MINUTES OF THE MEETING OF THE ASSEMBLY COMMITTEE ON LEGISLATIVE OPERATIONS AND ELECTIONS

Seventy-Ninth Session May 25, 2017

The Committee on Legislative Operations and Elections was called to order by Chairwoman Olivia Diaz at 5:54 p.m. on Thursday, May 25, 2017, in Room 3142 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/79th2017.

COMMITTEE MEMBERS PRESENT:

Assemblywoman Olivia Diaz, Chairwoman Assemblyman Nelson Araujo, Vice Chairman Assemblyman Elliot T. Anderson Assemblywoman Shannon Bilbray-Axelrod Assemblyman John Hambrick Assemblyman Richard McArthur Assemblywoman Daniele Monroe-Moreno Assemblyman James Oscarson

COMMITTEE MEMBERS ABSENT:

Assemblyman Skip Daly (excused) Assemblyman Ira Hansen (excused) Assemblyman James Ohrenschall (excused)

GUEST LEGISLATORS PRESENT:

Senator Joyce Woodhouse, Senate District No. 5 Senator Tick Segerblom, Senate District No. 3 Senator Pat Spearman, Senate District No. 1

STAFF MEMBERS PRESENT:

Carol Stonefield, Committee Policy Analyst Kevin Powers, Committee Counsel Julianne King, Committee Secretary Melissa Loomis, Committee Assistant



OTHERS PRESENT:

Lynn Chapman, State Vice President, Nevada Eagle Forum
Janine Hansen, State President, Nevada Families for Freedom
Constance Brooks, Vice Chancellor, Government and Community Affairs,
Nevada System of Higher Education

Chairwoman Diaz:

[Roll was taken. Committee protocol and rules were explained.] Today we have the distinct pleasure of having two Senators here to present <u>Senate Joint Resolution 11 (1st Reprint)</u>, so I will open the hearing on <u>Senate Joint Resolution 11 (1st Reprint)</u>, which proposes to amend the *Constitution of the State of Nevada* to provide for annual sessions of the Legislature.

Senate Joint Resolution 11 (1st Reprint): Proposes to amend the Nevada Constitution to revise provisions relating to the State Legislature. (BDR C-1082)

Senator Joyce Woodhouse, Senate District No. 5:

I am here to introduce <u>Senate Joint Resolution 11 (1st Reprint)</u>, which provides for annual regular sessions of the Nevada Legislature on a limited basis. The subject of this resolution is one that has been considered a number of times in the past, but I think you will agree that now is the time to bring this important issue back to the voters. I am joined today by Senator Tick Segerblom, who introduced the most recent annual session's resolution, which was approved in the 2013 Session and approved by this Committee again in the 2015 Session. After my brief introductory remarks, Senator Segerblom will also provide some comments and additional context on this important and timely resolution.

Senate Joint Resolution 11 (1st Reprint) proposes to amend the *Nevada Constitution* to provide for annual regular legislative sessions limited in odd-numbered years to not more than 90 legislative days within 120 calendar days, and in even-numbered years to not more than 30 legislative days within 45 calendar days. The resolution defines a "legislative day" to mean any calendar day on which either house of the Legislature is in session or any legislative committee holds a meeting during the session. Today, the Nevada Legislature meets nearly every day for 120 days. This resolution calls for the same number of legislative business days. It simply provides that these legislative days occur every year rather than every other year. The even-numbered years' sessions would commence on the first Monday in February, and the Governor would be required to submit any proposed appropriations or proposed revisions to the Executive Budget not later than 14 calendar days before the commencement of each regular session held in those even-numbered years.

The resolution also proposes to remove the current constitutional provisions that limit payment of legislators' salaries to the first 60 days of the regular session and the first 20 days of a special session, and proposes instead that legislators be compensated at regular intervals as set by law.

Finally, the measure proposes to remove the restriction of \$60 per session for office expenses, such as postage and stationery, and to appropriate funds for actual expenses that members may incur during each legislative session. As you know, if <u>S.J.R. 11 (R1)</u> passes in identical form this session, in 2019 it will go to the voters for their consideration at the 2020 General Election. As Senator Segerblom will review, this idea has been considered by the Legislature many times in the past, but the last time it was actually presented to the voters was in 1970, 47 years ago. In fact, during the 2009 Legislative Session, I proposed a similar measure. A lot has changed since 1970, and the voters deserve an opportunity to weigh in on this critical issue.

The passage of Senate Joint Resolution 11 (1st Reprint) will create a more responsible and accountable Legislature for all Nevadans, while at the same time maintain a citizen Legislature and provide for limitations of the overgrowth of government. Annual sessions with strict limitations on length will provide our state with increased financial stability in a complex and rapidly changing global economy. Despite our tradition of biennial sessions, it is time for a change. While this tradition made sense in similar times when our population was much smaller and our finances were less complex, it no longer addresses the needs of a rapidly growing state with a multibillion-dollar budget operating in a global marketplace. Our state simply cannot adequately address rapidly changing conditions, a complex budget, and policy matters by meeting every other year. In the past 15 years alone, our State General Fund has more than doubled. In that same time, our responsibility as legislators has increased significantly.

By instituting the limited-length annual sessions as proposed in <u>S.J.R. 11 (R1)</u>, we will reduce the need for special sessions. Since the Legislature was limited to 120 days beginning with the 1999 Session, we have been called into special sessions 14 times. I certainly understand the concern about the burden that annual sessions may place on citizen legislators; however, I submit that the continuity of set, short, limited, annual sessions will be less burdensome than multiple and spontaneous special sessions of unknown duration. The Legislature will also be better able to address the complex budgetary concerns of our state with annual sessions as proposed in <u>S.J.R. 11 (R1)</u>.

With passage of this resolution, I believe our legislative sessions will improve in the following ways. First, the Legislature will be able to conduct annual budgetary and policy reviews and act more quickly in response to changing conditions. Second, annual sessions will help to produce more accurate revenue and spending forecasts. Third, the annual system will allow for greater stability in state agencies and among our local governments, thereby helping to produce better long-term planning.

Fourth, the Legislature will be better able to attend to Nevada's demanding tax structure, ensuring a more stable revenue stream. Fifth, annual sessions will allow the Legislature to exercise better control over federal funds and to respond more effectively to the changing economic climate. Sixth, more frequent meetings may raise the status and impact of the Legislature, which will allow for better oversight of Executive Branch activities. Seventh, we will become a more efficient and effective body by meeting annually.

The Legislature will no longer lose critical institutional memory and expertise from session to session as legislators will spend less time getting up to speed and more time addressing the needs of our state.

Eighth, annual sessions will reduce the need to rely on the Interim Finance Committee and the Legislative Commission as often as we do. Ninth, speaking of the Interim Committees, we will be better able to focus our interim activities and interim committee meetings to ensure they meet the needs of the Legislature. We should be able to provide better continuity between our session standing committees and our interim committees. According to our research, only three other states—Montana, North Dakota, and Texas—have a legislative session structured similar to Nevada. I have provided a chart (Exhibit C), which you should have available on the Nevada Electronic Legislative Information System (NELIS), and it is three or four pages long. This chart comes from the *Book of States 2016* showing the provisions for each of the states. Also, the National Conference of State Legislatures has excellent research on this subject.

In conclusion, it is time for the Nevada Legislature to join the vast majority of states and meet our responsibilities to our constituents on an annual basis. This Resolution sets forth a system that will allow us to do so effectively and efficiently with no additional legislative days on the calendar while maintaining our important citizen Legislature.

Senator Tick Segerblom, Senate District No. 3:

As you know, I sat where you sit in 2011 and, at that time, we passed a bill that was to study annual sessions. We went to Oregon to see how they did it, came back, and in 2013 wrote a bill very similar to this, which was passed. Unfortunately, it died in 2015.

I see some freshmen here, and as you can see, you are learning the ropes, beginning to feel the ground, and starting to know where everything is. However, you are going to leave here and not be back for 18 months, and many times freshmen only come one time. It is very unfortunate that you learn what you learn but do not have a chance to digest it and come back for even a short 30-day period. The reality is that the Nevada Legislature, in the *Nevada Constitution*, is the first of the three political branches, but really we are very much inferior, especially since they put in term limits. This would be one way we could start to regain some of that power.

My personal goal is for Ms. Stonefield to see an annual session before she retires because she has been advising us on how to do this for years. She is nonpartisan and does not have a personal position. It would be nice for her to finally see this enacted.

If we pass the measure this time and we pass it again in 2019, it would go to the voters in 2020, and the first actual annual session would be in 2022, five years from now. That is over 50 years from the last time the Nevada voters voted on this issue.

As you know, a constitutional amendment is just that: it is a proposal to ask the voters if they want to amend the *Nevada Constitution*. We are not saying that we support annual sessions or do not support them; we are just asking the voters if this issue is worth revisiting after 50 years. This is particularly true after what has happened with term limits and other things, and the 120-day limitation we put on ourselves. The voters have constrained us, and I think it is time to go back to the voters and ask them if this is a good idea. I am committed that this is the time. Again, this will not happen until 2022. A vote in favor of this does not mean you support it. It means let the voters decide whether Nevada is ready to move into the twenty-first century.

When we leave here, many of us will have bills vetoed. We will not be able to override the veto for 18 months when we come back in 2019. That really gives the Governor too much power. We kill ourselves to get elected, then we come here and say that it is the way it is, and the Governor can run the state. I think our obligation is to be co-equals.

Chairwoman Diaz:

Senator Woodhouse, we did not get the amendment submitted to our Committee, but I see it on NELIS from when you presented in the Senate. If you would please have someone send them over to us, so we can distribute it.

Senator Woodhouse:

We can do that

Chairwoman Diaz:

I will open this up to questions from the Committee.

Assemblyman Elliot T. Anderson:

I support this, and I have supported it before. I think that you cannot overstate the problem we have in terms of having equal branches of government here. You cannot possibly be equal and hold other branches accountable when you have to do something else for the rest of the two years. You can never really focus as much as you would like on this job. This is an important thing for us to be doing. We need to pay attention to what is happening in the other branches of government. We have the deck stacked against us, and this is an important step to ensure the branches are equal.

Chairwoman Diaz:

In the previous consideration that we voted on in 2013—when you chaired this Committee—has this changed much from that iteration?

Senator Segerblom:

I believe all that changed was the second, smaller session's start date was changed from the first of March to the first of February.

Chairwoman Diaz:

Please explain the difference between the statement in this proposal to amend the *Nevada Constitution* to be 90 legislative days or 120 consecutive calendar days. Can you explain the difference, especially for those of us who have not seen this before?

Senator Woodhouse:

Right now, we have 120 days, and those days are actually calendar days, so they run from the first day to the 120th day, whether it is a Monday, Saturday, or whatever. What this proposal would do is, in the odd-numbered years, we would have 90 calendar days. That would include Saturdays and Sundays as well. Typically, within the 120 days, we do around 88 to 90 days because of the Saturdays and Sundays that we might not be in session. In the even-numbered years, we have 30 days out of 45 days. Once again, the 45 days are calendar days and the 30 days are the actual legislative days. It would be 90 legislative days out of 120 calendar days, and 30 actual legislative days out of 45 calendar days.

Senator Segerblom:

The thought is also for things such as when we have crossover between houses, we could go home for a week and staff could do all of the work. There is lots of dead time while the staff is working on amendments and getting everything ready. The finance people could meet, but the rest of us could go back to our districts and have it not count against us. The 90 days would be 90 days that we are actually here in session on the floor. That would make for a much better process, and we would get more done if we give staff the time to do their jobs. We would not have to feel that we are being paid so we need to be here.

Chairwoman Diaz:

In the "or" language in 90 legislative days or 120 consecutive calendar days, are we just going for one, or is there an option to go back to one way or the other?

Senator Segerblom:

It is within the 120 days, so you could not go more than 120 days. Within that time period, you could pick when you wanted to work those 90 days. The thought is that in the first month, you could work only four days because that would be sufficient since they are drafting the bills, and there is not a lot to do those first few weeks. We could stack it the way we wanted to do it. It would make it more efficient.

Chairwoman Diaz:

Our legal counsel has a clarification for the Committee.

Kevin Powers, Committee Counsel:

There are two things. The prior iteration of the joint resolution that was passed in 2013 and heard again in 2015 was almost identical to the resolution that is before you, except as Senator Segerblom mentioned, this version has both of the annual sessions starting on the first Monday in February.

As the bill defines "legislative day," it is any calendar day on which either house of the Legislature is in session, or any legislative committee holds a meeting during session. Even if only one legislative committee held a meeting on that day, that would be a legislative day that counts against the total count of legislative days. Ultimately, in that period, whether it is the 120 days or the 45-day period, that is the maximum time the Legislature could have a legislative day. Within that period, if they use up all of their legislative days quickly, the session would end sooner than that maximum, outside limit. Calendar days establish the start and the end. Legislative days click off within that period, and you can never go beyond that end date.

Senator Segerblom:

I have one more thing to add. There is a lot of push to have the Legislature move to Las Vegas, but we have rejected that idea.

Chairwoman Diaz:

I appreciate the consistency in the start dates because we will all know when we have to come up for business, and we will not get confused when we need to be here for the start of session.

We will open up testimony in support of <u>S.J.R. 11 (R1)</u>. Is there anyone here who wishes to offer support for the resolution?

Senator Pat Spearman, Senate District No. 1:

I am in support.

Chairwoman Diaz:

Is there anyone else here to offer support for <u>S.J.R. 11 (R1)</u>? Seeing no one, we will go to opposition.

Lynn Chapman, State Vice President, Nevada Eagle Forum:

Donald Totten was a self-employed businessman and a part-time legislator in Illinois. He wrote an article that I thought was interesting. He said:

As the Legislature becomes fuller and time oriented, it creates new programs, expands old ones, and manufactures solutions to problems, which sometimes do not even exist. As legislative service becomes more of a full-time occupation, there is an inevitable tendency for government to grow larger and more expansive in its efforts to justify its existence. With each new program created, two new interest groups are created, both of which are dependent on the actions of the Legislature for their existence. These two groups are the beneficiaries of the new programs and the bureaucracies created to administer them. Their voices then exert additional pressure on the legislative body for their perpetual existence and expansion. In those states which have retained a citizen-legislator concept, the pressure has not been as great to increase the

functions of state government, and their rate of increase in the cost of state government has not accelerated nearly as fast as that of states whose legislative bodies meet more frequently.

Full time legislators tend to be more influenced by the media and insulated from their constituents. We need to look no further than our Potomac Fraternity, the federal Congress, for how the full-time legislator has become insulated from American citizens. We need to look no further than our own state since the advent of annual sessions just eight years ago. We have doubled the state spending.

I have spoken with a lot of people over the years about annual sessions because I have been testifying against it. Every person I spoke with said, "No way." They do not want to have annual sessions. We are opposed to <u>S.J.R. 11 (R1)</u>.

Janine Hansen, State President, Nevada Families for Freedom:

We oppose this issue. There are many practical reasons that will make it more difficult for citizen-legislators and citizens trying to participate. One of those is the issue that, while you are in session for the 45 days in the even-numbered years—which were moved from March to February after I mentioned this—that is when filing for office takes place, the first two weeks of March. For those of you who have to raise money who are running for office, you cannot raise money one month before the session. You cannot raise money the month after the session when you have a primary in June. It will make it much more difficult for those who are actually in the Legislature to cope with those dates.

It is not necessary to add additional days. It is the same number of legislative days as we have calendar days now. We all know that many of those calendar days you are not here, especially the weekends. It adds an additional 45 days to what we have right now.

One of the other difficulties, especially for people from out of town, is that it is hard to get a place to live for just four months. You may have to pay for six months or more to get it. If you only have to come up here for 45 days, that may be another practical consideration that makes it even more difficult for those who are citizen-lobbyists trying to participate, and for legislators who are participating.

It is really unnecessary to do this. All you really need to do is to start limiting the number of bills that are here instead of continuing to increase the number of bills that you deal with. I know there is very little appetite to do that, but one of the reasons we do not want sessions every year is that it will increase the number of bills. It will also increase the tendency toward more government and more government spending, not less government and less government spending. This concerns the citizens who are paying the bill.

Chairwoman Diaz:

We want everyone to know that we uploaded the handout that Senator Woodhouse referenced in her testimony (<u>Exhibit C</u>), so if you want to take a look at the data, it is available.

Assemblywoman Bilbray-Axelrod:

My question is in regard to the increase in spending. We sought that to balance the budget. We cannot run in a deficit, and there is only so much money. Where did the thought come from that we would spend more money?

Janine Hansen:

Everyone has a lot of good ideas. We hear about more things that the government can do. In every session, we have more and more ideas about what are good ideas for government to do. What happens when it does not fit within the budget is that we start finding ways to raise taxes. There are several bills this session that address that. That is where the pressure comes in. Many of these we would rather they not do, or we can do ourselves. That puts pressure on the whole system to increase taxes. That is why every session we have pressure to increase taxes. I have heard several bills this time that increases taxes, and I have opposed them.

I have been here full-time every session since 1991 and part-time every session since 1971. I have seen a lot of it. I know this is the first session for some of you, and it is quite an experience. The more good ideas you have for the government to do—the more it increases the desire to increase taxes to pay for those possibly-good things that government could do.

Assemblywoman Daniele Monroe-Moreno:

It is my first session serving in the Legislature, but it is not my first time being in the Legislature or working with the elected. It is a misnomer when we say it is a part-time job. Our Assemblymen and Senators are elected, and they may only serve in Carson City on a part-time basis, but it is a full-time job with the work in the community, town hall meetings, and working with constituents and community groups. I know most, if not all, hold a full-time job outside of this and have a family while this is a full-time job. When we go home on weekends, I would love to hang out with the family, but on my weekends at home, I am with my constituents and at community events. Although it may look like a part-time job, it is truly a 24/7, full-time job.

Janine Hansen:

I appreciate that because I know how hard you work. One of the things that I failed to mention is that we support better pay for the legislators. I think that is only fair, and we have spoken about that many times. I know you work hard, and I do not mean to diminish that in any way. I know because I am doing the same thing, and I see what you are doing. It is very difficult, and you put in a lot of hours.

Chairwoman Diaz:

Is there anyone else who would like to speak in opposition? [There was no one.] Is there anyone who would like to offer testimony in the neutral position? Seeing no one, do you want to come back up to close the hearing, Senators?

Senator Segerblom:

It is embarrassing that we are afraid to ask to be paid for every day that we are here. We are paid \$140 every day for 60 days. Come on.

Chairwoman Diaz:

Then why did you leave it out?

Senator Woodhouse:

I want to thank you, and we hope you will support us.

Chairwoman Diaz:

We will close the hearing on <u>S.J.R. 11 (R1)</u>. We will cruise right into the next bill. I will invite Senator Spearman to come up to the table, and I will open the hearing on Senate Concurrent Resolution 4 (1st Reprint).

Senate Concurrent Resolution 4 (1st Reprint): Directs the Legislative Committee on Energy to conduct an interim study concerning the development of renewable energy resources in this State. (BDR R-1130)

Senator Pat Spearman, Senate District No. 1:

I am here today to introduce <u>Senate Concurrent Resolution 4 (1st Reprint)</u>. The first reprint brings to the forefront of legislative discussion the critical issue of renewable energy and the development of renewable energy resources in Nevada. This resolution represents just one piece of a larger puzzle that ultimately creates a comprehensive and valuable overall energy strategy for the state of Nevada.

Why is this resolution important? Nevada enjoys a rather diverse renewable energy portfolio with a number of renewable energy projects. Currently, Nevadans benefit from at least 20 geothermal projects, including 11 solar projects and nearly a dozen wind, biomass, hydro, and waste heat renewable energy projects. I might add that one of the geothermal projects is in Assemblyman Oscarson's district in Pahrump. It deals with a high school there that uses geothermal for heating.

As the resolution notes, renewable energy resource programs administered by the state have the potential to unleash vast renewable energy resources throughout Nevada and, as a result, put our state at the forefront of renewable energy development. The foundations of this critical development are rooted in Nevada's expansive and, at least so far, largely untapped potential for renewable energy resources. This includes Nevada's yet-to-be developed geothermal resources, which are more substantial than in any other state.

Moreover, Nevada's large deposits of lithium, which are currently the only deposits producing lithium for use in the United States, are largely untapped and undeveloped. The potential for us to become a worldwide leader in lithium production is significant. You might note that Governor Sandoval has a bill that will increase mining and processing of lithium. As you know, lithium is critical to the burgeoning electric car industry and for battery technology in general. As a matter of fact, some studies show that by the year 2020, we will have more of a demand for lithium than we actually have available, or to the tune of about 25 percent less than what we need to satisfy the demand. That is a conservative figure. Clearly, lithium possesses a wide array of applications for all forms of renewable energy.

Geothermal energy has the smallest carbon footprint of any form of renewable energy and can be used across a wide spectrum of temperatures, including lower temperatures capable of providing heat for public facilities, homes, greenhouse agriculture, and vegetable dehydration, and at higher temperatures to produce electricity. Development of geothermal, given its truly clean nature and its potential in Nevada, is the wave of the future for our state.

As you can see, systemic studies are needed to better locate these renewable energy resources; analyze the feasibility for developing such resources; determine the best methods for renewable energy extraction; and evaluate if initial support is needed to assist entrepreneurial industries in developing these resources. It is because of these critical needs that I requested <u>S.C.R 4 (R1)</u>.

This is what it does. I would like to address the scope of the study set forth in <u>S.C.R 4 (R1)</u>. As amended, <u>S.C.R 4 (R1)</u> requires the Legislative Committee on Energy to study the feasibility of converting existing mines into geothermal resources and the use of lithium resources in Nevada for energy purposes. I might add that the "existing mines" do not include active mines that are currently producing some other natural resources. We are talking about mines that are either abandoned, closed, or in some state of closure. These are resources that are just here in Nevada, and we are not doing anything with them. With the study, we will have the ability to determine if there are—and how many—mines that could be converted to geothermal energy producing facilities.

We should consider the potential for using geothermal energy in universities, governmental offices, prisons, and other major public facilities in Nevada. It is also important for developing geothermal resources of individual mines and mining districts, and to find ways to support the selection of Fallon, Nevada, as the site for the Frontier Observatory for Research in Geothermal Energy—also known as the FORGE laboratory. It is a new program that was developed by the United States Department of Energy. In its first consideration, there were several states that were looked at to house FORGE, and now we are down to two: Nevada and Utah. The federal government is looking to see which one will actually be selected. This is to be funded by the United States Department of Energy to test technologies for developing engineered geothermal systems involving the mining of heat from rocks for energy; methods for the acquisition of light detection and ranging (LiDAR) data, which is high resolution topographic data that may provide critical information on the distribution of faults and rock layers that host renewable energy resources; methods for the acquisition

of potential new, detailed geologic and energy resource maps, including three-dimensional maps to help identify areas with the greatest potential for development of geothermal and lithium resources; and the development of infrastructure and support for staff, including laboratories, geoscientists, digital curators, web specialists, engineers, and economists working at state agencies who could help facilitate the implementation of a renewable energy resource program in Nevada.

The study also capitalizes on the expertise of the Nevada System of Higher Education. Specifically, the resolution directs the Legislative Committee on Energy to include consideration of ways to increase opportunities for students to study renewable energy at community colleges and universities in Nevada. The committee is also authorized to contract, if possible, with the University of Nevada, Reno (UNR), the University of Nevada, Las Vegas (UNLV), and Desert Research Institute (DRI) to gather data concerning the total costs of energy, so that the Legislature may compare these costs from various sources, including, without limitation, gas plants, geothermal facilities, and solar resources. In addition, the committee may contract with UNR and UNLV to conduct a statewide audit to determine the savings that could be realized by the state of Nevada if governmental agencies implemented certain energy-efficient measures. Finally, to give the Committee on Energy some flexibility, the interim study can also include any other matters that the Committee determines is relevant.

A few weeks ago, I was energized when I had an opportunity to meet with some of the representatives from FORGE and to meet with Dr. James E. Faulds, who is a professor at UNR, and several other professors from UNR. I have also talked with people from UNLV who are also excited. Many times Nevada comes in on the tail end of opportunities. Geothermal is one renewable energy resource that, if we tap into it—according to the experts that I have talked to—has the potential to bring about \$50 billion into Nevada within the next five years.

If we are selected for the FORGE site, all of the projects will be paid for by the Department of Energy. Can you imagine some of our high school students who may be interested in energy or engineering, understanding that they will have an opportunity to work with professors who are studying geothermal, lithium, and other renewable resources that we have in Nevada? It is not just studying and researching those subjects, but it is also the opportunity to have their research published in peer-review journals. How many college students have an opportunity to do that? Plus they would have the opportunity to research a subject that will really lay the platform for energy production, resources, and use through the twenty-first century and well into the twenty-second century. What we are talking about here is the equivalent to having college students study with Alexander Graham Bell, Thomas Edison, and Bill Gates. Imagine that, and it could be huge.

I am sure you will hear a little later from representatives from the Nevada System of Higher Education that one of the ways you become a Tier 1 university is publishing research. This is another opportunity for our universities and colleges to elevate their status, and not just elevating the status for the sake of that, but to become a leader in understanding and researching all of the options and opportunities that we have available here in Nevada.

I know that many of the discussions that are related to energy here in the Legislature this session have been contentious. I think one of the issues we face is when you start talking about things that will happen in the future, you cannot look through a contemporary lens, but you have to look through a visionary lens. For those who cannot see the future and see how we might be a part of shaping that future, this will be difficult to comprehend; however, I promise you in 20, 30, or 50 years, and maybe even 100 years, people all over the world, and especially Nevadans, will look back on this moment in history and say this was the time we decided to make a difference. This was the time that we created a list that we could be number one on and not at the bottom of every other good list.

I believe you have the information from the "Geothermal Energy Potential" (Exhibit D), and I want to lift out a couple of things to read into the record. "Geothermal power plants employ about 1.17 persons per MW [megawatt]. Adding related governmental, administrative, and technical jobs the number increases to 2.13." "Over the course of 30 to 50 years an average 20 MW facility will pay nearly \$6.3 to \$11 million dollars in property taxes plus \$12 to \$22 million in annual royalties." We struggle as to how we are going to properly fund public education and higher education, and here is one avenue that we could use in order to do that.

To continue, "Geothermal power can offset electricity currently imported into the state, keeping jobs and benefits in state and local communities." Yesterday, in another committee, I asked the question, "How much of our energy resources are actually domestic?" We import 80 to 85 percent of all other resources we use to produce energy. I want to leave that there. When I ask what that means in terms of dollars going out of the state, you are now looking at a minimum of \$700 million leaving our state every year just so we can purchase energy from someplace else. Somewhere in the universe that might make sense, but I have not been able to wrap my head around it yet. When we have this kind of an opportunity inside this state, why would we continue to do what we are doing: sending money out of the state when we could be sending energy out of the state and bringing money back into the state. Quite frankly, I think it is part of our fiduciary responsibility as legislators to look for ways to create economic growth and development, and not to create ways to send money outside of the state.

"Geothermal flash plants emit about 5% of the carbon dioxide, 1% of the sulfur dioxide, and less than 1% of the nitrous oxide emitted by a coal-fired plant of equal size, and binary geothermal plants—the most common—produce near-zero emissions." During the last election cycle, you might have heard that there were people blaming certain other people for

the demise of coal. My heart went out to the people who heard that, believed it, and did not understand that one of the reasons coal became unpopular was that it was also more expensive than natural gas. It was a business decision.

"Geothermal has among the smallest surface land footprint per kilowatt (kW) of any power generation technology. Geothermal power can provide consistent electricity throughout the day and year—continuous baseload power and flexible power to support the needs of variable renewable energy resources, such as wind and solar." In 2013, we did a very good thing with Senate Bill 123 of the 77th Session. We looked at the coal-fired plants and understood the impact and implications of keeping those going, and not just for our economy, but also for our health systems. Once the coal-fired plants go away, we have only one baseload. That is natural gas, and we do not even create that here in the state. By extension, it could be said that we do not have a baseload here in Nevada. Research and businesses are showing that the cost of natural gas is going up. As the cost of natural gas goes up, that cost increase will be passed down onto the consumer. Ultimately, we will pay for the increases.

"Energy resource decisions made now for sources of electric power have 40-50-year consequences, or longer. Using renewables like geothermal resources avoids 'price spikes' inherent in fossil fuel resource markets. Geothermal energy is an investment in stable, predictable costs. Investing in geothermal power now pays off for decades to come." I might add that this study will benefit particularly those who are in northern Nevada, as well as those who are in the rural parts of Nevada, because it will bring a thriving industry to those areas that will have good-paying jobs in the creation of the geothermal power plants, and also maintaining and sustaining them.

As a result, many of the other pieces of infrastructure that go along with a thriving community will either expand or be implemented once again. I believe this is not only good legislation, but it is also groundbreaking and game-changing legislation. This is one of those things that, if you want to look at it and compare it to the difference between the wall phone and the cell phone, you could categorize this as disruptive technology, and we have an opportunity to capitalize on it.

Chairwoman Diaz:

As I read this, your comments are not clear in my mind. Does the study include the feasibility of converting existing mines into geothermal resources? You referenced that it would not be active mines, but it is not clear in the language. Why does it not say converting existing closed mines or inactive mines?

Senator Spearman:

That was not an intentional oversight, but it could be clarified in the last paragraph where I said that the Committee on Energy would have some flexibility, and that the interim study can also include any other matter that the Committee determines is relevant. I tried to capture everything, but at the same time giving the caveat to expand if necessary. The delineation between active mines and closed mines was to make sure we

understand that we are not talking about the mines that are currently producing silver, gold, or anything else. That is not what we are talking about. After listening to discussions in the Interim Finance Committee where they talked about some of the challenges they faced in terms of mines, and that they were not able to identify some of the owners, so some of them were closed or closing. They did not know what state of repair or disrepair they were in. I asked the Bureau of Mines and Geology, with the Nevada System of Higher Education, to send me a list of those, and when I got the list, I found that there were 61 mines. I do not know if all 61 of those are viable options for geothermal plants, but we will never know if we do not initiate this type of study.

Chairwoman Diaz:

Given the complexity of geothermal energy—a very specific, scientific-involved area—why is a legislative study a better route versus having the Governor's Office of Economic Development (GOED) look at the feasibility of attracting and bolstering our economy based on geothermal? Why are we going the interim study route instead of pursuing it through GOED?

Senator Spearman:

That is a good question, and one that I asked. I asked some people who would know, and they were perplexed that it was not something that had already been undertaken. The reason I opted for universities to participate in this is that I see it as a win-win in a lot of ways. First, it gives us research opportunities to elevate our institutions of higher learning to a Tier 1 status. Second, it provides opportunities for students who live here in Nevada, and people who might want to come, to participate in research that is real and relevant. It could have gone to GOED. That probably would have increased the expense, but with the universities' interest in helping, it is a win-win. It will also provide us with the information we need and will provide the researchers opportunities that they need as well.

Chairwoman Diaz:

You referenced UNR and UNLV. Is there a reason we do not include the Desert Research Institute?

Senator Spearman:

That was an oversight. We are correcting that with an amendment.

Chairwoman Diaz:

Are there any other amendments that you would like to advise us of that you are including?

Senator Spearman:

To my knowledge that is the only one, unless there is one that comes about as a result of presenting to this Committee. It was simply an oversight.

Chairwoman Diaz:

Would you be open to clarifying the language about the mines? While you are doing an amendment, you might as well address what mines we are talking about. If this comes to fruition, the Legislative Committee on Energy would need to be clear about what they are looking at.

Senator Spearman:

Sure. The gentleman that I spoke with who was connected with FORGE, with Nevada and Utah being the finalists in this competition—for lack of a better word—passing something like this will give the selection committee a clear signal that Nevada is open for business.

Chairwoman Diaz:

I am excited to know that the opportunity could arise for Nevada to potentially have a research lab in geothermal energy that would be funded by the United States Department of Energy. That would be an amazing opportunity for Fallon and the rest of our state.

We will open it up to take testimony in support of S.C.R 4 (R1).

Constance Brooks, Vice Chancellor, Government and Community Affairs, Nevada System of Higher Education:

We are in full support of <u>S.C.R 4 (R1)</u>. We are very appreciative of Senator Spearman's having the intuition and energy to support this legislation in this manner and to place Nevada in alignment with other states, and to possibly make us a leader in this area. The Desert Research Institute, UNLV, and UNR stand ready to participate. All three institutions already have studies underway with respect to renewable energy.

As the Senator stated, this is aligned with the Tier 1 goals of both UNR and UNLV and would provide them the opportunity to augment what they are already producing in that arena. We do not foresee any fiscal implications since this is already aligned with some of the things they already have in place. With that, we offer our support.

Chairwoman Diaz:

Is there any further support for <u>S.C.R 4 (R1)</u>? Seeing none, we will go to opposition. Is there anyone here wishing to testify in opposition? Seeing no one, we will open it to neutral, and anyone wishing to testify in the neutral position. Since there is no one, Senator Spearman, do you want to give closing remarks?

Senator Spearman:

I would encourage you, the other members of the Committee, and anyone who wants to know more about this to go to the National Renewable Energy Laboratory (NREL), or NREL.gov, and you will see all of the opportunities for geothermal. The results that were produced by research show how geothermal also attracts advanced manufacturing, like Tesla and Faraday. One of the things that happens with advanced manufacturing is that

their operational costs are particularly heavy with respect to energy, heating, cooling, lighting, et cetera. With geothermal being a viable baseload, it provides a low-cost and reliable way for them to run their plants. In addition to the jobs that will be created directly, there are secondary and tertiary benefits as well.

I had an opportunity to attend the Leadership Academy this summer, and it is true what they say: "The NREL is like Disneyland for Energy geeks."

[Submitted but not discussed was (Exhibit E).]

Chairwoman Diaz:

With that, we will close the hearing on S.C.R 4 (R1). We will open up public comment if

chere is anyone here wishing to give us public comment. This meeting is adjourned [at 6:55 p.m.]	nt. Seeing no one, we will close public
	RESPECTFULLY SUBMITTED:
	Julianne King
	Recording Secretary
	Karyn Werner
	Transcribing Secretary
APPROVED BY:	
Assemblywoman Olivia Diaz, Chairwoman	_
DATE:	_

EXHIBITS

Exhibit A is the Agenda.

Exhibit B is the Attendance Roster.

<u>Exhibit C</u> is a copy of "Table 3.2, Legislative Sessions: Legal Provisions," from *The Book of States 2016*, submitted by Senator Joyce Woodhouse, Senate District No. 5.

Exhibit D is a document titled "Geothermal Energy Potential," dated January 2016, by the Geothermal Energy Association, State of Nevada, submitted by Senator Pat Spearman, Senate District No. 1.

Exhibit E is a document titled "Clean Energy and Environmental Laws as Human Rights Protections, Nevada Legislature 79th Session – Support for SCR4," dated May 25, 2017, by Janette Dean, Private Citizen, Caledonia, Minnesota.