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

Eighty-First Session
May 14, 2021

The Committee on Growth and Infrastructure was called to order by Chair Daniele Monroe-Moreno at 5:50 p.m. on Friday, May 14, 2021, Online and in Room 3143 of the Legislative Building, 401 South Carson Street, Carson City, 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/81st2021.

COMMITTEE MEMBERS PRESENT:

Assemblywoman Daniele Monroe-Moreno, Chair
Assemblyman Howard Watts, Vice Chair
Assemblywoman Tracy Brown-May
Assemblyman John Ellison
Assemblyman Glen Leavitt
Assemblyman C.H. Miller
Assemblywoman Sarah Peters
Assemblyman Tom Roberts
Assemblywoman Shondra Summers-Armstrong
Assemblyman Jim Wheeler
Assemblyman Steve Yeager

COMMITTEE MEMBERS ABSENT:

None

GUEST LEGISLATORS PRESENT:

Senator Roberta Lange, Senate District No. 7

STAFF MEMBERS PRESENT:

Katie Siemon, Committee Policy Analyst
Jessica Dummer, Committee Counsel
Devon Kajatt, Committee Manager
Joan Waldock, Committee Secretary

OTHERS PRESENT:

Will Adler, representing International Brotherhood of Electrical Workers Local 1245

Chair Monroe-Moreno:
[Roll was called. Committee rules and protocol were explained.] We appreciate your patience as this is a deadline day. We have one matter before the Committee for your consideration. Senate Bill 328 (1st Reprint) is on for a work session.

Senate Bill 328 (1st Reprint): Revises provisions relating to energy storage systems. (BDR 58-658)

Katie Siemon, Committee Policy Analyst:
Senate Bill 328 (1st Reprint) was sponsored by Senator Roberta Lange and was first heard before this Committee on May 11, 2021 [Exhibit C]. Senate Bill 328 (1st Reprint) requires the Public Utilities Commission of Nevada (PUCN) to reevaluate regulations setting biennial targets for the procurement of energy storage systems based upon the most recent Integrated Resource Plan (IRP) filed by an electric utility and to make any necessary revisions to these targets no later than November 1, 2022. The PUCN must also submit a report to the Legislative Commission no later than November 1, 2022, regarding its reevaluation of the biennial targets and any adopted or pending modifications to the targets. The bill also requires a person installing an energy storage system to hold a valid license in electrical contracting with any subclassification required by the State Contractors' Board and, for installations for nonresidential properties performed on or after July 1, 2022, a certificate of completion of the Energy Storage and Microgrid Training and Certification (ESAMTAC) program.

There is one proposed amendment attached to the work session document. It would require the PUCN to establish biennial targets that deliver the greatest benefits to the customers of the electric utility in relation to the costs of the procurement of the energy storage systems. The amendment defines the term "electrochemical energy storage system" and provides that no one shall install an electrochemical energy storage system in this state unless: (1) the individual holds a valid license classification required to perform this work; and (2) the work is performed by, or under the direct supervision of, a person holding an ESAMTAC certification if the installation is for a nonresidential property and is performed on or after July 1, 2022. Both the State Contractors' Board and the PUCN have determined there is no fiscal impact to the measure as introduced.

Chair Monroe-Moreno:
Members, you have before you the amendment that is on the Nevada Electronic Legislative Information System (NELIS). At the start of this meeting, we were handed an additional amendment from the sponsor and those helping the sponsor with this bill [Exhibit D]. Are there any questions or discussion?

Assemblyman Ellison:
I just got the new mock-up amendment. It is for residential power only, and not for secondary distribution, only primary. If you look at section 5, subsection 2 (b), it talks about residential property means improved real estate that consists of not more than four residential units. They are saying this does consist of anything above four apartments. How are you going to do that when this is supposed to be a primary, not a secondary system? You are saying it does go back in and feed to the system.

The sponsor of the bill did a great job trying to get this thing out. We have been working on it, but I can name so many things in this room that are set by battery back-up. That exit light, the clock, and the emergency sign all have battery back-up systems even though they are internal. We were trying to get through that anything that is internally operated must be exempt under this bill. We are talking about two different kinds of systems. Where the pole outside your building has [a line] coming to a distribution panel on the building, then into subpanels that feed the power to the building, is a secondary line. If you are generating power from solar panels that goes to the grid and goes out, that is a primary line. That is not what this bill says. What we are trying to do is make sure we are on the same playing field and are speaking the same language. You are already saying in [section 5, subsection 2, paragraph] (b) that anything that is four units or more falls under this. That is secondary distribution, not primary distribution. Residential is still in here, even though it might be a commercial apartment building, but you are talking about two different systems. The main power line might be 41/60 volts or 120/208 three-phase or single-phase if it is a commercial building. If it is a house, it is 120/240. That is the difference. There is a difference between primary and secondary; that is what we are trying to get through. Nothing in the primary existing building should be exempt under this bill. I hope you can clarify that.

Will Adler, representing International Brotherhood of Electrical Workers Local 1245:
The intent of this bill is not to cover all batteries you find in commercially available products like generators, emergency signs, and other emergency systems that have self-housed battery units. The intent is to cover large energy storage systems. Most of these storage systems today are not classified as batteries, but there is a variety—liquid salt, a kinetic train, and others. The energy storage systems we wish to use in the training for the ESAMTAC are for chemical or lithium ion battery storage. They are the size of this table. The intent for that size battery is for taking in the large solar charge and redistributing it back to the grid at a later date. It is not for internal use. It is not a small battery, and it is not those small commercial things you mentioned on this side of a line. We are hooking up things on the primary side of the line for distribution back onto a grid. The intent of that could be clarified more. I produced some language that could better clarify that these are not batteries, but energy storage systems. We were told that because we used "energy storage system" earlier

in the bill and the PUCN already regulates energy storage systems and the targets of those, we could use the term "energy storage system" to mean the storage of green energy for distribution later at night, and we did not have to further clarify that it was only for electrochemical versions of that energy storage system. If more clarification is needed, I will put on the record that I will provide that for you. The intent is not to do any of those things; it is to keep it solely to that one function of a large electrochemical energy storage system for commercial or utility use.

Assemblywoman Peters:
I have concerns about the interpretation of electrochemical energy storage system from my colleague because we already have existing regulations around how an energy storage system, which is a very broad definition, is regulated in the state of Nevada. In this case, given *Nevada Revised Statutes* (NRS) Chapter 624, I would like to ask legal counsel to weigh in on what NRS Chapter 624 regulates and how that is generally interpreted with regard to the energy storage system or other system regulated under that chapter through the licensing standards that exist in that chapter.

Jessica Dummer, Committee Counsel:
Chapter 624 relates to contractors, to work that requires a licensed contractor, and creates the state licensing board. There are certain types of work that are excluded under NRS 624.031.

Assemblywoman Peters:
That list is extensive. I looked at the list after we had this conversation last time because I had concerns that "energy storage system" has such a broad definition. Correct me if I am wrong. We regulate not the storage system itself, but the licensing for the installation of those storage systems. Because we do not have a license that regulates the installation of batteries or other minor storage systems that exist in our buildings, this would not necessarily apply. It would be narrowed to the way we interpret the definition as it exists today, which is if you are required to have a contractor install it, the contractor would have to meet this licensing standard. Is that correct?

Jessica Dummer:
The language of the bill says that you must hold a valid license in the classification required to perform such work issued pursuant to this chapter. That could be interpreted as not applying to work that does not require a valid license.

Assemblywoman Peters:
In the public's understanding, it does not require a license to buy or install a battery.

Jessica Dummer:
Chapter 624 does not include ". . . the construction, alteration, improvement, or repair of personal property." Personal property, as opposed to real property—which would be land or a building—is the type of thing that would have a Duracell battery. There could be things attached to a building that might be considered real property that could use a battery. Whether that would use a Duracell-type battery is a factual question I cannot answer.

Assemblyman Watts:
I understand we just got this language, so I apologize for putting Ms. Dummer in the hot seat on this. I will try to state it more clearly and ask the question in a straightforward way. Does legal counsel believe the current language could be construed to require ESAMTAC training for general contracting work that would install fairly common devices that may have a small battery integrated in them; or do you believe the prepared language, along with the provision of legislative intent, would only apply to larger-scale energy storage systems and larger-scale battery systems that are outside of a component of another device? These are specifically designed to store larger amounts of energy and deploy it to various devices at a later time.

Jessica Dummer:
The definition from the amendment that was handed to us just before the meeting began does not specify the size of the battery. It would depend on how you interpret what it means to distribute electricity outside the system. I do not know enough about batteries to tell you if that would be only large batteries.

Assemblywoman Peters:
I am looking at NRS Chapter 624.031, subsection 6. It says, "The provisions of this chapter do not apply to . . . Any work to repair or maintain property the value of which is less than $1,000, including labor and materials, unless . . ." and there are stipulations, including if the type of work performed is electrical. Installing a battery does not require that, and the pieces of property you would reinstall a battery into would cost $30 at Costco, not $1,000. I would like an example of a $1,000 piece of equipment where a battery is a piece of maintenance and operation, Mr. Ellison, if you have one.

Assemblyman Ellison:
Nevada state law says any commercial building has to have someone with an electrical master's license with subclassification C2 for its company. Maintenance is where somebody pulls a battery out of a clock. That is maintenance, but nothing in electrical can fall under maintenance if it is over $1,000. They cannot change a switch or a plug; a licensed union or nonunion contractor has to do it. That is the law. When the bill was presented, I asked whether we were talking about 15 kilowatts (kW) or 150 watts or a kilovolt. The presenter said we were talking about everything. That is what created the problem. There is a difference between 150 watts and 150 KVA [1,000-volt amps] or kilovolts. The difference is massive and a whole different system. We are trying to verify that we are not putting small businesses in a position of not understanding the intent of the bill. The exit light in this room has a battery back-up in it. Although it is cheaper to throw it away, you can take it down and change the light, but it still has a battery in it. If it is thrown away, it must be

disposed of properly because of chemicals in the battery. We are trying to protect thousands of small businesses while trying not to get away from the intent. It is a problem for tens of thousands of electricians to have to take one of two union classes offered in the state.

Will Adler:
As I stated previously, the intent of this bill is not to do that in any way and not to require that training for any standard electrical work or any electrical work done today. This will be done on larger-scale units for the storage of energy commercially or on a utility scale. Whatever is needed to make that clear is what Assemblywoman Peters is trying to provide in the bill. The Legislative Counsel Bureau thought the legislative intent and the history of energy storage devices already regulated by the PUCN would make it clear so that it is not a problem in the future because that is not the intent.

Assemblyman Ellison:
Madam Chair, may I comment?

Chair Monroe-Moreno:
You may have one last question, then we are moving on to Assemblyman Leavitt.

Assemblyman Ellison:
What I am trying to get at is that we should have defined if it was 150 KVA or what it is. That has not been addressed yet. We are comparing apples to oranges; there is a whole different system. We started the process, but you went right back into residential. What kind of system of this size are you going to put on a fourplex? It does not exist.

Assemblyman Leavitt:
I get a little concerned when we talk about the intent of bills because it is up for interpretation. There was ample opportunity to lay it out there and address this—not in talking about intent, but in actual [bill] language. When we pass laws and regulations, if people have to guess what the intent is, that is a problem. My concern is that somebody will want to put up a small solar panel costing more than $1,000 purchased on Amazon, with a battery that is probably not that big on their business or office building to run something small inside the building. There is nothing clearly defining whether they can. Intent does not mean anything. If you do not write it out in the language—the battery has to have this level of storage or it has to be smaller than 3 by 2—to clarify what property owners can and cannot do, what they are regulated by law to do, they have to guess. If they guess wrong, they are in trouble. That is a problem for me. That is where the rubber meets the road on this. The language does not clearly define what you can and cannot do. I have no idea what electrochemical energy means, so I will have to research it, then go back to this hearing to listen to the intent. I struggle with that. Is there a way to get this so it is not up to a property owner's interpretation or guesswork whether what he is trying to power or install will require a contractor?

Will Adler:
I agree with you. I think that needs to be part of this issue, but one thing I have run into with energy storage devices is the lack of definitions around them in Nevada statute. We passed a bill in 2017 to look into energy storage devices at a state level from the PUCN. They took that direction and implemented a plan for NV Energy to start purchasing energy storage devices to make sure they capture extra green capacity going forward. In the future, it will no longer be just solar; it is a hybrid program which is solar plus battery. Under that framework, the PUCN regulated what an energy storage device is, so we referred to them as energy storage devices in this bill because the PUCN uses that term for devices intended to store excess energy for later use. To clarify this further, I provided the mock-up amendment that clarifies the energy storage is for distribution outside the system at a later date. That implies that the energy is stored in the system temporarily with the intent that the energy will be used outside the system; hence, the battery is for distribution out to the power grid or whatever other body there is. We did not know clarification was necessary because it had not seemed necessary when we reviewed the legal intent. There are so few hard-and-fast definitions in NRS or NAC [*Nevada Administrative Code*] on this subject that we might need to add something like the highlighted section I provided [section 3, subsection 2, subparagraph (i)]. The intent is not to address anything an electrical contractor can do in the state; it is to address something that is happening and will happen in the future. This training will provide safety and surety for these large energy systems, usually with lithium ion batteries, referred to in this bill. We do not wish to muddle the intent. If more clarity is needed, we could ask for that to be provided. The bill, as written, was intended to read as it is for energy storage systems such as the ones PUCN asked, through the regulations, to be provided to the state.

Chair Monroe-Moreno:
Are there any other questions?

Assemblywoman Peters:
I would like to get on the record a conversation we had regarding the training program—what that is and how it is accessed. I understand this is an open curriculum, developed by Pennsylvania State University, that is accessible by anybody. You contact them to ensure you are trained properly in the program. Would you clarify that is the case and that it is not isolated to only union training programs?

Will Adler:
The curriculum produced by Penn State University is an energy storage and microgrid training and certificate-issuing program based on these new energy storage systems that have been developed in the last five years. It provides the training needed to work on these energy storage systems. The curriculum comes with 13 different syllabuses and is available for anyone to use as a training platform. It is not specifically a union platform or anyone else's platform; it is publicly available to anyone who contacts them on their website. They are setting up trainings in the state regularly; about once a month they set up a new batch of

people, union and nonunion. It is publicly available and will be provided to whoever wants to take the course because more people need this training. The service is provided to whomever wants to learn.

Assemblyman Watts:
I want to thank the sponsors of the bill for working to address some of the questions and concerns that came out of the initial hearing on the bill. I appreciate all the work that went into narrowing the definitions and moving the pieces around to make more sense and work for the bill.

There are times when our laws are called into question. When they are, the legislative record and legislative intent are critical. I think we have made it abundantly clear what the intent is on this bill. My motion includes incorporating proposed amendment 3318 and not the additional language that was provided to us today.

> ASSEMBLYMAN WATTS MOVED TO AMEND AND DO PASS SENATE BILL 328 (1ST REPRINT).
>
> ASSEMBLYWOMAN PETERS SECONDED THE MOTION.

Chair Monroe-Moreno:
I think we have had quite enough discussion. I will move to the vote.

> THE MOTION PASSED. (ASSEMBLYMEN ELLISON, LEAVITT, ROBERTS, AND WHEELER VOTED NO.)

I will assign the floor statement to Assemblywoman Peters. We will close the work session on Senate Bill 328 (1st Reprint).

The last item on our agenda is public comment.

Senator Roberta Lange, Senate District No. 7:
I know this has been hard for all of us, and it is the last day, the last moment. We have all worked really hard on this. I know tensions are high. I wanted to let you know of my appreciation for your input and comments. I hope we can continue to move this bill forward. I think it is a good bill for Nevada. Thank you.

Chair Monroe-Moreno:
Seeing no one else here in the room for public comment, we will go to our virtual platform. Do we have anyone joining us for public comment? [There was no one.]

That was the only bill on our work session agenda. Seeing that is complete, this meeting is now adjourned [at 6:21 p.m.].

RESPECTFULLY SUBMITTED:

_____
Joan Waldock
Committee Secretary

APPROVED BY:

_____
Assemblywoman Daniele Monroe-Moreno, Chair

DATE: _____

EXHIBITS

Exhibit A is the Agenda.

Exhibit B is the Attendance Roster.

Exhibit C is the Work Session Document for Senate Bill 328 (1st Reprint), presented by Katie Siemon, Committee Policy Analyst, Research Division, Legislative Counsel Bureau.

Exhibit D is a proposed amendment to Senate Bill 328 (1st Reprint), presented by Will Adler, representing International Brotherhood of Electrical Workers Local 1245.