

Paul J. Moradkhan, Vice President, Government Affairs, Las Vegas Metro Chamber of Commerce:

The Las Vegas Metro Chamber of Commerce is also in support of this bill. I would like to thank the bill sponsor for working with many of our members whom you have heard today are in support of the bill. Therefore, the Chamber is also in support.

Steve K. Walker, representing Truckee Meadows Water Authority:

You received a letter on the Nevada Electronic Legislative Information System from the general manager of Truckee Meadows Water Authority (TMWA), Mark Foree (<u>Exhibit I</u>). Respecting your time, I will not read the letter.

In summary, TMWA operates three of the oldest renewable water systems in Nevada, which are early 1900s, run-of-the-river systems that generate 6.7 megawatts of electricity. That is enough energy to power 90 percent of the electrical needs of the second largest utility water purveyor in the state. Finally, TMWA would specifically like to state our appreciation to Senator Brooks. He worked with us concerning some wording issues in the bill after it had come out of the Senate Committee on Growth and Infrastructure. We made sure our hydropower energy would fit the portfolio standard. The Truckee Meadows Water Authority supports S.B. 358 (R2).

Laurel Saito, Nevada Water Program Director, The Nature Conservancy:

I am testifying on behalf of Jaina Moan, the director of external affairs. Thank you for the opportunity to comment on <u>S.B. 358 (R2)</u> regarding provisions related to the renewable energy portfolio standard in Nevada. The Nature Conservancy is committed to tackling climate change, one of the biggest threats to our mission to preserve the lands and waters on which all life depends.

The Nature Conservancy supports policies that move the United States toward a robust, clean energy economy and reduce greenhouse gas emissions from the electricity sector. The Nature Conservancy supports increasing Nevada's renewable portfolio standard to 50 percent by 2030 policies as outlined in <u>S.B. 358 (R2)</u>.

We echo the comments of previous supporters who testified to the benefits of renewable energy and RPS policies. Increasing the renewable portfolio standard is an important next step for facilitating the deployment of renewable energy. Equally important is how this policy is implemented and where renewable generation is sited.

For over a decade, The Nature Conservancy has advised on the permitting and siting for utility-scale renewable energy developments in the Mojave Desert. Using The Nature Conservancy's published ecoregional assessments, we have identified low-impact, low-conflict solar energy zones that minimize adverse effects of energy development to ecosystems and wildlife. In the past year, we initiated a program called Mining the Sun to identify mine lands and brownfields that are suitable for renewable energy development. These lands are already disturbed and frequently located next to existing roads and transmission infrastructure. A preliminary analysis conducted by The Nature Conservancy and the Rocky Mountain Institute in 2018 revealed that there are 2.8 million acres of postproduction mine lands and brownfields in Nevada that are suitable for renewable energy development and brownfields in Nevada that are suitable for renewable energy and brownfields and brownfields in Nevada that are suitable for renewable energy and brownfields and brownfields in Nevada that are suitable for renewable energy development.

Moving forward, The Nature Conservancy is interested in engaging with the Office of Energy in the Office of the Governor, the State Department of Conservation and Natural Resources, utility companies, solar developers, and other stakeholders to ensure that the deployment of renewable energy resources has minimal impact on ecosystems, wildlife, and public lands in Nevada. We urge the Committee to pass <u>S.B. 358 (R2)</u>, and we thank Senator Brooks for introducing this bill. Thank you for hearing this bill and considering our comments. [Written testimony was also submitted (<u>Exhibit J</u>).]

Hawah Ahmad, representing Local 1245, International Brotherhood of Electrical Workers:

I promised Mr. Adler that we would establish that the International Brotherhood of Electrical Workers, which is made up of many of the workers at NV Energy, supports this bill. We support this bill for the same reasons given by the sponsor. This bill is crucial to the future of Nevada.

Chair Monroe-Moreno:

Is there anyone else present who would like to testify in support of the bill? [There was no one.] Is there anyone present who would like to testify in opposition to the bill? [There was no one.] Is there anyone present who would like to testify as neutral to the bill? [There was no one.] Are there any closing remarks from the sponsor?

Senator Brooks:

I would like to thank you for expediting this process, and also thank the Committee for giving so much time to this presentation. I would also like to thank the members for their thoughtful questions. I hope you support this measure.

[Also submitted was (Exhibit K), (Exhibit L), (Exhibit M), (Exhibit N), and (Exhibit O).]

Chair Monroe-Moreno:

I will close the hearing on <u>Senate Bill 358 (2nd Reprint)</u>. I would like to remind members that last night on the Assembly floor we suspended Assembly Standing Rule No. 57.4. We will go ahead and work session <u>Senate Bill 358 (2nd Reprint)</u>. You will be getting your work session documents now (<u>Exhibit P</u>).

<u>Senate Bill 358 (2nd Reprint)</u>: Revises provisions relating to the renewable energy portfolio standard. (BDR 58-301)

Michelle L. Van Geel, Committee Policy Analyst:

<u>Senate Bill 358 (2nd Reprint)</u> declares that it is the policy of Nevada to encourage and accelerate the development of new renewable energy projects. Among other things, the bill provides that an electric utility is authorized to acquire, without additional approval of the Public Utilities Commission of Nevada, an existing renewable energy facility or a renewable energy facility that is being developed, if the electric utility meets certain conditions, and an electric utility may charge a just and reasonable price for the electricity generated by a renewable energy facility owned by the utility. The bill revises the portfolio standard for calendar year 2021 and each calendar year thereafter so that by calendar year 2030, and for each calendar year thereafter, each provider of electric service will be required to generate, acquire, or save electricity from renewable energy systems or efficiency measures in an amount that is not less than 50 percent of the total amount of electricity sold by the types of electric providers who are required to comply with the renewable portfolio standard. There are no amendments for this measure (Exhibit P).

Chair Monroe-Moreno:

I will entertain a motion to do pass Senate Bill 358 (2nd Reprint).

ASSEMBLYMAN WHEELER MADE A MOTION TO DO PASS <u>SENATE BILL 358 (2ND REPRINT)</u>.

ASSEMBLYMAN WATTS SECONDED THE MOTION.

Is there any discussion on the motion?

Assemblyman Ellison:

I will vote yes to move this bill out of Committee, but I reserve my right to change my vote on the floor. I still have some questions.

THE MOTION PASSED UNANIMOUSLY.

Chair Monroe-Moreno:

I will assign the floor statement to Assemblyman Watts.

Is there anyone here for public comment? [There was no one.]

This meeting is adjourned [at 2:41 p.m.].

RESPECTFULLY SUBMITTED:

Lori McCleary Committee Secretary

APPROVED BY:

Assemblywoman Daniele Monroe-Moreno, Chair

DATE: _____

EXHIBITS

Exhibit A is the Agenda.

Exhibit B is the Attendance Roster.

<u>Exhibit C</u> is a copy of a PowerPoint presentation titled "SB 358—Increasing Nevada's Renewable Portfolio Standard," dated April 18, 2019, presented by Robert G. Johnston, Senior Staff Attorney, Western Resource Advocates.

<u>Exhibit D</u> is a document titled "Support SB 358: Strengthen Nevada's Renewable Portfolio Standard," presented by Dylan Sullivan, Senior Scientist, Climate and Clean Energy Program, Natural Resources Defense Council.

<u>Exhibit E</u> is written testimony dated April 18, 2019, in support of <u>Senate Bill 358</u> (2nd Reprint), submitted by Ann Silver, Chief Executive Officer, Reno Sparks Chamber of Commerce.

<u>Exhibit F</u> is a letter dated April 18, 2019, in support of <u>Senate Bill 358 (2nd Reprint)</u>, authored by Sara Birmingham, Senior Director, State Affairs, Solar Energy Industries Association.

Exhibit G is written testimony dated April 1, 2019, in support of <u>Senate Bill 358</u> (2nd Reprint), presented by Kyle J. Davis, representing Interwest Energy Alliance.

Exhibit H is a letter dated April 18, 2019, in support of <u>Senate Bill 358 (2nd Reprint)</u>, authored by Jessica Scott, Senior Director, Interior West, Vote Solar Action Fund.

Exhibit I is a letter in support of <u>Senate Bill 358 (2nd Reprint</u>), dated April 18, 2019, authored by Mark Foree, General Manager, Truckee Meadows Water Authority, presented by Steve K. Walker, representing Truckee Meadows Water Authority.

Exhibit J is a letter dated April 18, 2019, in support of <u>Senate Bill 358 (2nd Reprint)</u>, authored by Juan Palma, Nevada State Director, The Nature Conservancy, presented by Laurel Saito, Nevada Water Program Director, The Nature Conservancy.

<u>Exhibit K</u> is a letter dated April 18, 2019, in support of <u>Senate Bill 358 (2nd Reprint)</u>, authored by Rachel Bird, Director, Policy and Business Development, Borrego Solar; Sarah Van Cleve, Senior Managing Policy Adviser, Tesla, Inc.; Matthew Crosby, Policy Director, Coronal Energy; Ray Fakhoury, Principal, Advanced Energy Economy; Sam Jammal, Senior Manager, Government Relations, BYD Company Ltd.; Chris King, Chief Policy Officer, Digital Grid, Siemens USA; Kent Leacock, Senior Director, Government Relations and Public Policy, Proterra; Meghan Nutting, Vice President, Policy and Government Affairs, Sunnova Energy Corporation; and Ben Serrurier, Policy Manager, Cypress Creek Renewables LLC.

Exhibit L is a letter dated April 1, 2019, in support of <u>Senate Bill 358 (2nd Reprint)</u>, submitted by Ben & Jerry's Homemade, Inc.; Dignity Health-St. Rose Dominican Hospitals; eBay, Inc.; Ethel M Chocolates; Squaw Valley Alpine Meadows; and Unilever.

Exhibit M is a letter dated April 17, 2019, in support of <u>Senate Bill 358 (2nd Reprint)</u>, authored by Jill Lagan, President and Chief Executive Officer, Boulder City Chamber of Commerce.

<u>Exhibit N</u> is a letter dated April 9, 2019, in support of <u>Senate Bill 358 (2nd Reprint)</u>, authored by William Chernock, Executive Director, Carson Valley Chamber of Commerce.

<u>Exhibit O</u> is a letter dated April 17, 2019, in support of <u>Senate Bill 358 (2nd Reprint)</u>, submitted by Rudy Zamora, State Director, Chispa Nevada; Rev. Dr. Ralph E. Williamson, President, The Organizing Alliance; Andy Maggi, Executive Director, Nevada Conservation League; Sondra Cosgrove, President, League of Women Voters of Nevada; Elspeth DiMarzio, Campaign Representative, Sierra Club Beyond Coal Campaign; Annette Magnus, Executive Director, Battle Born Progress; Dr. Mary House, Chief Executive Officer, Caring, Helping and Restoring Lives; Jerry Holliday, President, Uplift Foundation; Katie Robbins, Campaign Manager, Nevadans for a Clean Energy Future.

Exhibit P is the Work Session Document for <u>Senate Bill 358 (2nd Reprint)</u>, dated April 18, 2019, presented by Michelle L. Van Geel, Committee Policy Analyst, Research Division, Legislative Counsel Bureau.