

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

**Eighty-Second Session  
May 16, 2023**

The Committee on Growth and Infrastructure was called to order by Chair Howard Watts at 1:33 p.m. on Tuesday, May 16, 2023, 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 [[Exhibit A](#)], the Attendance Roster [[Exhibit B](#)], and other substantive exhibits, are available and on file in the Research Library of the Legislative Counsel Bureau and on the Nevada Legislature's website at [www.leg.state.nv.us/App/NELIS/REL/82nd2023](http://www.leg.state.nv.us/App/NELIS/REL/82nd2023).

**COMMITTEE MEMBERS PRESENT:**

Assemblyman Howard Watts, Chair  
Assemblywoman Tracy Brown-May, Vice Chair  
Assemblyman Max Carter  
Assemblywoman Jill Dickman  
Assemblywoman Danielle Gallant  
Assemblyman Bert Gurr  
Assemblywoman Heidi Kasama  
Assemblywoman Elaine Marzola  
Assemblywoman Brittney Miller  
Assemblyman Cameron (C.H.) Miller  
Assemblywoman Sarah Peters  
Assemblywoman Shondra Summers-Armstrong

**COMMITTEE MEMBERS ABSENT:**

None

**GUEST LEGISLATORS PRESENT:**

Senator Pat Spearman, Senate District No. 1

**STAFF MEMBERS PRESENT:**

Jann Stinnesbeck, Committee Policy Analyst  
Jessica Dummer, Committee Counsel  
Connie Barlow, Committee Manager

Minutes ID: 1099



Kathy Biagi, Committee Secretary  
Garrett Kingen, Committee Assistant

**OTHERS PRESENT:**

Adrian Hunt, Private Citizen, Las Vegas, Nevada  
Sean Sever, Deputy Administrator, Research and Project Management, Department of Motor Vehicles  
Peter D. Krueger, representing Registration Services Association of Nevada LLC  
Sena Loyd, President, Web3 iD Coalition  
Paul J. Enos, Chief Executive Officer, Nevada Trucking Association  
Andrew MacKay, Executive Director, Nevada Franchised Auto Dealers Association  
Will Adler, representing, ACES Delta, LLC  
Stacy M. Woodbury, Manager/Public Affairs, Southwest Gas Corporation  
Chloe Chism, Government Relations Adviser, NV Energy  
Belén Gallego, CEO, ATA Insights and RENMAD Events  
Chelsea Capurro, representing Natural Resources Defense Council; and Environmental Defense Action Fund  
Christi Cabrera-Georgeson, Deputy Director, Nevada Conservation League and Education Fund  
Jermareon Williams, Nevada Government Affairs Manager, Western Resource Advocates  
Chris Bell, Legislative Committee Volunteer, Toiyabe Chapter, Sierra Club  
Omar Gonzales, Senior Manager, Government Affairs, Nikola Corporation

**Chair Watts:**

[Roll was taken. Rules and protocol were explained.] Welcome to today's meeting of the Assembly Committee on Growth and Infrastructure. Today, we have three bill hearings from Senator Spearman. We are going to take them slightly out of order. We will hear Senate Bill 164 (1st Reprint), followed by Senate Bill 346 (1st Reprint), and finally, Senate Bill 334 (1st Reprint).

**Senate Bill 164 (1st Reprint): Revises provisions relating to special license plates. (BDR 43-8)**

**Senator Pat Spearman, Senate District No. 1:**

I think it is probably safe to say that everybody knows at least somebody who is a member of the Divine Nine. The Divine Nine is one of the colloquial phrases that we affectionately use to refer to the National Pan-Hellenic Council. It is composed of the nine African-American sororities and fraternities that were founded during a time of segregation, during a time when African Americans were moving into higher education but there was not a real place for them to set up and have a place called "home" or a support system.

We had this bill last session, but I brought it back this session because we had to clean up how the funds would be allocated and to whom they would be allocated. The Divine Nine, also known as the Pan-Hellenic Council Incorporated, is the umbrella organization for nine historically African-American fraternities and sororities. Last year, Senate Bill 163 of the 81st Session created the special license plates to support the Divine Nine. The bill passed unanimously out of the Senate. The bill before you today is Senate Bill 164 (1st Reprint). It changes the way the funds collected in support of the Divine Nine will be distributed by the Office of the State Treasurer. As such, it requires that all fees collected for the special license plate, in addition to all other applicable registration, license fees, and governmental services taxes, will be distributed to the Las Vegas Metropolitan Inter-Alumni Council of the United Negro College Fund. The specific provisions are found in section 1 on page 2 of the bill. You may be aware that these license plates have not yet been produced by the Department of Motor Vehicles. The intent of this proposed legislation is to streamline the distribution process for the funds received by the State Treasurer and make it easier for the local chapters to apply for or benefit from these resources in the future. Chair Watts and members of the Committee, thank you for the opportunity to present this bill. I will stand for questions if there are any.

**Chair Watts:**

Members, are there any questions? Seeing none, I have one. You mentioned the organization. First let me just say I appreciate all your work on the creation of this plate. I think the consolidation to one organization that is committed to helping Nevadans attend college, helping our Black students attend college, is excellent. I was just wondering if you could speak a little bit about how you found the Las Vegas Chapter of the Inter-Alumni Council of the United Negro College Fund, and also what you learned about this organization and their ability to help meet the overall objective that I think you intended with the creation of the license plate and proceeds.

**Senator Spearman:**

I happened to come across this as I was asking some other members of Divine Nine. I said we want to make sure the money is kept locally. In the last bill, it would have been sent to the National Organization of the United Negro College Fund with the hope that it would come back here. One of my sorority sisters—I am a member of Alpha Kappa Alpha, as is the Vice President of the United States; just thought I would throw that in—was getting ready for a luncheon. She participates in the Las Vegas Metropolitan Inter-Alumni Council. I said, I have got to find a place for this money to go that will be right here in Nevada, that will help students, and we will not have to go through five or six different communities or organizations, et cetera. She said, Well, we have a luncheon every year to raise money for scholarships and this encompasses all of the Divine Nine. So she said, I am sure they would welcome it. She put me in touch with the person who is the president of the chapter here. On the phone, I said, This is what we want to do, and she said, Oh, my God, thank you.

**Chair Watts:**

Wonderful.

**Assemblywoman Summers-Armstrong:**

Can you tell us how long this council has been in effect—how long this organization has been giving scholarships in the community?

**Senator Spearman:**

I do not have the exact date, but I know they have been doing this for about the last 10 years. What this will essentially do is, instead of having a luncheon and trying to sell tickets and hope that people come, et cetera, this will give them an opportunity for an income stream so that when they start selecting students or the recipients, they will not have to worry about how much they are going to raise next year.

**Assemblywoman Summers-Armstrong:**

I think that is a great change. I have been on committees before and it is difficult to raise money by having a luncheon or a dinner. This is a great way to get this started. Do you by chance have any idea how—what your goal is for the number of [license] plates you believe you will be able to get done?

**Senator Spearman:**

I believe we will probably start off small, maybe about 1,000 because it will not be limited to just the Divine Nine, but people can purchase the plates to support the scholarship efforts. I am looking at anywhere between maybe 1,000-1,500. I am sure it will grow the longer that it is in inception. So even with just 500 of those plates, I think they said we are probably looking at somewhere in the neighborhood of \$10,000. It will be significant.

**Chair Watts:**

Members, any additional questions? Seeing none, thank you, Senator, for the presentation. With that, we will move to testimony on S.B. 164 (R1). We will begin with testimony in the positive, also known as support of S.B. 164 (R1).

**Adrian Hunt, Private Citizen, Las Vegas, Nevada:**

I am a proud member of Phi Beta Sigma Fraternity Incorporated. I am in full support of this bill. We do a lot of service within the Divine Nine in our communities, and this is a great effort and measure for the cost.

**Chair Watts:**

Noted. Is there anyone else wishing to testify in support of S.B. 164 (R1)? [There was no one.] With that, we will move to testimony in opposition to S.B. 163 (R1). If anyone wishes to provide testimony in opposition, please come forward. [There was no one.] Seeing no one at this time, we will move to testimony in neutral on S.B. 164 (R1).

**Sean Sever, Deputy Administrator, Research and Project Management, Department of Motor Vehicles:**

The Department of Motor Vehicles (DMV) is neutral on this bill, but we greatly appreciate working with the bill sponsor on it. The DMV was unable to implement this bill during the last session because not all of the organizations listed in the statute registered with the Office

of the State Controller, thereby preventing the DMV from distributing the funding. The amendment to this bill revising the distribution of 100 percent of the fees to a single recipient should enable the DMV to move forward with this license plate. The DMV is happy to continue working with the bill sponsor and provide any assistance as necessary. I appreciate your time.

**Chair Watts:**

Members, are there any questions for Mr. Sever? All right, seeing none, thank you, sir. Is there anyone else wishing to testify in neutral position? [There was no one.] I will close the hearing on S.B. 164 (R1) and now open the hearing on Senate Bill 346 (1st Reprint), which revises provisions relating to motor vehicles.

**Senate Bill 346 (1st Reprint): Revises provisions relating to motor vehicles. (BDR 43-458)**

**Senator Pat Spearman, Senate District No. 1:**

For the record, I am still Senator Pat Spearman and I am here today to provide an opportunity for you to hear Senate Bill 346 (1st Reprint). My voice will be limited because I am carrying the bill for Department of Motor Vehicles (DMV), so with that, I will turn it over to them.

**Sean Sever, Deputy Administrator, Research and Project Management, Department of Motor Vehicles:**

Senate Bill 346 (1st Reprint) is a much-needed bill to help the DMV transition to a new, modernized computer application for the delivery of our services to customers online. As the DMV moves into our department transformation effort, there are several statutes that are based on physical paper documentation submission located in various chapters of the *Nevada Revised Statutes* (NRS). We would like to establish a blanket section in Chapter 481, which authorizes the establishment of a DMV electronic branch office to allow the DMV to accept and issue electronic credentials as necessary to fully transition to an online environment for our services. For example, statutes need to be adjusted on the implementation of E titles, and NRS 482.245 states what needs to be on the front and back of a title. Electronic documents, of course, do not have a front and back. That is section 2. The *Nevada Revised Statutes* also refer to electronic submission and storage of documents only being allowed for financial institutions and owners of fleets with ten-plus vehicles. This needs to be changed to include everyone who will be submitting electronic documents, and this is addressed in sections 3 and 4. Section 5 allows the DMV to accept electronic signatures. Then we have some other cleanup language in the bill, such as NRS Chapter 482 to include a definition for an auto cycle. There is industry confusion on these types of three-wheel vehicles which look like motorcycles in nature, but they require a Class C driver's license instead of a Class M. We also updated language that currently prohibits the DMV from legally issuing a special plate for full-size trucks, revises fees for special license plates that are duplicative to fees already prescribed in NRS, and also removes the dollar technology fee which the DMV no longer collects. So, there are no fee or revenue changes with this change. We are just aligning NRS.

Finally, we have an amendment [[Exhibit C](#)] that further clarifies the electric plate fees and also adds a new section 6 to provide definition in NRS Chapter 487 of a salvage title agent. This is to clarify provisions for applicants to become salvage title agents to submit documentation to the DMV, including fingerprints, for submission to the Central Repository for Nevada Records of Criminal History and ultimately, the FBI. We appreciate your considering our request, and I have several relief pitchers here in the DMV bullpen to help answer questions.

**Chair Watts:**

Thank you. With that, we will open it up to questions. Before we get into that, I have a question. With the proposal for the electric vehicle plate fees, but also the other changes to the plate fees in general, you mentioned this, but can you just confirm that there is not actually going to be a change in what customers are seeing? Essentially, there are just different dollar amounts in different places, so this is trying to make everything extremely clear, but the net impact is that there will not be any change in any direction on the fees that are assessed or where they go.

**Sean Sever:**

That is correct. Well stated.

**Chair Watts:**

Thank you. Members, any additional questions for the DMV? Seeing none, I think that will conclude your presentation. We will now move into testimony on [S.B. 346 \(R1\)](#) and will begin with testimony in support.

**Peter D. Krueger, representing Registration Services Association of Nevada LLC:**

We are proudly in support of this bill because we believe it furthers the already established testimony and actions of cooperation between Registration Services and DMV.

**Sena Loyd, President, Web3 iD Coalition:**

The Coalition unites industry and government leaders in the pursuit of digital identity ownership. We advocate for public policy that shifts control of digital identity away from large corporations to where it rightfully belongs, with individuals. The coalition is in support of [S.B. 346 \(R1\)](#) revising the provisions related to motor vehicles, specifically that which authorizes the use of an electronic signature and stamps for recording certain information as part of their modernization plan. Thank you for your time.

**Paul J. Enos, Chief Executive Officer, Nevada Trucking Association:**

I am here today to support [S.B. 346 \(R1\)](#). We appreciate the Department and Senator Spearman bringing this bill forward. During COVID-19, while a lot of us were home and really did not have to worry about the DMV, a lot of my members still had to be there on the road, moving 95.3 percent of all the freight in the Silver State. We were able to work with the DMV to come up with a lot of processes to make sure those folks were still in compliance—you know, they had their whole back end still there working and operating. Because of that transition—what we dealt with and learned from that process—I think this

bill is great at moving us forward. I do have to say my last experience at the DMV, taking my daughter to get a permit test, was actually an extremely positive one with a technician who was very customer service-oriented, calming down a fifteen-and-a-half-year-old girl, saying to her, Relax, it is going to be fine. You do not have to answer every question. Take your time; it is not timed. It was, Oh my gosh. This is what we want, right? We want that kind of public service. However, for a lot of my folks who have to go and stand in line at DMV to get things done, that means those tires are not rolling and they are not making money. So if they can do something online, it is truly better. This bill, as I said in the Senate, gets us to where we want to be, which is not in line at the DMV. We are very supportive of this bill, and I would like to thank the Department and the Senator for bringing this forward.

**Chair Watts:**

Do we have anyone else wishing to provide testimony in support of S.B. 346 (R1)?

**Andrew MacKay, Executive Director, Nevada Franchised Auto Dealers Association:**

I want to echo the comments by Mr. Krueger and Mr. Enos. We fully support S.B. 346 (R1) and thank Senator Spearman as well as the Department for bringing it forward. This is a key component for the DMV to continue to push for their modernization projects, particularly as it relates to the titling aspect. We have been working hand in glove with the Department and a pilot program to move this forward. I just want to thank the Senator and the Department for bringing this forward and to reiterate that we fully support the bill.

**Chair Watts:**

Is there anyone else wishing to provide testimony in support of S.B. 346 (R1)? [There was no one.] We will move to testimony in opposition to S.B. 346 (R1). [There was no one.] We will move to testimony in neutral to S.B. 346 (R1). [There was no one.]

Senator, do you have any closing comments? No, thank you, I appreciate that. I will close the hearing on S.B. 346 (R1). We will move to the last bill on our agenda, Senate Bill 334 (1st Reprint), which revises provisions relating to energy storage systems that are used to meet certain biennial energy storage targets. Welcome back, Senator, and welcome, Mr. Adler.

**Senate Bill 334 (1st Reprint): Revises provisions relating to energy storage systems that are used to meet certain biennial energy storage targets. (BDR 58-30)**

**Senator Pat Spearman, Senate District No. 1:**

Thank you for this opportunity to present Senate Bill 334 (1st Reprint). I had an opportunity last year, and in 2016 I was fortunate to be selected to go to the National Renewable Energy Labs Executive Energy Program. It is one that is competitive, and I am sure my chances were increased because Senator Reid wrote a letter for me. But during that time, it was also when I was working on the last part of my dissertation research, so it folded right in together. Those of you who have been in this house or in this body since 2017 probably know of my interest in making sure Nevada always pushes ahead with opportunities for

renewable energy. This is just another one of those. Senate Bill 334 (1st Reprint) expands the definition of renewable energy to include clean hydrogen in relationship to electric services provided by the state. As such, section 2.4 of S.B. 334 (R1) defines the term "green hydrogen" as hydrogen produced through a certain process that is completely powered by renewable energy. Additionally, section 2.6 makes conforming change to make the definition applicable to existing law that governs biennial energy storage targets. Lastly, section 2.8 authorizes technology that retains, stores, and delivers energy through hydrogen storage and uses systems that only use green hydrogen to be used to meet the existing biennial energy storage targets.

There were several people from Clean Cities Coalition Network who were going to be here, but their afternoon meetings conflicted with our meeting. I just want to say this: if you look at what California to our west and Arizona to our southeast are doing, you will see that they are moving in the direction of making sure that all available options for clean renewable energy are employed. The one thing that frightens me about our current RPS [renewable portfolio standard] stance is that we do not have a base load. I worked really hard in 2017 to make sure that we got solar, but most of the solar we produce is not used here. We sell it to California. When the sun is not shining, the wind is not blowing, we do not really have any way, if you will, to secure an energy resource. What this bill is really designed to do is let us look at all available options and see what will work here. If it works, let us do it. If it does not work, then let us not do it. But I certainly do not want us to take anything off the table because, as I said before, we do not have a base load and our cost of energy is really dependent upon how much it costs for us to buy it from someplace else and get it in here. That is my portion of the bill. Now, I want to turn it over to Mr. Will Adler.

**Will Adler, representing ACES Delta, LLC:**

We want to thank Senator Spearman for bringing S.B. 334 (R1) forward. A big part of this bill is looking to the future of decarbonization and what Nevada needs to be looking to do to make our achievable goals achievable. Hydrogen, as itself, is a new part of the energy storage formula. It is a new asset in Nevada that we need to look at and assess to see where we are going to end up, maybe even ten years from now. The whole formula is such that to have a decarbonized future, to have a future that uses less burnable fuels, you need to have something that can fill the gap when renewable energies are not available. That gap is filled by energy storage. Having that third leg of the stool of having energy created with renewable energies, the utilization of it when you need it, and the ability to store it in a usable format in another time is what energy storage is all about. Senate Bill 334 (1st Reprint) is adding green hydrogen to the definition of energy storage in Nevada because as an energy storage, hydrogen actually uses less waste product and less waste energy while creating a single unit for recombustion later or for reutilization in a different way, even transportation or industry.

Having a future we as Nevada can assess, What is the best use for this energy today? Is it to be used immediately when we need it, or maybe stored for later for a peak usage time when we have high air-conditioning use, or at night when renewables are not available? But that is all usable and compatible with this bill. The future is unknown to us, but it is one where we see huge investments in hydrogen. The federal government has put billions of dollars into it



in the Bipartisan Infrastructure Bill. We do think this will become more and more the regular future for everyone. We see hydrogen for transportation, for energy use, and for decarbonization efforts across the board. So again, thank you, Senator Spearman, for bringing this bill forward. I am here to answer any questions about hydrogen or the difference between clean and green hydrogen and how we got to this place with this bill.

**Assemblywoman Brown-May:**

I have a lot of questions and have done a significant amount of research, so I probably know just enough to cause some trouble. Just be warned.

This bill specifically addresses green hydrogen and identifies the specific definition in the *Nevada Revised Statutes* (NRS). There is no mention, though, of other types of hydrogen, so are we specific to green hydrogen and only green hydrogen, not blue hydrogen, gray hydrogen, or pink hydrogen? I first want to get that out there as we go. That is my first question.

**Senator Spearman:**

That is correct. We changed the definition so that it will comport not just with existing law, but there were some questions about the other types of hydrogen.

**Will Adler:**

This came from an amendment on the Senate side, but the original definition of the bill was for clean hydrogen or a broader definition. The idea was to ensure that we are utilizing renewables when possible. As green hydrogen's definition is exclusively electrolysis-driven hydrogen created through an electrode in water from renewable energy sources only, that seemed to fit with the theme of energy storage here in Nevada, as the Nevada Conservation League and others asked for that correction.

**Assemblywoman Brown-May:**

Thank you. That brings me to my next question. You just said the word water, which is a big concern, right? The development of green hydrogen means the usage of water in that it is essential to this process. Are we considering the manufacture of hydrogen in Nevada that would utilize this resource? Or are we talking about the import of hydrogen resources and storage?

**Will Adler:**

That is a great question and a complex one as well. We do have multiple hydrogen providers and hydrogen suppliers here in the state. One of the largest ones is Air Liquide and utilizes sort of a clean hydrogen or a secondary use of, I believe, methane that comes from power generation and other sources as well. So there is a diverse slot of different kinds of hydrogen. There is gray, blue, turquoise, red, and even pink [\[Exhibit D\]](#). Yellow hydrogen and green hydrogen are thought of as the green ones because yellow is solar energy-only derived and green is renewable energy-only derived. That is why we came to a narrow definition as we see a lot of extra "renewable" specifically on the grid in Nevada during the sun-shining times, especially during the winter when we do not have a season. The target of

this was to make sure those are captured in a sustainable storage way. Today, yes, making hydrogen and the utilization of hydrogen will require some water. But the offset of the water you are not using to cool an energy facility that uses a natural gas- or coal-fired plant, as we are seeing in Utah and other places, use of the hydrogen, or the hydrogen made to offset that, is usually substantially lower than the current use from a power station that needs steam-generated energy or other compatible uses. So, there will be water use. There is some water use in hydrogen creation and liquification of it for fuel uses for cars and transportation. I think it is a balanceable one in Nevada's formula, but it is one we should assess while we assess the viability of hydrogen as a whole, I do believe.

**Senator Spearman:**

Mr. Adler just mentioned Air Liquide. It is an international company that is now located in North Las Vegas and has been there since 2020. They are producing hydrogen. Here is the thing: they are trucking it over to California and there are a number of other subsidiaries of hydrogen that are either already in the state or inking deals that will bring them here. One of the things that I was concerned about is one, we have never talked about it, and two, these companies are either here or coming here, and unless we do some things to make sure our state is involved in regulating, authorizing, or however you want to say it, make sure we have got to get this on the radar because they are already here. Air Liquide has promised, over the next ten years, more than \$2 billion in investment out there at Apex [Industrial Park]. Part of the reason for bringing this bill and another one is to make sure it is on our radar. They are already here and we cannot tell them to go away. We need to be doing some things to make sure we know what they are producing and where it is being sent. We also need to know how it will or will not affect not just economic development, but environmental.

**Assemblywoman Brown-May:**

Thank you, Senator. I sincerely appreciate that and love the work that you are doing relative to this space. It is very cutting edge. I just watched a YouTube video from the United States Department of Energy with regard to how we are producing green energy. I have questions relative to this space. I want to make sure we can help to get the definition correct in NRS so that we can look forward and not have to look backward in order to fix it.

Mr. Adler, you just talked a little bit about energy production—the hydrogen production that is happening in the state, but it did not sound like all of it is necessarily green production. You talked about the other colors as well, and I am a little bit concerned about where that is. Can you also talk about storage relative to what we are producing in this? Is it still green? If we are pulling it from another source that is not produced here, how do we make it available when it is produced? Do we have the storage systems relative to that, and how does this bill address that?

**Will Adler:**

How this bill addresses that? It may be that it does not address all of it at once. I think we are putting our foot in the door and sort of opening it up to see where Nevada can get when it comes to hydrogen as a whole. As I mentioned earlier, there are three legs to the stool when it comes to energy as a whole, right? It is the production of energy, the utilization of it, and

today, the storage of energy. Before, we relied on "peakers," the idea of energy production when you need it, so you have an extra natural gas-fired plant that you can turn on when you have a high-peak demand for air conditioners and other daytime elements.

The idea of having energy storage really comes from a renewable energy platform or decarbonizing the grid, because you cannot peak or turn on extra solar at a time. You cannot peak or turn on extra wind at a time when it is needed to hit that extra demand. Having the utilization to store energy or the ability to peak or turn on those batteries or peak or turn on something else that you can use is this element. Where hydrogen can fall into that specifically—ACES Delta, for example, is utilizing green hydrogen specifically in a replacement for a coal-fired plant in Delta, Utah. Today, that coal-fired plant can turn on and use larger or smaller quantities of coal as needed to meet that peak demand. They are going to be able to replace that with natural gas-fired plants that will do 30 percent hydrogen. That 30 percent hydrogen will be decarbonized fuel that will have almost zero emissions when burned for energy production. That in itself, does not decarbonize a whole plant, but does reduce its capacity by 30 percent. In the future, it is hoped that by 2040, 2050, or sometime later, hydrogen plants can be fully hydrogen energy-producing plants with no natural gas elements at all. When you have enough green hydrogen, or available hydrogen at all, you can run the whole power plant on that. NV Energy, specifically in Nevada, I do think, applied to have new natural gas plants that could have this blend-hydrogen capacity as well to have 20 or 30 percent blended hydrogen with their natural gas components. Again, it will be decarbonization of that piece of the usage that is not natural gas. It is a complex and larger picture here that we are looking at—storage and then maybe future utilization. But it is one where I think Nevada can start looking at these pieces year by year to put them all together.

**Senator Spearman:**

I just want to say you heard Mr. Adler talk about peak times. Five years ago, we called it the duck curve. Peak time is the new translation of that. I want to also say, and I think we have sent or are sending to you, Mr. Chair and members of the Committee, a link for an international hydrogen conference that will be held in Las Vegas July 12 through the 13. There will be companies coming from all over the world. It is RENMAD H2 USA 2023. I mention that to say there are a number of people who are already looking at Nevada with respect to hydrogen. I just spoke to some of the organizers of this conference, and they have asked me to be a speaker there as well. The first question they asked me was, everybody knows Nevada is poised to be the leader in hydrogen, hydrogen fuel cells, et cetera. What are you all doing to make sure you act or exploit that opportunity? I did not really have anything to say. I told them we are talking about a number of bills here in the Legislature right now. But a number of people have already started looking here and the fact that they chose Las Vegas to have their international convention, I think, speaks highly of Nevada.

**Will Adler:**

If I may piggyback on the Senator's comments just briefly. Some of the overarching context that is adding to this idea that Nevada is going to be the next hydrogen hub of the future for hydrogen development is happening next door, as frequently does happen to Nevada.

California took a pretty firm stance and then reaffirmed it just last week when they asked for a full decarbonization of their fleet. That includes all mid-range and large heavy equipment trucks and large commercial vehicles. That is putting pressure on them to have energy storage technology, other technologies, and have a full hydrogen fleet created as most of the transportation outlets do have this gap that does not have that fuel today. The production of hydrogen is going to take multiple states and multiple avenues to fulfill just California's need.

So, a lot of the energy community—a lot of people—are focusing on Nevada as that state next door that can be the provider of transportation services, a relay hub that has hydrogen that goes into California, and then has fuel leaving for the rest of the country. There is a lot of this happening around us and with us, and we appreciate your context on hydrogen today.

**Chair Watts:**

Members, are there additional questions? Seeing none at this time, I believe I saw the original version of the bill before the reprint and there was some discussion of the renewable portfolio standard. As I understand it, this is now being placed into the definition of energy storage system and related to some of the energy storage targets. You spoke briefly to the use case, and I think there has been discussion about a wide range of potential use cases for hydrogen and specifically for green hydrogen. I want to get a little bit of clarity. Since this is now being proposed to be added as a type of energy storage, you mentioned essentially using excess renewable energy during those peak generation periods to power the creation of green hydrogen and then potentially deploying that into a power generation facility, whatever it has been converted from, whether it is coal, gas, et cetera. Is that really the use case that is imagined through adding this in as an energy storage system, or are there any other types of use cases for that generated hydrogen that you potentially see?

**Will Adler:**

As you said, the original bill had a different context in a different original approach. I do think I mentioned earlier in my testimony that this may not be the utilization of next year or the year after that, but the utilization of ten years from now. The ideal use case in my perfect scenario would be, especially for green hydrogen, the idea that it could be its own battery, right? Today you can turn on a battery, an electrolytic battery, for energy storage. The Tesla house wall or any of the larger batteries are similar. You can store energy in that today and then off-port that energy later. Ideally, though, hydrogen can be an energy storage unit that has almost infinite capacity. With a salt well or a large containment unit, you can hold an extremely large amount of potential energy in a hydrogen state for almost an unlimited amount of time. So, you do have a long-term use for this hydrogen once you make it and you could reutilize it for direct energy production. But similar to a Tesla car, you could say the renewable energy generated there and put into that car is decarbonizing our streets as well. I do think a good use for green hydrogen in a stored way could also be in the transportation network, as it does have the same leading capacity that the idea of having renewable energies created does. It is ultimately using less fossil fuels for renewable purposes, so I do think green hydrogen could have that use as well. But again, the utilization today maybe is not even there for the next couple of years, but we are looking forward to that in Nevada.

**Chair Watts:**

To follow up—mentioning transportation, so the use in hydrogen fuel cells that utilize hydrogen, essentially we are talking about the creation of green hydrogen, which is one way of using energy to create hydrogen. Fuel cells use hydrogen to create electricity. So I think whether it would be in powering vehicles or potentially providing power to the grid, a fuel cell would be another potential use case for this, not just using it for the retooling of other types of power plant fuels. Is that fair to say?

**Senator Spearman:**

Another thing that I would say to tag along with that is there are now hybrids that are not combustible engine and electric vehicle (EV). There are now hybrids that are hydrogen fuel cell and EVs. My fiancé has a Toyota Mirai and I drove it Sunday. It is really, really good. The thing with hydrogen that I think is very unique is the hydrogen fuel cells will use whatever energy is needed. Then the rest of it goes back in to power the EV, which is why every major automobile manufacturer in the world has now turned to creating the hybrid that is hydrogen and EV. I think it was last year when Governor Newsom said as of 2035, there would not be any new combustible engine cars sold in California. I stopped and I thought, wow, that is a bold statement. But he was able to make that statement because of the advances in hydrogen fuel cells and the hybrid. There are other places that have already done this. I think California has been into this about the last ten years.

Sacramento has something called Clean Cities Coalition and they are looking at all of the uses for hydrogen. They are looking at ways that not only can they use it in California, but what do they need to do to export it? So, I am trying to make sure we are at least keeping up so we do not have to catch up, but that will be the new hybrid. Hyundai already has a hybrid here in the U.S. and it is called the Evo, and I have had an opportunity to drive that as well.

**Chair Watts:**

Thank you very much. Members, are there any additional questions? All right, seeing none at this time, we will move to testimony. We will begin with testimony in support of S.B. 334 (R1).

**Stacy M. Woodbury, Manager/Public Affairs, Southwest Gas Corporation:**

Hydrogen is an important future energy resource for Nevada and is compatible with the existing pipeline infrastructure. Southwest Gas is presently partnering with the University of Nevada, Las Vegas on a study to blend hydrogen into our system and ensure there are no adverse impacts to the infrastructure or to the end uses. We are invested in hydrogen as a company, and we view hydrogen as part of the future for our infrastructure. For these reasons, we ask for your support of S.B. 334 (R1).

**Chloe Chism, Government Relations Adviser, NV Energy:**

NV Energy is in support of S.B. 334 (R1) as amended, including green hydrogen. Nevada's renewable portfolio will allow our regulatory bodies to better assess the benefits of hydrogen

and the role it can play in helping Nevada reach our renewable energy and carbon reduction goals. We would like to thank Senator Spearman for her leadership on this issue and urge the Committee to support the bill.

**Will Adler:**

Not to be exhaustive—you have heard enough of me. ACES Delta is in full support of S.B. 334 (R1). Shocker, I know. Thank you all for hearing this bill and I appreciate all the questions.

[[Exhibit E](#) was submitted but not discussed and will be made part of the record.]

**Chair Watts:**

Thank you for your testimony, in addition to your presentation, Mr. Adler. Do we have anyone on the phone wishing to testify in support of S.B. 334 (R1)?

**Belén Gallego, CEO, ATA Insights and RENMAD Events:**

We are organizers of this event that covers energy storage and hydrogen in Las Vegas, July 12-13, 2023. As Senator Spearman said clearly and transparently, a lot of the companies in the industry are looking for clear signals that Nevada is looking to lead in the future of this industry. Hence, we are in support of this bill, and we thank Senator Spearman for spearheading this new development. We look forward to the approval of this bill.

**Chair Watts:**

Is there anyone else wishing to provide testimony in support of S.B. 334 (R1)? [There was no one.] Seeing no one, we will move to testimony in opposition to S.B. 334 (R1)? [There was no one.] Seeing no one, we will move to testimony in neutral.

**Chelsea Capurro, representing Natural Resources Defense Council; and Environmental Defense Action Fund:**

Thanks for hearing this. We were originally opposed to this bill as it was drafted, but there were quite a few amendments over on the Senate side and so we really appreciate that this is focused specifically on green hydrogen. As some comments were brought up, we would still love to see that narrowed a little bit. I think there are a couple of pieces about making sure that this truly is green hydrogen, but overall, we appreciate the sponsor for changing this and recognizing the importance of this being geared towards green hydrogen.

**Christi Cabrera-Georgeson, Deputy Director, Nevada Conservation League and Education Fund:**

We are neutral on S.B. 334 (R1). As with Natural Resources Defense Council, we were opposed to the original draft. We did have some concerns with the clean hydrogen definition and that some hydrogen other than green hydrogen would be allowed to be used. We would be supportive of narrowing the definition further. Thank you for your time.

**Jermareon Williams, Nevada Government Affairs Manager, Western Resource Advocates:**

Western Resource Advocates is neutral on S.B. 334 (R1) as presented today. We were originally opposed to the bill on the Senate side, as the bill would have included hydrogen produced from fossil fuels as a resource in our state's renewable portfolio standard. The bill before you today more properly includes green hydrogen as a storage resource. We would also support further clarification of the definition of green hydrogen as discussed earlier in the hearing. Thank you for your time.

**Chris Bell, Legislative Committee Volunteer, Toiyabe Chapter, Sierra Club:**

I am a volunteer member of Sierra Club's legislative committee. On behalf of the club, the world's largest environmental volunteer organization, and more than 30,000 members and supporters statewide, I am delivering our revised stance of neutral on S.B. 334 (R1). This bill, as amended, authorizes technology that retains, stores, and delivers energy through hydrogen storage and user systems that only use green hydrogen. The amendment to this bill is a big improvement, and we are happy to remove our opposition based on its new stipulation for green hydrogen. We cannot support this bill, however, as there is no guarantee that the dedicated renewable electricity used to produce the hydrogen will be "on site and hourly matched." This simple inclusion would assure that the renewable energy is not taken from the grid where it is transitioning homes, businesses, and vehicles away from fossil fuel dependence. However, we do appreciate that this amendment has improved the bill substantially enough for us to remove our opposition. Thank you for your time.

**Omar Gonzales, Senior Manager, Government Affairs, Nikola Corporation:**

On behalf of Nikola, we appreciate Senator Spearman's leadership to introduce S.B. 334 (R1) and the opportunity to provide comments on this bill which is before you today. Nikola is a leading designer and manufacturer of heavy-duty commercial battery-electric vehicles, fuel cell-electric vehicles, and energy infrastructure solutions. Our heavy-duty fuel cell truck is available to order now, is approved for California's heavy-duty incentives, has a range of up to 500 miles, and will go into production in quarter four of this year. In terms of hydrogen infrastructure, Nikola is working with our business partners to build a nationwide ecosystem of hydrogen production, distribution, and fueling stations to support those fuel-cell electric vehicles operating along heavily traveled regional and national long commercial corridors.

Most recently, we announced a definitive strategic partnership with Volterra Technologies to develop 50 hydrogen stations collocated with commercial charging stations. Nikola is also collaborating with our partners to build low-carbon hydrogen production facilities across North America, with our first production facility to be built in Arizona supplying hydrogen for fueling stations in the West and Southwest markets. Hydrogen will not only play a significant role to balance the electric power markets but will also be a critical bridge technology to fuel the future of the nation's heavy-duty transportation industry. It is imperative not to prevent the growth of this industry at the beginning, and to focus on a pathway-agnostic approach to advancing hydrogen production. We recommend replacing green hydrogen with clean hydrogen and to use the federal definition of clean hydrogen. This instead focuses on low-carbon intensity and lifecycle emissions and allows the industry

to produce cost-competitive hydrogen, which is one part in ensuring a competitive total cost of ownership for fleets transitioning to zero emission vehicles. We appreciate your consideration and hope that we can move forward, which will allow hydrogen to advance Nevada as a leader in the clean energy transition.

**Chair Watts:**

Is there anyone else wanting to testify in neutral? [There was no one.] Senator, do you have any closing remarks?

**Senator Spearman:**

I just wanted to let you know that Sheetal Shamdasani called in from India. It is 3 a.m. there. She wanted to make sure she went on record to talk about why hydrogen production and fuel cells are important, as well as to invite anyone who wanted to attend the convention as their guests to learn more about this renewable energy. She wanted to make sure you could do that. So I just want to thank everybody—the Committee and those who listened. We are a work in progress, but I just do not want us to lose out. It is \$8 billion out there and somebody is going to get that for transportation. I certainly hope that it is us. We have, north and south, hydrogen fuel cell buses. On the 31st of this month, you all will have an opportunity to drive some hydrogen fuel cell vehicles. They are going to be parked out front, so you will be able to see and feel exactly what I am talking about. Thank you.

**Chair Watts:**

Thank you very much. With that, we will close the hearing on S.B. 334 (R1). That brings us to the last item on our agenda for today, which is public comment. Is there anyone who would like to make public comment? [There was no one.]

Thank you, members. That concludes our business for today. Our next meeting will be on Thursday, May 18, 2023, at 1:30 p.m. We will have a work session on various bills that we have considered up to this point and we will get more information to everyone as soon as possible. Thank you for your time. We are adjourned [at 2:32 p.m.].

RESPECTFULLY SUBMITTED:

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Kathy Biagi  
Committee Secretary

APPROVED BY:

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Assemblyman Howard Watts, Chair

DATE: \_\_\_\_\_



## EXHIBITS

[Exhibit A](#) is the Agenda.

[Exhibit B](#) is the Attendance Roster.

[Exhibit C](#) is a proposed amendment to Senate Bill 346 (1st Reprint) submitted and presented by Sean Sever, Deputy Administrator, Research and Project Management, Department of Motor Vehicles.

[Exhibit D](#) is a document titled "SB 334 Prepared by SSGR" submitted by Will Adler, representing ACES Delta, LLC, and presented by Senator Pat Spearman, Senate District No. 1, in support of Senate Bill 334 (1st Reprint).

[Exhibit E](#) is a letter submitted by Susan A. Fernandez, Senior Director of Strategy & Communications, ACES Delta, LLC, in support of Senate Bill 334 (1st Reprint).