## NEVADA STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS Minutes of the Legislative Committee Meeting Held virtually (zoom) at 3:00PM, Wednesday, November 15, 2023

Committee Chairman Greg DeSart, PE, called the meeting to order at 3:00pm. Committee members participating via video conferencing were Matt Gingerich, PLS, and Jay Dixon, PE. Robert Fyda, PE, was excused. Also joining were Patty Mamola, Executive Director; Christopher MacKenzie, Board Legal Counsel, and Murray Blaney, Operations/Compliance.

## 1. <u>Meeting conducted by Committee Chair Greg DeSart, call to order and roll call to determine</u> presence of quorum—committee members: Jay Dixon, Matt Gingerich, Robert Fyda.

A quorum was determined.

# 2. Public comment period.

There was no public comment via e-mail, virtually, or in-person.

## 3. Approval of September 13, 2023, Legislative Committee meeting minutes.

LGC 23-7 A motion was made by Mr Gingerich to approve the September 13, 2023 minutes, Mr Dixon seconded, and the motion passed. Mr Fyda was absent for the vote.

# 4. <u>Consider future licensing of engineers as it relates to emerging technologies and blended</u> <u>engineering degrees including considering retention and/or modification of specific disciplines</u> <u>licensed by the board.</u>

Mr DeSart said this agenda item is related to considering the future of engineering licensing for emerging technologies and blended engineering degrees, including considering retention and or modification of specific disciplines licensed by the board. He said this is an issue that Robert Fyda agreed to take the lead on, and our goal in this fiscal year is to develop a position that we can recommend to the board. Mr DeSart added that a PowerPoint presentation has been prepared by Mr Fyda with input from Ms Mamola, that summarizes findings and characterization of the issues. He asked Ms Mamola, with Mr Fyda unable to attend the meeting, to introduce and run through the presentation.

Ms Mamola said she and Mr Fyda had a detailed discussion and also reviewed past documents related to the topic and following that preparatory work, Mr Fyda prepared a PowerPoint.

Key points highlights in the presentation:

- Current Landscape Licensure is about assessing minimum competency for initial entry into the profession and to ensure ongoing standard of professionalism by facilitating compliance with laws, regulations, and code of practice. Nevada is discipline specific and there are no provisions for emerging disciplines.
- Current licensure model was presented

- Other profession models of licensure were considered
- Responsible charge related to emerging disciplines, protection of the public, teams, 3D plans presented a number of issues to be considered as it relates to professional licensure
- Potential steps were identified for developing pathways to recognize emerging disciplines in engineering.

Mr DeSart said Robert did a really good job of characterizing the issue. It's complicated. And there's no obvious right answer. And there seems to be pros and cons which is why we haven't dealt with it because it's hard. He opened the discussion to comments from others on the committee.

Mr Dixon asked if the state-specific exam for geologic engineering existed.

Mr DeSart said yes, but it was not new. He said it's been around for 30 plus years. And it is an engineering discipline in Nevada only, or there's a couple states that have it and have state exams. He said it was initiated because UNR has a geological engineering program. The first exams were written by Dr Waters, who ran the geological engineering program at UNR. And then Dr Carr, who ultimately replaced Dr Waters, wrote the follow-up exams. We did have discussions relatively recently in the last five or six years about possibly dropping that because people aren't taking the exam, and because Dr Carr retired. And who's going to write the exams for us now? And I think since that conversation, I was one of the advocates for keeping it, because I happen to graduate from the Geological Engineering Program at UNR. I thought was good to have a viable option since we have to keep that program viable for the university. It's somewhere between civil engineering and mining engineering and geology. We have very few test takers, maybe two in the past 6 years.

Mr DeSart asked Mr Dixon to elaborate on his point.

Mr Dixon said that in the mining industry he has heard feedback from engineers that Nevada does not have a good path to licensure.

Mr DeSart said he thinks it's common for applicants to ask for waivers of supervision, working under the supervision of a licensed mining engineer. We have a statute or regulation that says you have to work for two years underneath a licensed professional in the same discipline that you're seeking licensure. And it's a pretty common request for a waiver of that requirement due to few licensed mining engineers in Nevada.

Mr DeSart said one option we have to resolve that issue is to consider amending that statute or regulation if we perceive it to be an unnecessary obstacle to licensure. (ACTION Item)

Mr Gingerich said he agreed. He said it's common for folks to work in a different field in engineering, and maybe there is a need for some sort of specific exam, but trying to get into the specific stuff, it's going to be really challenging because of rapid evolving of degrees and blended degrees. He said he'd be more of a mindset to find a more general solution for licensing emerging engineering disciplines. Mr Gingerich said it'd be difficult to administer exams for specific emerging engineering disciplines, but he would like to see a pathway for them to get a license that would be more general. He said he just didn't know what that looks like. Mr DeSart said it's sort of like a hybrid model. So, something along the lines of still having a traditional PE—civil engineer, mechanical engineer—but we also have a PE for emerging engineering disciplines, we would simply define the difference.

Mr Gingerich said yes, you still would be able to specialize as a civil or electrical engineer, but there would be more of a general engineering option. He said he was just kind of thinking out loud and saw a need for there to be a pathway for these folks. He said it just didn't seem feasible to try to do something specific for every emerging engineering discipline.

Mr DeSart said he agreed that every time there's a new specialty that we would have to create a whole new license. He said he remembered there was discussion about licensing entertainment engineers because UNLV had an entertainment engineering program, and it didn't go anywhere.

Mr DeSart said so the question is, if we want to get those people licensed, we have to have a general PE then do we have a general non- discipline specific PE, or do we just eliminate the specifics and we have a general PE. And I think Nevada is in the minority, there are only about a dozen states that license by discipline, most states are PE states, they don't license by discipline.

Ms Mamola said that is correct, there are 14 states that are discipline specific. But even though most states are PE states, non-discipline-specific states, a significant number of those states require licensees to declare a branch of engineering practice area and require the NCEES PE exam.

Mr Gingerich asked if there was a general engineering NCEES PE exam.

Ms Mamola said there is no general engineering NCEES PE exam, for the NCEES fundamentals of engineering, there is a general engineering (other) FE exam, but the NCEES PE exams are all discipline specific.

Mr Gingerich said why wouldn't we want to provide a pathway for those types of folks, engineers graduating with blended/custom engineering degrees such as entertainment engineering or mobility engineering. He said consider those engineers working at Tesla that are putting batteries together for automobiles that catch on fire, shouldn't we be concerned with public safety.

Ms Mamola said another example is smart cities. Engineers are involved in smart cities, often leading the efforts, which is software engineering and electrical engineering and civil engineers. Are we not going to require somebody to be licensed to address mobility engineering related to smart cities. Again, as a state regulatory board aren't we charged with protection of the public as it relates to regulating engineers?

Mr Gingerich asked if this is a topic being discussed at NCEES.

Ms Mamola said yes, it has been discussed at NCEES. There was a 90 min workshop held by NCEES a few years ago at one of its annual meetings. David Cox, CEO of NCEES says, yes, we need to be doing something about this, and NCEES has a committee discussing this issue. Engineering Change Lab USA is working on an experiment around this topic and is considering a prototype licensing model. She said it is a national discussion. It will likely need to be a state to lead the way. Nevada has led the way

on a number of national issues related to licensing of engineers, we need to decide if we want to lead here too. She said we could keep our finger on the pulse, keep discussions going, have an open mind, and she thought we could figure out a way forward.

Mr DeSart said the big outcome of this discussion, that had not previously crossed my mind is the concept of keeping our legacy disciplines—civil, mechanical, electrical, etc—and creating another catch-all, general category, for emerging disciplines. He said for lack of a better word, call it a non-declared PE, general PE, without a specialty, that creates a bucket for us to be able to put everybody that doesn't fit into one of our legacy categories, it's a hybrid solution.

Ms Mamola said yes, it becomes about changing our mindset. Our legacies are about gatekeeping. We keep certain people out by only letting them through the gate if they meet all our licensing criteria— degree, exams, experience, supervision under a PE. She said the new approach would be more of a gate tending mindset, a mindset that's about protecting the public. So, the new mindset would enable a new/different pathway for emerging engineering disciplines, likely no exams.

Mr DeSart said we're definitely not going to solve this today, and this is a great initial conversation. He said it seems like there are two action items that came out of this conversation. One, for further discussion and further exploration is the topic of the future of engineering licensure. And the other action item is considering revision of the statute that relates to requiring two years of working underneath a PE of the same discipline that an applicant is seeking licensure. (ACTION Item)

Mr Gingerich agreed those were the two action items.

Mr Dixon said he agreed and said he thought it was a good discussion, and asked Greg to confirm that the hybrid model would be a license pathway for other engineers that do not currently have a pathway to licensure.

Mr DeSart said the hybrid option seems like something that people could grasp. So, a hybrid model keeps what we have now—the current licensing process for legacy engineering disciplines—and allows for developing a new pathway for emerging disciplines. As opposed to throwing what we have now out the window, which is kind of why I think people get paralyzed about this, is because that's what it becomes, it's like, we have this general PE, we can't have the specialty PEs, and I think that's where people can't wrap their head around that concept. He said he thought the hybrid concept was easier to grasp and makes a lot of sense.

Mr Gingerich said he agreed.

Mr DeSart said we don't have to take a vote, it is just for discussion, but we have two action items for this committee to further discuss and study. And we can add those as future agenda items and we can continue the discussion as the topic continues to evolve and we gather more information. (ACTION Item)

## 5. <u>Consider survey results and Small Business Impact Statement related to proposed changes to</u> <u>Nevada Administrative Code chapter 625.</u>

Mr DeSart said Ms Mamola has prepared, signed, and certified, a draft Small Business Impact statement. He said he agreed with the findings in the summary of conclusions and proposed the committee consider a vote to accept the statement as written.

LGC 23-8 A motion was made by Mr Gingerich, seconded by Mr Dixon, accept the Small Business Impact Statement as written, and to make a recommendation of approval to the board. The motion passed. Mr Fyda was absent for the vote.

Mr DeSart said in his committee report at the board meeting tomorrow he would recommend that the draft Small Business Impact Statement be accepted as written.

Mr Gingerich said, related to the comments in the survey, the most tension in the survey comments were related to the proposed amendment to NAC 625.545 – specifically the change from the word "date" to "schedule".

Mr DeSart agreed. He said he believed there was some confusion as to what was meant by "schedule", where it appears some of the respondents automatically assumed it would require a Gantt Chart or critical path schedule. He added that was not the intent of the change. The intent was to give a more practical and flexible option because often there are items in a project that are beyond the control of the licensee that makes it very hard to determine a completion date.

The committee discussed options related to the comments made relating to contracts. It was agreed, before considering any revision, to see if any additional feedback is received during the scheduled Public Workshop on December 6, 2023, and in the meantime, add a narrative introducing the proposed change to NAC 625.545, with an example of what a simple schedule would entail to help alleviate any concerns. (ACTION Item)

Ms Mamola said the survey comments relating to professional land surveying standards of practice will be packaged and sent to the PLS Sub-committee for review and consideration. (ACTION Item). She added that meeting has been scheduled for December 5, 2023.

## 6. Discussion on process and schedule for updates to Nevada Administrative Code chapter 625.

Ms Mamola outlined the next steps in the process, highlighting the Public Workshop to gather additional feedback on December 6, 2023, at 12 noon. She said in addition to the Reno office, the Las Vegas office would be staffed for the public to attend in person, and remote participation would be available via Zoom or telephone.

Ms Mamola said any recommendations from the PLS Sub-committee and feedback from the Public Workshop would be presented for consideration by this committee at its next scheduled meeting on December 14, 2023, at 9:45am. (ACTION Item)

## 7. <u>Discussion on process and schedule for updates to Nevada Administrative Code chapter 625</u> related to Governor Lombardo's Executive Order 2023-003 and 2023-004.

Ms Mamola reviewed the status of the regulations submitted to the LCB for drafting. She said the LCB

R #s had been assigned and staff had been engaged with LCB legal to answer questions. Ms Mamola added that when drafts are received for all the regulations submitted, they will be presented to this committee for review and consideration. (ACTION Item) She added that it was not expected all drafts would be received from LCB in time for the December 14 committee meeting.

#### 8. Discussion on status of committee and staff assignments.

Ms Mamola reviewed the assignments and answered questions from the committee.

Mr DeSart asked that the list be adjusted to group like items together and add clarifying notes as required. (ACTION Item)

#### 9. Open discussion of items related to the Legislative Committee.

There were no topics put forward by the committee.

#### 10. Public comment period.

There was no public comment via e-mail, virtually, or in-person.

#### 11. <u>Adjourn</u>

Mr DeSart thanked the committee members for their participation and adjourned the meeting at 4:07pm.

Respectfully,

Patty Mamola Executive Director