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BUSINESS MEETING
BEFORE THE
CALIFORNIA ENERGY COMMISSION

In the Matter of:  

)  )22-BUSMTG-01
  ) Business Meeting )
______________________________)

WEDNESDAY, MAY 11, 2022
10:00 A.M. - 3:30 P.M.

In-person at:  
Warren-Alquist State Energy Building  
1516 Ninth Street  
Art Rosenfeld Hearing Room  
Sacramento, California 95814  
(Wheelchair Accessible)

Option for Remote Public Access via Zoom.

Please note that the CEC aims to begin promptly at the start time and the end time is an estimate based on the agenda proposed. The business meeting may end sooner or later than the time indicated depending on various factors.

Pursuant to California Code of Regulations Title 20 section 1104(e), any person may make oral comment on any agenda item. To ensure the orderly conduct of business, such comments will be limited to three minutes or less per person. Any person wishing to comment on information items or reports (non-voting items) shall speak during the general public comment portion of the meeting and have three minutes or less to address all remaining comments.

Reported by:  
Peter Petty
APPEARANCES

Commissioners

David Hochschild, Chair
Siva Gunda, Vice Chair
Patricia Monahan

Staff Present:

Drew Bohan, Executive Director
Linda Barrera, Chief Counsel
Dorothy Murimi, Public Advisor’s Office
Matt Pinkerton, Chief Counsel’s Office
Justin DelaCruz, Chief Counsel’s Office
Matt Chalmers, Chief Counsel’s Office
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Pursuant to Government Code Section 11126(e), the CEC may adjourn to closed session with its legal counsel to discuss any of the following matters to which the CEC is a party:

i. Interlink Products International, Inc. v. Xavier Becerra, Drew Bohan, Melissa Rae King (United States District Court for the Eastern District of California, Case No. 2:20-cv-02283)

Pursuant to Government Code section 11126(c)(3), the CEC may hold a closed session to deliberate on a decision to be reached in a proceeding required to be conducted pursuant to Chapter 5 (commencing with Section 11500) or similar provisions of law:

i. In the matter of Pecho Energy Storage Center (Docket No. 21-AFC-01).

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PROCEEDINGS

MAY 11, 2022 10:03 a.m.

(Start of Introductory Video.)

MS. MURIMI: Welcome to the California Energy Commission's Business Meeting. Zoom's closed-captioning feature has been enabled to make Energy Commission business meetings more accessible. Attendees can use this feature by clicking on the “Live Transcript” icon and then selecting either “Show Subtitle” or “View Full Transcript.” Closed captioning can be stopped by closing out of the Live Transcript or selecting “Hide Subtitle.” Those participating solely by phone do not have the option for closed captioning.

The Energy Commission will continue to post a recording of this business meeting on the Business Meeting webpage in addition to posting a transcript of this business meeting rendered by a professional court reporter in the docket system on the business meeting webpage.

To increase access to the California Energy Commission’s proceedings, this meeting is being held in-person and is also available for remote participation.

The public can participate in the business meeting consistent with the instructions for remote participation found in the notice for this meeting and as set forth on the agenda posted to the Energy Commission's
website. Pursuant to California Code of Regulations Title 20, section 1104(e) any person may make oral comments on any agenda item.

Once the public comment period begins, to indicate you would like to give a comment in-person please use the QR codes shown in the room and fill out the form.

For remote participants, please raise your hand by clicking on the “Raise Hand” icon at the bottom of your screen. If you are joining by phone press *9 to raise your hand and *6 to unmute.

To ensure the orderly and fair conduct of business, public comments will be limited to three minutes or less per person for each agenda item voted on today.

Any person wishing to comment on information items or reports which are non-voting items shall reserve their comment for the general public comment portion of the meeting and shall have a total of three minutes or less to state all remaining comments. After the Public Advisor calls on you to speak, spell your name and state your affiliation, if any.

Welcome to the California Energy Commission’s business meeting. The meeting will now begin.

(End of Introductory Video.)

CHAIR HOCHSCHILD: Well good morning and welcome friends. I'm David Hochschild, Chair of the Energy
Commission. We have a little echo. Is there a way to resolve that?

(Pause to address audio issues.)

CHAIR HOCHSCHILD: Let me try that. Is that better? Okay.

Good morning, and welcome friends. Today is Wednesday, May 11th. I call this meeting to order.

Joining me are Vice Chair Gunda and Commissioner Monahan. Commissioner McAllister and Commissioner Vaccaro are out today.

I just want to note there is something of a surge going on again with COVID, unfortunately. The good news it appears to be very, very few hospitalizations thanks to a high vaccination rate. But I can just tell you anecdotally half of my daughter's high school class got COVID last week after their prom, including her. So she tested positive. The other daughters tested positive only for sarcasm. And we are, of course, all mindful of the continuing challenges of COVID and what that presents and just wanted to urge additional caution in these next few weeks to reduce the spread.

With that, let me begin with the Pledge of Allegiance, which I will lead.

(Whereupon the Pledge of Allegiance was recited.)

CHAIR HOCHSCHILD: Thank you, Commissioner.
So before getting to our voting items a few announcements to make. Nominations are being accepted for the 2022 Clean Energy Hall of Fame Awards happening on December 8th, 2022. I really wanted to encourage all of you who know someone who you think would be a good candidate for that to submit a nomination. The Hall of Fame is an annual event through the Energy Commission that started in 2020 to spotlight local leaders throughout our state who are contributing to our goal of getting to 100 percent clean energy future for all through innovative, bold work that advances equity and environmental justice. The nominations period ends July 1st. I encourage all of you to submit a nomination if you know someone. There are six different awards for this.

A Lifetime Achievement Award that honors someone who's retired who dedicated their career to clean energy.

There's a Huge Game Changer Award that honor someone who's influencing younger generations to advance a clean energy future.

And there's a Tribal Champion Award carved out to honor a leader doing clean energy future work for tribal communities in California.

And then we have three Champion Awards on our leaders doing innovative work that starts in their communities and ripples throughout the state.
And finally, let me just share that today the Commission is going to be seeking to approve over $41 million in grants contributing to our state's economic recovery. And I always want to recognize all the staff who've worked on all the different programs to prepare all these grants for approval.

With that let's turn now to the Consent Calendar. Do we have any public comments, Dorothy, on the Consent Calendar?

MS. MURIMI: Thank you, Chair. I’ll just read a few instructions for folks.

For folks that are on Zoom, go ahead and use the raised-hand feature. It looks like an open palm or high-five at the bottom of your screen or device. For individuals that are in the room, go ahead and use the QR codes that are located in the back of the room or come to the podium and unmute the microphone. Give your name and begin your comment.

No individuals on Zoom. I see no comments, and no comments in the room, Chair.

CHAIR HOCHSCHILD: Thank you, Dorothy.

With that, I’d welcome a motion on Item 1 from Vice Chair Gunda.

VICE CHAIR GUNDA: I move Item 1.

CHAIR HOCHSCHILD: And a second from Commissioner
COMMISSIONER MONAHAN: I second it.

CHAIR HOCHSCHILD: All in favor say aye. Vice Chair Gunda?

VICE CHAIR GUNDA: Aye.

CHAIR HOCHSCHILD: Commissioner Monahan?

COMMISSIONER MONAHAN: Aye.

CHAIR HOCHSCHILD: And I vote aye as well. That item passes unanimously with 3 to 0, with Commissioner Vaccaro and Commissioner McAllister absent.

Let’s turn now to Item 2, Acknowledging the Contributions of Dr. Thomas Gates who recently retired with a resolution, which I will now read:

“Whereas, Thomas Gates, known as Tom, started his career during his undergraduate years at Humboldt State University where he met his lifetime partner, Jenni. Together, they worked and raised their children in the mountains of eastern California, in the Sierras and the White Mountains, as well as on the North Coast in Humboldt County. Tom earned a dual degree from Humboldt in 1987, in Anthropology and Philosophy, with a Minor in Art. He earned his PhD in Cultural Anthropology from the University of North Carolina, Chapel Hill in 1993; and

“Whereas, his lifelong commitment to tribes began while completing his graduate fieldwork with the Yurok.
Tom continued to work for the Yurok Transition Team, assisting in developing the framework for the establishment of the Yurok Tribe. He continued to work for the tribe in a number of capacities, centered on culture and heritage preservation, until 2008; and

“Whereas, during his time with the Yurok Tribe Tom successfully advanced several of the objectives outlined in the Preamble of the Yurok Constitution. Tom made invaluable contributions to the tribal government’s most impactful projects, including land recovery, Klamath dam removal and the California condor reintroduction. Tom played a pivotal role in the development of the Yurok Tribal Heritage Preservation Office. Tom was tireless in his effort to preserve important Yurok religious sites throughout the tribe’s ancestral histories; and

“Whereas, Tom, by the scope of his consulting duties, had developed and conveyed justifiable veracity and principled positions towards crucial environmental and indigenous issues. By utilizing knowledge and acumen in his numerous meetings, reviews, and written opinion for native tribes, alongside other conglomerates, he would uphold the integrity, ethics and unification essential to the benefit of all; and

“Whereas, Tom was among the first duly appointed Tribal Historic Preservation Officers in California as well
as in the country. And in this capacity, with clear vision and political will forever expanding the role of Tribal Historic Preservation Officers, he pushed the scope of consultations beyond the NHPA Section 106 undertakings on Tribal Lands to include all projects with the potential to impact tribally significant cultural resources on Ancestral Lands that are regulated by various local, state and federal laws and jurisdictions; and

"Whereas, Tom joined the CEC in December of 2012, he provided a constant reminder to respect and honor tribal sovereignty while highlighting the importance of protecting cultural resources. He developed a robust network and established communication strategies that proved effective, growing tribal engagement in all CEC’s programs. He gifted paintings, including annual holiday cards, a symbol of his gratitude, generosity, and deep connection to others. He developed meaningful conferences to build relationships between state agencies and tribes, working towards a resilient clean energy future. We learned that energy goes far beyond that which runs through our transmission lines and wires; and

"Whereas, Tom brought an infectious enthusiasm for tribal affairs and historic preservation to the Cultural Resources Unit at CEC’s Siting, Transmission, and Environmental Protection Division, leading documentation of
Native American and Euro-American cultural landscapes, supporting innovations like the Cultural Resources Unit Inventory System, and promoting a people-focused approach to the management of our cultural environments; and

"Whereas, Tom, a man of many talents, quickly earned the utmost respect and admiration of multiple tribal communities and colleagues as an ally and lifelong friend. Tom integrated Traditional Ecological Knowledge and Tribal wisdom into CEC proceedings and introduced Tribal Leaders and Traditional Religious Practitioners to become Intervenors in accordance with the California Environmental Quality Act; and

"Whereas, Tom was not afraid to do a site visit, camp out in the field, or draw and paint to better understand the cultural landscapes of California, to share those understandings with others, and to create an elegant Traditional Cultural Property report for the Obsidian Butte in Imperial County; and

"Whereas, Tom has made lasting contributions to the recording of Native American history. His work has enhanced the knowledge of the antiquity of the record of Native Americans across the vast California landscape and brought forth information from the lasting impacts of tribes on California history. Tom has worked tirelessly with the Fort Yuma Quechan Tribe Cultural Committee, as the
CEC Tribal Liaison, for the protection of the Tribe's history across their traditional lands. He has laid a strong foundation regarding communication and coordination with the Tribe that will aid his successor immensely. The Fort Yuma Quechan Tribe and Cultural Committee greatly appreciate Tom's commitment and dedication to the preservation of the Tribe's cultural heritage. His work will continue to benefit Tribes well into the future; and

“Whereas, Tom is a mentor and friend to many tribal liaisons and has strengthened the policies and practices of how the state consults and partners with California Native American tribes through his leadership and expertise; and

“Whereas, Tom will forever be appreciated by the Office of the Public Advisor for incorporating them into the most recent tribal conference and tribal visits, then masterminding the expansion of the office to cover tribal affairs. He will hold a special place in their hearts due to his friendship and all he has invested in each of them through his mentorship and wisdom, especially through the art he created and graciously shared. The Public Advisor’s Office will miss him brightening up meetings with his quirky jokes, reliable recipes, fascinating stories, wise advice, and humble nature. The PAO also appreciates his receptivity to learning a thing or two from them,
especially about Microsoft Office technology, which he
dreaded. But we all hope his transformed life will
continue using into retirement to help manage his vineyard;
and

“Whereas, Tom illuminated the trail for so many
of us, advancing the state’s journey and commitment to
rebuilding our relationships with tribes. He was generous
with his time, mentoring all those he encountered with open
hearts and minds that were eager to learn from his profound
words, deep knowledge, and extensive experience. While
sometimes he walked in circles, his footprints have left
impressions at the CEC that will forever guide us in the
right direction.

“Therefore Be It Resolved, that the CEC hereby
recognizes and commends Thomas Gates for his great
contributions to the Energy Commission, California Native
American Tribes, the people of the state of California and
wishes him all the best in his future endeavors.”

Now we’ll turn to Commissioners for comments.

Let me just kick it off by extending my gratitude to Tom.
I’ve learned a lot from Tom about our incredible tribal
communities here in California. We have over 150 tribes in
California, more than any other state in the country. I
had the opportunity to do a number of tribal trips with
Tom, learn from him, really appreciate his insights.
And I think it's really an amazing legacy to have to be able to lift up the tribal sovereignty issues, particularly energy sovereignty. I’m really proud of the work we've done, now seven tribal microgrids the Energy Commission has funded. And new opportunities for funding and for loans. Including the ECCA program, which will include EV charging in tribal communities for the first time as well as planning grants and other outreach.

And I think, Tom, your greatest legacy is actually going to be the inspiration that you provided to the younger generation. I want to again say how proud I am of Katrina Leni-Konig in the Tribal Liaison role now. And the mentorship you've provided to her, and to so many is your greatest gift. And so my gratitude on behalf of all of us.

Let's go to other Commissioners for comments.

Vice Chair Gunda.

VICE CHAIR GUNDA: Thank you, Chair.

So Tom, just recognizing that probably I haven't had the pleasure of working with you a lot, but in the few interactions we've had I kind of recognize the knowledge, the respect that you bring to the table. Your openness and taking the time to help everybody understand the importance of the various aspects you were leading.

So from, I think from my end I just want to
recognize a few things. You know, public servants like you make the difference in advancing the state forward in so many ways, more than the things that you just touch. So thank you for your incredible work. Thank you for bridging the gaps and really building the bridges necessary to have the dialogue necessary for bringing the tribes into the energy conversation, and all that you've done. And inspiring so many of our staff and really kind of being that beacon of kindness, light, and inspiration for so many of us to engage in that conversation, so thank you for your work.

Congratulations to you and your family. Thanks to your family for supporting you all those years as you tried to advance important points. So thank you and look forward to continuing that relationship.

CHAIR HOCHSCHILD: Commissioner Monahan?

COMMISSIONER MONAHAN: Well, when I first started at the Energy Commission and I really was starting from scratch, I met Tom and he brought a map of all the Native American tribes in California. And I had this conversation with him where I was so moved and I thought, “If this is what state workers are like I’m in a great place.” And I just want to say how impressed I’ve been with just Tom’s ability to take what has (indiscernible) arcane energy (indiscernible) that can be very impenetrable
to most people and just bring it into this very personal experience with the tribes.

And just a couple of months ago I was in Imperial County. We were at a roundtable with a Quechan Tribe talking about lithium extraction. And the tribe was expressing very deep reservations about what mining could do to the land and what it would mean. And it was a little tense and painful to hear the many deep concerns that are rooted in a legacy of poor treatment, I would say, of the earth that they've experienced with people mining in their territory.

But after this long conversation at the very end Manfred Scott said, “Where's Tom? Because I have a gift for him.” And the affection that Manfred Scott expressed and that you could see reflected in the eyes of all the tribal members was just really a powerful thing. And it, I think, reinforces this idea that this dialogue can be -- is really hard and we need to have it. And Tom created the conditions for us to have that conversation, so just I want to thank you for all you've done for us.

CHAIR HOCHSCHILD: Thank you, Commissioner, and really well said. And just one or two more things I'd like to add that occurred to me.

I don't think it's an overstatement to say that most of the significant challenges our world faces today
are, to me, rooted in the fact that our society has departed from that basic Native American wisdom of always asking with every big decision, “What is the right thing, like seven generations ahead,” and then thinking that way. We have to return to that.

And I guess a lot of what we're trying to do right now with all of our work on sustainability and clean energy is return to that and to return to a process that is inclusive and restorative. One of the things that makes me incredibly proud to serve in the Newsom administration, and I know my colleagues join in this, is Governor Newsom’s apology to the tribes. I thought that was long overdue and very powerful, and a really important milestone.

And we're going to continue this work, Tom, that you've begun. And it's a priority for me personally as Chair and for all the Commissioners in really focusing on tribal energy sovereignty, especially where I think we can do a lot.

I finally also wanted to say I think good things happen from bringing people together. And one of the things I really appreciated, we had a Tribal Energy Summit a few years ago in the Eastern Sierra in the Paiute Territory. And that was where I met Darcie Houck and I hired her as Chief Counsel, because I met her there. And then she served with great distinction here as Chief
Counsel for a number of years and then got tapped by the Governor and now she's a Commissioner at the Public Utilities Commission. And that is really from that Tribal Energy Summit. So I am mindful of that and we want to sustain that leadership as well.

So with that let's go -- I believe we had some additional people who wanted to give comments?

MS. MURIMI: We'll start with individuals -- and we'll start with individuals on Zoom. And for individuals that are in the room, go ahead and fill out a blue card and hand it to the Public Advisor at the back of the room and she'll raise her hand.

For individuals that are on Zoom if you are on the phone go ahead and press *9 to raise your hand and *6 to unmute on your end once your phone number has been called.

We have Scott Galati. Go ahead and state and spell your name and give your remarks.

MR. GALATI: Good morning, Commissioners. This is Scott Galati, G-A-L-A-T-I. I'm with DayZen, LLC. I practice in front of the Commission doing siting work. And we had the pleasure to work with Tom during many of the renewable projects in the desert. And I would like to echo what Commissioner Monahan said, specifically Tom's calm and confident ability to communicate, I think, is one of his
better skills. Both in public and in private conversation.

And I would just like to thank Tom personally, because he really was the first person to be able to explain to me the complexities of indigenous peoples’ religious beliefs and how they may conflict with something that archaeologists may be looking at; the difference between study and the difference between a religious belief. That was a very hard concept. I know, I had worked on it on my own to try to understand that. But Tom was able, because of his relationship to the Native American tribes, be able to see and help broadcast a window to me. And I am forever grateful. So thank you Tom for that, I appreciate it very much. And I just want to make sure you heard that from somebody that didn't work directly with you. Thank you.

MS. MURIMI: Next we have Eric Knight. Go ahead and come to the podium.

MR. KNIGHT: Good morning, I’m Erick Knight, Manager of the Siting and Environmental Office in the Siting, Transmission and Environmental Protection Division. I had the honor of being Tom’s supervisor for about seven years. So I’d like to congratulate Tom, on your retirement and say it was a great pleasure being your supervisor. I admired your dedication and commitment to ensuring that the
perspectives of tribes were considered in the business of
the CEC.

I have to say you're one of the hardest-working
people I know. You made countless trips over the years to
meet with tribal representatives throughout the state,
building relationships and earning their trust. You
created an environment of teamwork in the Cultural
Resources Unit, developing the skills of junior staff and
the students. And I want to thank you for bringing
everybody back safely from the desert. (Laughter.) You all
did very important work and had a lot of fun in the
process.

Before the pandemic, when we were here in the
office the highlight of my day was to walk through the
Culture Unit, stop and chat with you and your and your
staff about your projects, and just learn something new.
Very fascinating topic area, and I always learned something
new, and I had quite a few laughs too, so thank you for
that.

It was a very sad day when the Cultural Resources
Unit mega-cube up on the fourth floor of this building had
to be packed up. You're going to be missed, but your many
contributions to the CEC will continue to live on. And now
it's time to focus on being a full-time farmer, not just a
weekend farmer or how do you spend your vacation. And I
wish you and Jenni the best in this next chapter of your life.

MS. MURIMI: Thank you. Next, we have Shawn Pittard.

MR. PITTARD: Hi, my name is Shawn Pittard. I’m the Deputy Director for the Siting, Transmission and Environmental Protection Division. Congratulations, Tom, great to meet you. And I just want to touch on an aspect, one aspect of his contribution that I think is exemplary, and important for us to be aware of.

And I put Tom now among the legendary supervisors of STEP right there with Jim Brownell, our Biological Resources Supervisor. What Tom and Jim have in common, what they've done in common, is both are PhDs. Both were recognized subject matter experts, but both knew the importance of training and developing staff and they had the skills to do that. Both Jim and Tom provided field research experience for their staff to keep them sharp and seeing outside just their regulatory role.

So Tom, thank you so much for that approach to your job and developing so many students, then junior staff, and training up a really good successor for our Cultural Resources Unit Supervisor. So I wish you the very best and greatly appreciate the time I got to work with you.
MS. MURIMI: Thank you.

Next, we have Katrina Leni-Konig.

MS. LENI-KONIG: Hello everyone. With Shawn’s words it’s fitting that I’m speaking next. I spent quite a bit of time with Tom in my transition into role as Tribal Liaison. And I’ve certainly benefited from his ability to teach. And I think he does that each time that he encounters people as he shares stories, words, contexts so gracefully and thoroughly and also in a way that it really touches you, I think, and really shapes you as a person.

I’m just going to share a few words from a book “Residence on Earth,” by Pablo Neruda. And I share these words because some of my greatest teachers have been my uncles and they certainly learned from my grandfather, and so I went out and I reached out to my uncle what’s a good book to share with Tom? And he said, “Neruda.” So I picked out a few words that I want to share with you. Tom has now been added as one of my greatest teachers, so joining the ranks of my uncle and my father and my grandfather.

Okay, and these words I’m just going to share prior, so you have a little bit of context. It’s really about how we can sort of move forward and build from the ashes, the resilience that we see in tribes, that we see in the State of California, that we see in all of our people.
as we move through some challenging times.

“Again, I hear approach like fire in smoke,
spring up from earthly ash, light filled with petals and
pushing earth away, in a river of flowerheads the sun
reaches my mouth, like an old, buried tear that becomes
seed again.”

Just with that I just want to thank Tom. I’m
going to share this book with you. This is one of my
gifts. And thank you everyone for listening and being here
to celebrate.

MS. MURIMI: Thank you. Chair, there are no
other comments.

CHAIR HOCHSCHILD: Were there any comments on
Zoom or anything?

MS. MURIMI: No other comments on Zoom.

CHAIR HOCHSCHILD: Tom, would you mind sharing a
few words?

MR. GATES: Well, I’m a bit flattered with all of
the words this morning. Thank everyone that provided their
insights on their experiences with me. It’s quite a bit
for $41 million on the table today to spend so much time on
me.

But I want to first recognize my wife who made
the journey this morning with me and probably for the last
maybe, what, 38 years or so, 40 years we've been together.
So that's first.

Second, thanks for the Resolution. It means more than just a piece of paper, and I really appreciate that.

I think I’m not a terribly smart person nor -- and some people say I’m passionate -- nor am I really passionate. I think the skillset that I bring is hard work. I think Eric was the one that mentioned that. My skillset is hard work and perseverance. I also have a mentoring or a teaching ability. I know this, and Shawn brought that up as well. Katrina brought that up.

I think my skillset comes from growing up on a poor farm on the San Joaquin River Delta and working very hard on a farm. And that skillset has taken me through my career. I think for 12 years, Jenni and I, we ran a watershed restoration fishery, restoration work in the High Sierra including the golden trout, the state's trout and state fish. I spent 18 years at a tribe as an outsider, a foreigner. I eventually became like family to a number of those people at that tribe in California. Eighteen years is a long time for someone who's non-Indian to survive in one of the biggest tribal governments in California, ten years here at the Energy Commission.

I think in all three of those scenarios -- and there have been other jobs. I worked as a timber faller and worked in a mill for a bit and taught at an academic in
an academic way -- but in all of those three jobs I
mentioned: fishery restoration, working for a tribe,
working at the Energy Commission, my skillset of
perseverance and hard work is what's needed when the
obstacles are tremendous and actually overwhelming and
perhaps someone would say impossible. Restoring a native
fish, indigenous fish, to a place that's been trashed by
cattle, is it's just an incredible thing to try to do.
Working for a tribe, that of which the poverty levels are
60, 70 percent, impossible job. People that persevere are
those that work hard and don't give up.

And here at the Energy Commission our tasks are
huge. We look at climate change. I saw the recent report
about the, what, the increase of 1.5 degrees. The need to
change our entire energy sector; huge, insurmountable,
impossible people would say. But hard work, perseverance,
that's what will get us there. Yes, we have a lot of
engineers. Yes, we have a lot of attorneys. Yes, they
have to be smart, but going forward and not quitting.

So that leads me to why am I retiring now. It's
not that I’m leaving something, it's that I’m actually
moving forward into something else. My wife and I have
inherited some large chunk of property. I’m reentering
into the farming life, something I left when I was 18 years
old. I’m going back to that, I’m fully embracing that.
And you can't believe how much I wanted to get away from that farm when I was 18. So now here I am back at it and doing a lot of things.

And I think I’ll leave you with the last thought is “All things, big and small -- when we need to turn the world to where we think it'll be a better place -- all things, big and small, are important.”

I remember a consultation on one project. And a tribal person said, “Who is speaking up for the ants that are going to be wrapped in this project? Who's speaking out for the insects? Who's talking about the lizards?” He says, “Those are all our relatives. They're all small. We tend to not see them, they are just as important.” And so I think going forward with the property that my wife and I now manage, I have an obligation there. There's probably 150,000 salamanders on this property. There is probably 40 deer, there is probably 3 or 4 bears, etcetera, etcetera.

And yes, I leave the Energy Commission and the great work that you all will continue to do, but I move forward to a piece of land, which is small compared to what we have to do here at the Energy Commission. But that's, I think, where I’m going to invest the next part of my career.

And thank you for a good time here. And thanks for everyone here who I’ve worked with over the years.
CHAIR HOCHSCHILD: Thank you, Tom. (Applause.)

Thank you to you, and your amazing wife for being there with you on the journey. And congratulations.

All right, we'll turn now to Item 3, Informational Item on Reliability Update.

MR. ERNE: Good morning, Chair, Vice Chair, Commissioner Monahan. A very tough act to follow. Tom is one of the most impressive people that I’ve met working here in the Energy Commissioner over the last few years. I really appreciate his engagement with me and those in R&D.

So I am David Erne. I’m in our Assessments Division and I’m here to talk a little about summer reliability, here to give you an overview based on kind of what's coming up this next year. And give you some perspective based on what's happened since we updated you last year. So to the next slide.

Going back to 2020, which is a defining moment, in August 2020 we had extreme heat events throughout the west that cause rolling outages in the CAISO territory. And that was a substantial impact to people and customers in California.

As a result of that the Governor directed the CEC, the CPUC and CAISO to conduct a root cause analysis. One of the key findings of that root cause analysis is very important, and that is climate change is upon us. It’s
affecting us substantially and our planning processes are not prepared, are not preparing us, or have not been preparing us for that climate change. In part because our planning for both supply and demand focuses on historical performance. Historical performance in a world where our future is very different than it has been in the past means that our traditional ways of looking at the future need to change. And so we are in a place where we need to revamp our demand-and-supply analysis and thinking about how to prepare for those uncertain futures. So next slide.

2021, not a whole lot better. 2021 we saw drought increasing that caused substantial impacts to our hydro capabilities in the state. We had a situation where Oroville, the Hyatt Power plant went offline, and we lost 600 megawatts due to low water flows.

Additionally, we had unforeseen situations such as a bootleg fire in southern Oregon that caused a loss of nearly 4,000 megawatts of imports from the northwest critical for our summer reliability. Those 4,000 megawatts, 3,000 of those were destined for CAISO territory, and so again another significant impact to us for last summer.

Additionally, what we've seen from last summer and in moving forward is the energy industry is particularly impacted by supply chain issues, commodity
prices, and tariff issues, all of which cumulatively impact our ability to build out these new projects moving forward. And so our reliability is dependent upon new buildout and that new buildout is affected by these particular issues. In addition to that, we have 6000 megawatts of plants that are planned for retirement between now and 2025. And in part, we are building new resources to help compensate for those retirements. And so it is critical that those new projects come online in time before ahead of when we retire those resources. Next slide.

So the question is what have we been doing? We've been doing quite a bit. After the root cause analysis, the CEC, CAISO, the Governor's Office, DWR, CPUC, all worked together to take a number of actions.

So CEC worked on incorporating climate change into our demand forecast. We had a review and approval of efficiency upgrades at plants to provide more megawatts of existing facilities. We had a look at identifying contingency resources that could come online when we have these extreme heat events or other emergencies, and identifying those and working with the Governor's Office to help bring those large opportunities on board.

The CPUC made the unprecedented procurement of new resources between now and 2026 11,500 megawatts, which has not been done before, called for. And it's critical
that those come online, as I mentioned.

CAISO and CPUC worked on improving our demand response, so bringing load down.

We had an acceleration of new projects coming online and, in fact, before this summer we will have 4,000 megawatts of energy storage online in California. That's up from 200 megawatts two-and-a-half years ago, so an unprecedented buildout of energy storage over the last two-and-a-half years which are critical, which is a critical resource, particularly during the net peak period. The period where we have the most challenge on our grid, so we can take solar during the height of the day and provide that energy storage or provide that resource later, in the afternoon, early evening, so incredibly important.

We installed emergency generators to provide additional contingency backup and also delayed some plant retirements to provide additional resources.

Lastly, we collectively worked together to develop a Tracking Energy Development Task Force. The purpose of this is we have so many projects coming online, they are critical to get online in a timely fashion. We needed to marshal the resources of the key agencies to bring all of those capabilities together to work on these new projects. So the task force includes the CPUC, the CEC, CAISO, DWR, Governor's Office of Business Development,
all working to help address these projects and get them online.

We first identified all the projects that are coming online or are in development over the next 4 years. We currently have identified 140 projects coming online. That amounts to 6,000 megawatts of net qualifying capacity, or a little over 11,000 megawatts of nameplate.

As you can see, it's critical that all of that come online. And so we are working and tracking those projects, working with the load-serving entities, working with the developers, working with all of our resources to try to overcome obstacles so those come online and come online in time.

So what does that mean for where we are this summer? So fortunately this summer we are a little better off it looks like right now than we were last summer. That's good. We have unprecedented procurement, which is helping to put us in a good position over the next four years. But we still have hurdles, and those hurdles include the ones I mentioned before. We still have to worry about the supply chain, commodity pricing, development of new projects, we have to get those online.

We have to address the understanding of how we're going to continue to improve our planning processes to incorporate climate change. We actually have an EPIC grant
that will be helping us think more about new ways to
incorporate climate change in our planning processes.
That’ll be important to fold in.

So all of this is critical to get these projects
online ahead of retirements.

So I want to point out as one last point, we have
a workshop coming up on May 20th. We’ll be talking about a
number of these challenges and what the state has been
doing. We’ll have -- go to the next slide, I’m sorry --
we'll have representation from CEC and CAISO about our
summer’s assessments, looking at this summer and over the
next three or four years.

We’ll have an overview of the TED Task Force. We
haven't really talked about that too much publicly, so this
will be our first opportunity to do that.

And we'll also have panels to talk about the
supply chain issues and internet connection issues. So
that's what our workshop is going to be covering on May
20th and we hope that everyone can join us. With that I
will pause for any questions. Next slide.

CHAIR HOCHSCHILD: Well thank you so much, David.
I want to just commend you personally for your incredible
work and professionalism and diligence. I know how much
the Vice Chair and all of us have leaned on you in this
critical period, so I just want to begin with that. You’ve
been stellar. And with that I’ll turn it over to the Vice Chair.

VICE CHAIR GUNDA: Thank you, Chair.

Thanks, David. So I think I want to just begin by doing a few thank-yous. I have to bring in my inner Commissioner McAllister here, just take the time and just thank.

So reliability has been a focus for the last 20 months as David mentioned, in terms of making sure since the outages we had in 2020, that we do not have that repeat in California again. And do everything we can as agencies to get us out of that hole. So the recognition in 2020 was we were in the hole from the planning front, from the procurement front, as well as kind of in coordination fronts.

So it wouldn't be possible without a number of people in the Energy Commission, but I want to start with other agencies first. So we have CAISO, CPUC, CEC, the Governor's Office and sometimes the California Air Resources Board all working together in making sure we move forward. And one of the additions that we had last year was DWR. So there's a lot of agencies coming together in coordination with the Governor's Office and the Administration to ensure that we're all working well and moving things forward.
So at CAISO, you know, just incredible recognition of four people that we work with: obviously Elliot Mainzer, Mark Rothleder, Neil Millar and Delphine Ho, who all are vital in these efforts.

At CPUC, President Reynolds, Commissioner Rechtschaffen, as well as Pete Skala has been incredible, along with Molly that David mentioned.

And at DWR, Ted has been incredible with DWR Director Karla Nemeth. So we have incredible partners as we journey on forward here.

At CEC, the Chair already called out, so I just want to start with David. Thank you for your contribution. It's been a lot of work. And a number of our staff are doing the reliability on the top of their regular work. And so thank you. For you, thanks to Aleecia for your leadership in the EAD and really fostering the necessary movement of resources to ensure we can work on these things, especially recognizing that there is a lot of burnouts on staff who are the same 30, 40, 50 people we lean on, on so many of these issues.

And I wanted to kind of shift to recognizing the Executive Office and Drew, thank you for your support. And Linda, not just kind of aligning the resources but also bringing in, helping us learn how to kind of support the staff.
I want to move to the Siting team, Shawn to you as well, wonderful contributions -- so diligent on this work. Thank you for everything your teams are doing.

And Justin Cochran from the Chair’s Office is the Nuclear Advisor.

From CCO, Linda as well as Dian, thank you for your contributions.

So it's a lot of people to name, but I just wanted to recognize some people who have been just going beyond their work every day to kind of get this moving.

So just a couple of high-level points, and I want to just reiterate the things that David kind of mentioned, the first one I’m glad that we're in California. So there is a clear understanding that climate change is real and it's here. And we're kind of in the front lines dealing with that and then especially the impacts of that on the energy system and reliability.

A couple of things that we tried to do as we got out to the August 2020 situation is how do we better coordinate and really think about three buckets of work.

One is just like plan ahead of time, coordinate and plan in ensuring procurement is authorized. Taking into consideration climate change, taking into consideration potential supply side issues, whether it's more outages and so on. So we've been doing that.
And then the second stage, obviously, is what
David kind of mentioned within the Task Force realm, which
is how do we, once we authorize the procurement, do we have
enough coordination making sure that the procurement
actually happens? So that's with that task force.

And finally moving into any summer in the
December timeframe, where are we standing? How do we get
through the next summer? So those are the different pieces
of work we've been doing as a team.

But what we did not see coming after 2020 we kind
of said, “Okay, it's really an extreme heat situation.
Let's plan for very high demand that's regional so there is
some impact to the imports. And let's think through how we
can navigate through those extreme heat events where the
demand is high.”

And then comes 2021 where you have this
incredible drought. We did not ever see a high-heat demand
situation coincide with the fires, but what fires kind of
brought to us was we lost those supply side resources;
4,000 megawatts is a lot. And if you lose that in about
half an hour or an hour’s time to kind of replenish those
resources is incredibly hard, so you have that issue. And
then you have fires threatening large generation assets,
right? So like the Blythe Complex where we have 1,700
megawatts that we lost.
So what we are getting to is this situation of compounding things. At this point we haven't experienced a situation where all of them coincided, but if they were to coincide it would be incredibly hard for us to keep the lights on. And that's something that we need to recognize and to figure out how to develop some solution or a cushion to get through those times when some of these fire and heat issues might coincide. So it's important. We're going to continue the conversation. May 20th will be an important workshop for us to continue to think through what all needs to be done, but also improving the public awareness.

And before I pass it on, I just want to take a moment to thank my office. Ben Finkelor the Chief of Staff, who has been just putting in countless hours. I know he came in only a couple months ago, he did not know what he was getting himself into. Ben, thank you. And Liz Gill from our office who focuses on reliability and Miina who runs our office. So thank you so much to the entire team, thanks for all the work.

I'm happy to answer any questions that -- Commissioner Monahan you haven't been directly involved in any of these things -- happy to answer any questions you might have.

And finally, Chair, thank you for your leadership. It's not easy to navigate these. Thanks for
all the things that you're doing behind the scenes, thank you.

COMMISSIONER MONAHAN: Of course, Vice Chairs Gunda, when he thanks everybody, he very rarely acknowledges his role in all of this. And the fact that he’s had so many sleepless nights working to ensure that the lights stay on, and the analysis is robust. So just thank you, Vice Chair, for all you do.

Just a comment, which is that the confluence of climate change impacts with COVID supply chain issues really is, I think, tasking you, David, and the team of researchers on this with unprecedented challenge. And I just want to acknowledge that we need to change how we do research and how we plan for our energy needs, given the rapid changes that we're seeing.

I think none of us, I mean I’ve been in this climate space pretty much my entire career, and the fact that the changes we're experiencing are kind of on this edge. Like we scientists like to plan for a conservative future, but that’s not what we're seeing. We're seeing kind of these edge cases playing out in California.

And I’m sure I speak for all of us who were born in California, have lived here our whole lives, the changes are so profound compared to when I was a child. And that is creating for researchers this really hard task. And
it's against our nature of scientists to want to kind of explore that worst case and make sure that we're planning for that worst case. So just a deep recognition that, as Vice Chair Gunda said, this is a place of burnout, and it can be very difficult to have to upend our processes.

So I just appreciate all that the team and Vice Chair Gunda is doing and all the different agencies working together on this, because it is all-hands on deck. We have to keep the lights on, and we have to change our energy systems to make sure that we have a resilient energy system for the future, so just appreciation for the research.

This is a sober moment in California. And it's a time when we really all have to work together and take care of each other and do the best analysis that we possibly can in this challenging situation.

CHAIR HOCHSCHILD: Thank you, Commissioner, for those comments.

And let me also just say we've never had a Commissioner whose principal focus was reliability until last year. And I asked Vice Chair Gunda to assume that responsibility. He’s done it with incredible dedication and distinction, and we are so much better off for it.

I do have a question for you, David. Just looking ahead, I mean when you step back, right, it's actually only a couple dozen hours of the year that we're
really, really concerned about reliability just from the
grid perspective. I'm not talking about the PSP as
preventive actions I’m just talking about from the threats
to the system.

And the cheapest, cleanest, fastest way to
address that is on the demand side when we can do that
well. And we've had, I think, pretty anemic results with
demand response up until recently. There's some really
promising stuff coming. And I met with a company
yesterday, Nostromo Energy, which is doing this technology,
just load shifting. So they use, when there's cheaper,
plentiful renewables, they use that to freeze water or
coolant and then they then deploy that during the peak
hours to run, to cool buildings. I mean, just simple
things like that.

I’m just wondering on the demand side when you
look ahead, what do you see? How big can that go? What
are the main barriers? If you could just share a little
bit of your thinking on the demand side, what we can do on
reliability.

MR. ERNE: Sure, thank you, Chair.

So in the last few years as we've been looking at
finding these contingency resources, I think what we have
found is there are a lot of opportunities out there to
reduce demand by calling on people and asking them would
they please turn something down for the price. It’s not just customers and consumers, it's the large facilities that have tremendous potential.

And our DR program right now is challenging to participate in. And CPUC and CEC are looking at ways to make the DR program more effective. And be able to then bring people in is a very complex process in California, in many different programs it's hard for people to know where to play, how to play. I think we need to streamline and simplify that process to make it easier for customers to join in, to be able to contribute more than they have been contributing thus far, and be compensated for it properly.

VICE CHAIR GUNDA: Chair, if I may? I just want to add on the one, so first of all I want to recognize again David, and Tom Flynn and Erik Lyon from our office who are working on this Demand Response Working Group to really advance some of the core principles that we need to really put in place for ensuring DR becomes a real part of the solution. So I think right now to what David just said, the complexity, the way the structures have been built over time, and the business opportunities is it's hard; sometimes it's opaque.

And I know we have been - really in a wonderful relationship with CPUC on helping and use both the strengths of CEC as a venue for a non-regulatory
discussion, on just framing the problem and thinking
through some high-level solutions. But also thinking about
on the other end how can we support PUC on providing some
of these options, so we're doing some wonderful work there.
So I want to recognize the team on that one.

But I think the bigger point I just want to raise
is this kind of goes to Commissioner Monahan purview as
well, the V2G is a humongous opportunity moving forward.
And I think that's something that we need to unlock. And
we really need to think through how do we address optimally
between the supply-side demand response, the demand side
through critical de-pricing (phonetic), but also
incentives.

And how do we develop an overall framework on
approaching DR? And I know the Executive Office under the
leadership of Drew has been beginning to think through at
an enterprise level how to bring our teams across all
divisions to think about and framing this problem. So I
want to just thank Drew for his leadership on that. And I
think it's an important problem we have to solve to ensure
reliability.

CHAIR HOCHSCHILD: Yeah, the closing thought I
would add is that one of the benefits of the
electrification that's occurring now, which is significant.
We're adding 900 electric vehicles a day in California and
that's rising fast. And of course we're seeing that in the building sector and with energy storage, distributed energy storage systems as well. It does give us more levers to pull. And so I think this is this vision of making everything that connects to the grid a good citizen of the grid. That is absolutely the future.

I think this used to be considered something of a sideshow. I think it's actually sort of the main stage in many ways for where we have to go. And that's not just good for reliability, it’s also good for ratepayers because this is just by far the most cost-effective when we’re getting smart on demand side, demand response. So that that really is it's a good move on every level.

So again, my congratulations to you and the team. And thanks, tremendous gratitude to the Vice Chair for your leadership on this.

With that let's turn now to Item 4, STACK Trade Zone Park.

MR. KNIGHT: Good morning, Chair, Vice Chair and Commissioners. I’m Eric Knight, Manager of the Siting and Environmental Office in the Siting, Transmission, and Environmental Protection Division. I am here to present a proposed order appointing a committee of two commissioners to oversee a Small Power Plant Exemption proceeding for the STACK Trade Zone Park. Next slide, please.
In a series of filings between December 10th, 2021, and April 11th, 2022, STACK Infrastructure filed a Small Power Plant Exemption application for the STACK Trade Zone Park project. The project includes a thermal power plant with a generating of 50 megawatts, which would fall under the CEC’s licensing authority, if not exempted. Next slide, please.

The STACK Trade Zone Park project would include one four-story advance manufacturing building of about 135,000 square feet; two three-story data center buildings, about 527,000 square feet; and a backup generating facility with a capacity of 90 megawatts to provide emergency power to the data center if electricity cannot be supplied by Pacific Gas and Electric Company.

The backup generating facility would include 36 3-megawatt and 2 1-megawatt diesel-fired generators. The generators would be equipped with emission controls to comply with Tier 4 emissions standards.

The project is proposed on two parcels of land, encompassing about 10 acres, located at 2400 Ringwood Avenue and 1849 Fortune Drive in San Jose. The properties are zoned “Industrial.” Next slide, please.

The CEC has exclusive authority to certify all thermal power plants, 50 megawatts and greater, proposed for construction and operation in California. Pursuant to
Public Resources Code section 25541, applicants proposing thermal power plants not exceeding 100 megawatts, may seek an exemption from the CEC’s jurisdiction. The CEC can grant a Small Power Plant Exemption if it finds “no substantial adverse impact on the environment or energy resources will result from construction or operation of the proposed facility.”

The SPPE process is described in California Code of Regulations, Title 20, sections 1934 through 1947. The review of the application for exemption follows the requirements of the California Environmental Quality Act, or CEQA, and the state CEQA Guidelines. By statute the CEC is the lead agency under CEQA for an SPPE.

Once a final environmental document is published an evidentiary hearing will be held by the SPPE Committee. The committee will then publish its proposed decision to either grant or deny the exemption. The proposed decision is then presented at a business meeting for a final decision by the CEC.

If the exemption is granted an applicant must obtain the appropriate licenses and permits from relevant local, state, and federal agencies to construct and operate the project. The state and local permitting agencies, which in this case include the city of San Jose and the Bay Area Air Quality Management District as responsible
agencies under CEQA, will rely on the environmental
document prepared by the CEC for their discretionary
decisions to issue permits for the project.

CEC Staff will coordinate its review of the
project with all relevant agencies. Staff’s environmental
analysis document will address all aspects of the proposed
project, not just the backup generating facility, as
required by CEQA.

Staff has begun its review of the exemption
application. Staff is preparing its first set of data
requests to understand more about the project and its
possible effects on the environment and energy resources.
And staff is in the process of sending out the public
notices required by the CEC’s regulations and CEQA. Next
slide, please.

Staff recommends approval of proposed order #22-
0511-4 to establish a committee of two commissioners to
oversee the STACK Trade Zone Park SPPE proceeding. The
committee would comprise of Commissioner McAllister as
Presiding Member and Commissioner Vaccaro as Associate
Member.

I’m available to answer any questions the
Commissioners may have about the SPPE process and staff’s
role. In addition, Mr. Scott Galati, outside counsel to
STACK Infrastructure, is on the line. And I believe Matt
Bourne with STACK Infrastructure as well, are online available to answer any questions about the project you may have.

And that concludes my presentation. Thank you.

CHAIR HOCHSCHILD: Thank you so much, Eric. Let’s go to public comment on Item 4.

MS. MURIMI: Thank you, Chair. Individuals that are in the room go ahead and see the Public Advisor at the back of the room or fill out the form, using the QR code in the back of the room.

For individuals on Zoom if you are on the phone go ahead and press *9 to raise your hand and *6 to unmute on your end. And if you are -- that’s if you are on the phone, sorry.

And if you're on Zoom use the raised-hand feature, it looks like a high-five or an open palm at the bottom of your screen or device. Again, if you're on Zoom, go ahead and use the open palm or high-five at the bottom of your screen or device to indicate that you'd like to make a comment.

No comments, Chair.

CHAIR HOCHSCHILD: Okay. Let’s go to Commissioner discussion here. I would welcome a motion appointing Commissioner McAllister as Presiding Member and Commissioner Vaccaro as Associate for the Committee on the
STACK Trade Zone Park.

Vice Chair Gunda?

VICE CHAIR GUNDA: Yeah, I move Item 4 as you propose.

CHAIR HOCHSCHILD: I'll move that motion. Okay, is there a second from Commissioner Monahan?

COMMISSIONER MONAHAN: I second.

CHAIR HOCHSCHILD: All right. All in favor say aye. Vice Chair Gunda?

VICE CHAIR GUNDA: Aye.

CHAIR HOCHSCHILD: Commissioner Monahan?

COMMISSIONER MONAHAN: Aye.

CHAIR HOCHSCHILD: And I vote aye as well. That item passes 3 to 0. Thank you, Eric.

And we’ll turn now to Item 5 La Paloma Generating Plant, Petition to Amend. Elizabeth Huber.

MS. HUBER: Hello Chair, Vice Chair, and Commissioners. My name is Elizabeth Huber and I manage the Safety and Reliability Office of the Siting, Transmission, and Environmental Protection Division, which you know because I am here almost every month. And I want to put into context why you see me at almost every business meeting. And that is due to our power plant program, leading coordination between STEP’s Engineering, Siting and Environmental, and Safety and Reliability Offices, along
with the Chief Counsel's Office.

In any given month we have been processing,
analyzing petitions from one third of our power plants,
jurisdictional power plants. And that includes the work
that we've honored today and Tom Gates and his staff.

We also work in collaboration with the Energy
Assessments Division and the Energy Research and
Development Division on projects such as reliability. I’ve
been interviewed myself by Mark Kootstra for STACK analysis
purposes. And then of course presentations we've done on
pilot projects for carbon capture and offshore wind.

With that said, we are here today to present to
you on La Paloma Generating Project’s petition of the
installation of an emergency back-up generator at the West
Kern Water District pump station requiring the addition to
new air quality conditions to their existing CEC license.

Next slide, please.

La Paloma Generating Project is located in a
sparsely populated community of McKittrick in Kern County.
In order to operate the power plant requires nearly 1.8
billion gallons of water annually for cooling and
processing, which is supplied by the West Kern Water
District. The water district provides water from the
California Aqueduct via an 8-mile-long pipeline from the
pump station to the power plant. The water pump runs
exclusively off the grid and when the grid is interrupted
the pumping of water to the power plant stops and it has
less than 8 hours of process and cooling water to operate,
causing the power plant to derate or go offline.

Last summer, between June and October, La Paloma
experienced a combination of 13 derates and outages during
extreme heat. These events resulted in a loss of
generating capacity from 50 megawatts to more than 1000
megawatts.

The proposed installation of the back-up
generator will ensure that Los Palomas Generating Project
continues to receive the process and cooling water needed
to operate and generate electricity during grid
interruptions. Next slide, please.

The La Paloma Generating Project is a 1,048-
megawatt combined-cycle, natural gas power plant that was
certified in October 1999 and began commercial operations
in January 2003. The power plant consists of four
combustion turbine generators, four heat recovery steam
generators, and four steam turbines.

On May 28th, 2013, the CEC staff approved the
installation of inlet foggers to recover lost generating
capacity on hot days when the combustion turbines are not
able to operate at full capacity.

In February of 2022 the project owner filed the
petition to install an emergency back-up generator. During the same month the CEC staff mailed what is known as a “Notice of Receipt of the Petition for Post Certification Project Change” to the power plant’s mail list of interested parties and property owners adjacent to the power plant.

In April, the CEC staff sent this final staff analysis cover letter to the same mail list recipients.

On May 3rd the power plant owner also filed a formal comment with the CEC to clarify that the San Joaquin Valley Air Pollution Control District evaluated the installation of the new back-up generator at the remote pumping station as a separate stationary source. Next slide, please.

The San Joaquin Valley Air Pollution Control District issued La Paloma Generating Station an Authority to Construct Permit to install the 1.35-megawatt backup generator at the pumping station allowing for increased emissions of up to 50 megawatts per year for testing and maintenance.

The CEC staff consulted with the Air Pollution Control District on the air quality analysis to confirm the limited changes to emissions and concluded that new air quality conditions of certification, specifically AQ-EG 1 through AQ-EG 16 should be added to their CEC license so
that these additions will be enforceable.

It is important to note that even though the backup generator is being installed at the water district’s pump station and not onsite at the power plant, any existing CEC license includes all related pertinent infrastructure such as transmission lines to their first point of interconnection, gas lines, and in this case a water line. Next slide, please.

So to conclude, to align with the Air Pollution Control District’s permit the CEC staff recommends your adoption of the order, adding to the existing conditions of certification new air quality conditions allowing for up to 50 megawatts of testing and maintenance time of the installed energy backup generator annually, which will comply with all applicable laws, ordinances, regulations, and standards. Thank you.

CHAIR HOCHSCHILD: Thank you. Let’s go to public comment on Item 5.

MS. MURIMI: Thank you, Chair.

For individuals that are in the room go ahead and see the Public Advisor at the back of the room or use the QR code to indicate that you’d like to make a public comment.

For individuals on Zoom go ahead and use the raised-hand feature, looks like a high-five at the bottom
of your screen or device. And for those on the phone go ahead and press *9 to raise your hand and *6 to unmute on your end.

No comments in the room, or on Zoom, Chair. We’ll give that one more moment. Yeah, no comments.

CHAIR HOCHSCHILD: Okay. Thank you, Dorothy. With that unless there are Commissioner comments, I’d welcome a motion from Vice Chair Gunda on Item 5.

VICE CHAIR GUNDA: Yeah, I’ll move Item 5.

Elizabeth, thank you and all.

CHAIR HOCHSCHILD: Commissioner Monahan?

COMMISSIONER MONAHAN: I second.

CHAIR HOCHSCHILD: All in favor say aye. Vice Chair Gunda?

VICE CHAIR GUNDA: Aye.

CHAIR HOCHSCHILD: Commissioner Monahan?

COMMISSIONER MONAHAN: Aye.

CHAIR HOCHSCHILD: And I vote aye as well. Item 5 passes unanimously.

Let’s turn now to Item 6, Delegation of Geothermal Certification Authority Regulations.

MS. WEBSTER-HAWKINS: Good morning, Commissioners. My name is Renee Webster-Hawkins, Senior Staff Attorney in the Chief Counsel’s Office. And I am presenting Item 6 for you today. This item is the proposed
adoption of the rulemaking in Docket Number 21-OIR-02, the
Delegation of Geothermal Certification Authority
Regulations.

The rulemaking before you today is the result of
the leadership of former Commissioner Douglas and
Commissioner Vaccaro, and strong collaboration between
staff in the Siting, Transmission and Environmental
Protection Division and our team in the Chief Counsel’s
Office. Next slide, please.

The proposed amendments to the CEC’s existing
regulations that are before you today will streamline and
accelerate the development of clean energy from geothermal
resources in counties that have adopted a geothermal policy
in their general plan, while preserving robust
environmental review and public participation in individual
project approval under CEQA.

Updating the CEC’s procedures will eliminate
redundant or unnecessary administrative steps and modernize
the development of new electricity from California’s
geothermal resources.

Approving the rulemaking has the potential to
accelerate California’s transition to carbon-free energy as
called for in the Proclamation of a State of Emergency
issued by Governor Gavin Newsom in July 2021.

And also to support a June 2021 decision by the
California Public Utilities Commission, directing utilities to procure 11,500 megawatts of new electricity resources before 2026, with at least 1000 megawatts coming from firm resources with zero-onsite emissions, such as geothermal. Next slide, please.

Our existing law, at section 25540.5 of the Public Resources Code, already authorizes the CEC to delegate its certification authority for geothermal power plants to those counties that can demonstrate an equivalent certification program.

The CEC’s regulations for delegating this certification authority are currently promulgated in Title 20 of the California Code of Regulations in Sections 1802 and 1860-1870. These regulations were adopted in the 1970s, and have not been significantly amended since then. And they include procedures which are now unnecessary or duplicative, given the passage of strong laws under the California Environmental Quality Act and other statutes for robust environmental review and public participation in permitting decisions.

No county has ever petitioned the CEC for delegated certification authority since the passage of Public Resources Code, section 25540.5. Next slide, please.

So therefore, staff proposes these amendments
which eliminate the duplicative and unnecessary procedures associated with counties applying to the CEC for delegated authority, while not changing or undermining full environmental review and public participation in individual project review under CEQA at the local level.

These amendments will clarify the information needed in petitions for delegated authority to the CEC, so that counties may successfully petition for that authority from the CEC. If counties are granted delegation authority through this streamlined process, counties will be able to review and approve permits for individual geothermal powerplants under the equivalent certification program as approved by the CEC.

Providing delegated authority to counties with equivalent certification programs will enable the state to accelerate the certification of geothermal power plants and increase production of electricity from facilities with zero-on-site emissions, while preserving robust environmental review and public participation in the approvals of the individual projects.

Key dates from this rulemaking proceeding have included a 45-day public comment period, which ran from February 25th through April 11th. And also the CEC held a public hearing on April 14th with Commissioner Vaccaro attending. All public comments that have been received
have been supportive of the rulemaking, without any recommended changes to staff’s proposed text. Last slide, please.

So based on the rulemaking record in this proceeding, the Chief Counsel’s Office recommends that the CEC take actions to find that the proposed regulations are exempt from CEQA under the common-sense exemption, and approve that resolution adopting the amendments to Sections 1802 and 1860-1870 of Title 20 of the California Code of Regulations.

I am happy to answer any questions that you might have.

CHAIR HOCHSCHILD: Well thank you so much, Renee. I really appreciate your work on this.

Let's go to public comment on Item 6.

MS. MURIMI: Thank you, Chair.

For individuals that are calling in press *9 to indicate that you would like to make a comment. For those on Zoom use the raised-hand feature, it looks like a high-five or open palm at the bottom of your screen or device. And for those in the room see the Public Advisor at the back of the room or use the QR code.

First public commenter, Armando Ramirez, apologies if I've misstated your name. Go ahead and state and spell your name and give your public comment. Make
sure to unmute on your end. That's Armando Ramirez.

MR. RAMIREZ: I’m sorry, that was a mis-click.

MS. MURIMI: Armando? We lost you again.

COMMISSIONER MONAHAN: I think he said it was a mis-click. I think he didn't mean to.

MS. MURIMI: Oh, okay. Thank you, Armando.

Next, we have a commenter named Z.V. (phonetic) Please state your name, give your affiliation if any and give your comments. (No audible response.) Possibly another mis-click.

I’m seeing no other comments, Chair.

CHAIR HOCHSCHILD: Okay. Thank you, Dorothy.

Yeah, I think this is terrific. I think it's in the category of barrier busting for clean energy deployment. And I just wanted to commend Commissioner Vaccaro and all the team in the Chief Counsel's Office who worked on this and Karen Douglas as well, so thank you to everybody. I have no further comments unless there are from my colleagues, I’d welcome a motion from Commissioner Monahan on Item 6.

COMMISSIONER MONAHAN: I move Item 6.

CHAIR HOCHSCHILD: Is there a second from Vice Chair Gunda?

VICE CHAIR GUNDA: I second.

CHAIR HOCHSCHILD: All in favor say aye.
Commissioner Monahan?

COMMISSIONER MONAHAN: Aye.

CHAIR HOCHSCHILD: Vice Chair Gunda?

VICE CHAIR GUNDA: Aye.

CHAIR HOCHSCHILD: And I vote aye as well. Item 6 passes unanimously. Thank you, Renee, I appreciate your work.

We’ll turn now to Item 7, Field Verification and Diagnostic Testing Program. Ronnie Raxter.

MS. RAXTER: Hello Chair and Commissioners, my name is Ronnie Raxter and I’m a supervisor in the Standards Compliance Office in the Efficiency Division. I’m here today to request approval to open an order instituting a rulemaking for two separate, but related proceedings to consider amendments to the field verification and diagnostic testing requirements, some of which are currently located in the Home Energy Rating System, or HERS, program regulations.

With me today are Matt Pinkerton and Justin Delacruz from the Chief Counsel’s Office. Next slide, please.

These rulemakings will benefit Californians by simplifying Energy Code compliance by first aligning the requirements in the Energy Code, which will provide clarity to providers, raters, and builders.
These changes will also improve CEC program oversight and program performance to enhance compliance with the Energy Code, which will ensure customers will receive the benefits of the energy efficiency measure, as promised. Next slide, please.

Field verification and diagnostic testing is done to demonstrate compliance with the Energy Code. Presently, the verification and testing requirements are split between the HERS regulations in Title 20 of the California Code of Regulations and the Energy Code, which is in Title 24.

The purpose of the two rulemakings is to relocate and update the verification and testing requirements from their current location in Title 20 to the Energy Code. This will sync the Energy Code’s energy efficiency measure requirements with the verification of installation requirements.

Staff are considering changes to progressive discipline, quality assurance procedures, conflict of interest, training, and other requirements. Next slide, please.

Staff recommendation is to approve the order instituting a rulemaking for two separate, but related, proceedings for the field verification and diagnostic testing program.

Thank you for your consideration and I’m
available for questions.

CHAIR HOCHSCHILD: Thank you.

Let’s go to public comment on Item 7.

MS. MURIMI: Thank you, Chair.

Once again, for individuals that are in the room go ahead and use the QR code in the back or see the Public Advisor in the back.

For those of you that are on Zoom go ahead and use the raised-hand feature, it looks like an open palm or a high-five at the bottom of your screen or device. And for those of you calling in go ahead and press *9 to indicate that you would like to make a comment.

Seeing no comments, Chair, back to you.

CHAIR HOCHSCHILD: Okay. Channeling Commissioner McAllister here, I support this, and I think it’s pretty straightforward. So I’d welcome a motion from Commissioner Monahan on Item 7.

COMMISSIONER MONAHAN: I move to approve Item 7.

CHAIR HOCHSCHILD: Can I have a second from Vice Chair Gunda?

VICE CHAIR GUNDA: I’ll second Item 7.

CHAIR HOCHSCHILD: All in favor say aye.

Commissioner Monahan?

COMMISSIONER MONAHAN: Aye.

CHAIR HOCHSCHILD: Vice Chair Gunda?
VICE CHAIR GUNDA: Aye.

CHAIR HOCHSCHILD: And I vote aye as well. Item 7 passes unanimously.

Thank you, Ronnie, I appreciate that.

MS. RAXTER: Thank you.

CHAIR HOCHSCHILD: We’ll turn now to the Certification of the 2022 Energy Code Compliance Manuals, Item 8.

MR. TSAN: Good morning, Chair, and Commissioners. My name is Bach Tsan. I’m a Senior Mechanical Engineer in the Building Standards Office, and Project Manager for the 2022 Single-Family Residential and the Nonresidential/Multifamily Compliance Manuals.

I’m here to seek certification of the 2022 Energy Code Compliance Manuals, which are one portion of the Energy Conservation Manual as required by the Public Resources Code section 25402.1(e) for each updated code cycle. The other tools under the Energy Conservation Manual will come before the Energy Commission at the next business meeting. With me today is Matt Chalmers and Josey Crosby from the Chief Counsel’s Office. Next slide, please.

As a benefit to Californians, the Energy Conservation Manual is designed to help the building industry comply with the Energy Code and help regulators
enforce California’s Energy Code for residential,
nonresidential, and multifamily buildings. Written as both
a reference and instructional guide the manual is helpful
for anyone directly or indirectly involved in the design
and construction of buildings in California. Next slide,
please.

On August 11th, 2021, the Energy Commission
adopted the 2022 Energy Code. The Warren-Alquist Act
requires that the CEC create and certify an energy
conservation manual no later than 180 days after that
approval. The compliance manuals before you today are part
of the Energy Conservation Manual, which the Energy
Commission certifies each code cycle.

The compliance manuals have been updated and
vetted with building industry stakeholders, including the
codes and standards enhancement team to reflect the changes
to the 2022 Energy Code.

The compliance manuals were posted for a 30-day
public comment period on the CEC website. The staff
received 107 comments from 7 industry stakeholders and
worked diligently to update the information and to
incorporate suggestions where appropriate.

Upon your certification of these items, along
with the remainder of the Energy Conservation Manual next
month, the building industry will have the tools needed to

Staff recommends that you certify the 2022 Compliance Manuals and adopt staff’s finding that the Compliance Manuals are exempt from CEQA. Thank you and I am available for any questions. Next slide, please.

Thank you to the whole team involved, in particular my Code Leads to these compliance manuals. They are Payam Bozorgchami, Joe Loyer, Matt Haro, Armando Ramirez, Sam Cantrell, Matt Chalmers and Josie Crosby.

And hopefully you liked the presentation.

CHAIR HOCHSCHILD: Well, thank you and to the whole team who worked on this. Let's go to public comment on Item 8.

MS. MURIMI: Thank you, Chair.

Once again, for individuals that are in the room go ahead and use the QR code in the back and see the Public Advisor in the back.

For those of you that are on Zoom go ahead and use the raised-hand feature, it looks like a high-five or open palm at the bottom of your screen or device.

And for those of you calling in go ahead and press *9 to indicate that you would like to make a comment and *6 to unmute on your end. Go ahead and state and spell
your name and give your affiliation, if any. And you'll have three minutes or less per person to give your comment. Sarah Blair, you may begin.

MS. BLAIR: Yes, hi. This is Sally Blair, I'm with NORESCO, B-L-A-I-R. I do a lot of work with the IOU Compliance Improvement Program. And we support the industry in complying with Part 6. And I wanted to express my support for certification of the 2022 Part 6 Compliance Manual.

The industry uses these manuals to understand how the Energy Code requirements applied to their projects, so the Commission providing them is much appreciated. Thank you.

MS. MURIMI: Thank you.

We have Alanna Torres. Please state and spell your name and give your affiliation, if any. That's Alanna Torres. Go ahead and unmute on your end. State and spell your name, give your affiliation if any, and you may begin your comment.

MS. TORRES: Hi. Thank you, good morning. This is Alanna Torres on behalf of the Statewide Utility Codes and Standards Enhancement Team. We're supportive of the California Energy Commission approving of these compliance manuals and thank the Commission for working collaboratively on these updates for the 2022 Code Cycle.
We recognize and appreciate the hard work the Commission put into restructuring the multifamily compliance manual to reflect the structural changes adopted in the 2022 Code.

Additionally, we are committed to supporting market actors in code compliance. And please make sure to visit energycodeace.com for tools and resources related to code compliance, which are being updated now to incorporate revisions for the 2022 Code Cycle. Thanks so much.

MS. MURIMI: Thank you.

And our last comment comes from Chris Ochoa, Esquire, Senior Counsel for the Codes, Regulatory and Legislative Affairs for the California Building Industry Association.

The comment states, “The California Building Industry Association, CBIA, is a statewide trade association representing over 3000 member companies involved in residential and light commercial construction. CBIA member companies are responsible for over 85 percent of the new homes built in California each year.

“Please be advised that CBIA strongly support CEC’s certification of the 2022 Residential Energy Conservation Manual today. The Conservation Manual is key to the effective implementation of the residential energy efficiency building standards in the field.

“We would like to extend our appreciation to
Commissioner McAllister and the CEC staff who worked on this project. It was a major undertaking and was accomplished in record time.

Your approval today will make this critical document available to code users across the state a full seven months ahead of the effective date of the standard.”

CHAIR HOCHSCHILD: Thank you, Dorothy.

We’ll turn now to Commissioner discussion. And I just want to add my thanks as well to the whole team. I saw the list you put up of all the people involved. It's quite a team there and seems like that's robust support.

So unless there's other -- yeah, Vice Chair Gunda, please go ahead.

VICE CHAIR GUNDA: Yeah, I just wanted to just commend the team. Thank you for that clear presentation. And thanks to the entire team for the wonderful work. I think what I’m noting both from the public comments, but also what I’ve heard too, just how fast and how responsive it was to the needs of the industry. Thank you so much for your work.

CHAIR HOCHSCHILD: Okay. And would you be willing to move Item 8?

VICE CHAIR GUNDA: Yeah, I'll move Item 8.

CHAIR HOCHSCHILD: Is there a second from Commissioner Monahan?
COMMISSIONER MONAHAN:  I second.
CHAIR HOCHSCHILD:  All in favor say aye.
Vice Chair Gunda?
VICE CHAIR GUNDA:  Aye.
CHAIR HOCHSCHILD:  Commissioner Monahan?
COMMISSIONER MONAHAN:  Aye.
CHAIR HOCHSCHILD:  And I vote aye as well.  Item 8 passes unanimously. Thank you.

We’ll turn now to Item 9, National Lighting Contractors Association of America, Amendment to Provider Application. Daniel Wong.

MR. WONG:  Good afternoon, Chair and Commissioners. My name is Daniel Wong from the Standards Compliance Office in the Efficiency Division. I am here to present for your consideration approval of the National Lighting Contractors Association of America, or NLCAA, application amendment, which makes substantive amendments to its approved acceptance test technician certification provider application. With me today is Justin Delacruz from the Chief Counsel's Office.

The Acceptance Test Technician Certification Provider Program addresses training, certification, and oversight of acceptance test technicians. The technicians perform acceptance tests to ensure that installed equipment, controls, and systems in nonresidential
buildings operate as required by the Energy Code. Next slide, please.

The proposed provider application amendment ensures that certified technicians continue to receive adequate quality assurance and oversight through NLCAA’s program, and that Californians receive the benefits of Energy Code compliant lighting controls. Next slide, please.

Providers are required to perform randomly selected quality assurance on-site audits of a technician’s completed acceptance tests. This application amendment alters the on-site audit procedures included in NLCAA’s approved provider application.

The proposed changes resolve potential barriers that may prevent NLCAA from scheduling and completing randomly selected quality assurance onsite audits of a technician’s completed projects. NLCAA will continue to perform onsite audits at the rate required by the Energy Code while maintaining an equivalent level of oversight to technicians.

Staff posted its evaluation of the application amendment on April 25, 2022, for public comment, and no comments have been received.

Based on staff’s evaluation, the Executive Director has found that NLCAA’s proposed amendments meet
the 2019 Energy Code requirements and has issued a recommendation for approval. Next slide, please.

Staff recommends that the CEC approve NLCAA’s application amendments. Thank you for your consideration and I am available to answer any questions.

CHAIR HOCHSCHILD: Thank you.

We’ll go to public comment on Item 9.

MS. MURIMI: Thank you, Chair.

Once again, for individuals that are in the room who would like to make a public comment use the QR code located in the back of the room or see the Public Advisor at the back of the room.

For individuals that are on Zoom go ahead and use the raised-hand feature, it looks like a high-five or an open palm at the bottom of your screen or device. And for those on the line go ahead and press *9 to indicate that you would like to make a comment and *6 to unmute on your end.

Seeing no comments, Chair, back to you.

CHAIR HOCHSCHILD: Okay we'll go to Commissioner discussion. And again channeling Commissioner McAllister I support this. I don't have any particular observations or comments to make other than that. Unless there are from my colleagues, I'd welcome a motion from Vice Chair Gunda on Item 9.
VICE CHAIR GUNDA: I'll move Item 9.

CHAIR HOCHSCHILD: Commissioner McAllister, or Commissioner Monahan, sorry. (Laughter.) We are channeling you. (Overlapping colloquy.)

COMMISSIONER MONAHAN: I second.

CHAIR HOCHSCHILD: a second from Commissioner Monahan. All in favor say aye.

Vice Chair Gunda?

VICE CHAIR GUNDA: Aye.

CHAIR HOCHSCHILD: Commissioner Monahan?

COMMISSIONER MONAHAN: Aye.

CHAIR HOCHSCHILD: And I vote aye as well. That item passes unanimously.

We’ll turn now to Item 10, the United States Department of Energy.

MR. LU: Hi. Good morning, Commissioners, folks in the room, and also folk on Zoom. My name is Jeffrey Lu. I’m an Air Pollution Specialist here in the Vehicle-Grid Integration Unit at the CEC. I will be walking you through items 10 and 11 of the agenda today. And we’ll start, of course, with Item 10. This is an agreement approving the CEC’s participation in a Memorandum of Understanding on vehicle-to-everything technologies. Next slide.

Vehicle-to-everything technologies can provide immense benefits to Californians as they become
increasingly available. “Vehicle-to-everything” is an umbrella term describing technologies and products that allow an electric vehicle to export energy from its battery to power loads, buildings, other vehicles, or the grid.

So here’s what these technologies could enable:

Customers can use their vehicles to absorb cheap electricity when renewable generation is abundant, and then discharge that energy back to their home or the grid when electricity is more expensive, potentially yielding significant bill savings.

Similarly, these technologies can help power homes, buildings, or other critical loads during grid outages such as public safety power shutoffs.

And finally, given that electric vehicles are essentially huge batteries on wheels, vehicle-to-everything technologies can unlock opportunities for vehicles to serve California’s growing energy storage needs, and this can support greater grid reliability. Next slide.

This agreement package would ratify and approve the CEC’s participation in a Memorandum of Understanding that aims to accelerate the availability of vehicle-to-everything technologies. This MOU is led by the Department of Energy, and the CEC is just one signatory among a very broad range of stakeholders. This group includes automakers, charging providers, labor, other public...
agencies, and of course the U.S. DOE and its National Labs. Big names include Ford and GM, as well as many California entities: PG&E, Lucid Motors, Rhombus, Nuvve, even the Public Utilities Commission. Next slide.

In participating in this MOU the CEC is agreeing to explore greater data-sharing and possible technology demonstrations among the participating groups.

In the immediate term, we’re expecting a kickoff meeting to be led by DOE soon, which will roadmap the group’s activities.

We have already been in close contact with staff at the PUC on this matter, and we will be working to make sure that California's policy, interests, and activities are consistently conveyed to the group.

This MOU would expire in two years. Next slide.

I recommend that the Commission approve this resolution ratifying the MOU and CEC’s participation, and adopt staff’s determination that this agreement is not a project under CEQA. I’m happy to answer any questions you have. And I believe we have staff from DOE on the line as well. Thank you.

CHAIR HOCHSCHILD: Thank you so much, Jeffrey. We’ll turn now to public comment on Item 10.

MS. MURIMI: Thank you, Chair.

For individuals that are on Zoom go ahead and use
the raised-hand feature, it should be at the bottom of your screen or device to indicate that you would like to make a comment. For those on the line go ahead and press *9 to indicate that you would like to make a comment and *6 to unmute on your end.

And for folks in the room go ahead and use the QR codes in the back of the room or see the Public Advisor in the back of the room.

We have Rima Oueid, apologies if I have misstated your name. Go ahead and state and spell your name, give your affiliation, if any, and you may begin your comment.

You have three minutes or less for your comment.

MS. OUEID: Hi, Rima Oueid with the U.S. Department of Energy. I just wanted to -- I was invited to come in and listen in and just wanted to applaud the CEC and the CPUC in the State of California on their support.

I just want to mention that electric vehicles and the internal combustion engine both came, were discovered around the same time in the late 1800s. And it is only now that we're really commercializing them in a way that that is going to scale them. And bidirectional capability will introduce those, the value streams necessary for the electric vehicle to be able to compete with the internal combustion engine.

And if you had asked Henry Ford his thoughts when...
he was commercializing the internal combustion engine he
would have said, “If I'd asked people what they wanted,
they would have said faster horses.” He was a champion for
the internal combustion engine.

And today the signatories for this MOU are the
champions for bidirectional electric vehicles that will
help pave the way for electrification of transportation.

Thank you.

MS. MURIMI: Thank you.

Chair, we have no other comments.

CHAIR HOCHSCHILD: Yeah, I’d just like to build
on that comment that was just made. And there's a
wonderful -- actually I use this in a lot of my
presentations, a picture of the, I think it’s a
Thanksgiving Day Parade in New York City in the early 1900s
that shows the street completely full. But it's not a
parade, it's just on Thanksgiving Day, the street is
completely for with horses and buggies and one car. And
then ten years later it's all cars and one horse and buggy.
And I love that image, because it is just a reminder of how
quickly it's possible to have a transition. I think we're
at that moment with transportation electrification now.

And I just wanted to say thanks on behalf of all
of us to our colleagues and friends at the Department of
Energy. I've been so impressed with caliber of people in
the Biden Administration Department of Energy. I met
yesterday with Carolyn Snyder, who's running their building
decarbonization group over there. And the dedication at
the federal level is just phenomenal.

I had the opportunity to support Commission
Monahan at this event a few weeks ago in L.A. where the MOU
was discussed and kind of launched. And it's just terrific
to be doing this with amazing allies.

And also Jeffrey, I just really wanted to thank
you for your professionalism and sharp insights. I really
enjoyed our breakfast together with Commissioner Monahan a
few weeks ago there and just hearing your thoughts and
looking forward.

I think one observation is we have these
different kind of silos that we're working on: reliability
and R&D and transportation, (Inaudible.) But everything is
converging, and in a good way. And as we're rapidly
growing EV deployment, that has real benefits to the grid
if we do it the right way. I mean, there's definitely a
wrong way to do it and a right way to do it. And I think
this MOU is a great example of the right way to do it.

So with that I’ll turn it over to Commissioner
Monahan for comments.

COMMISSIONER MONAHAN: Well, I’m going to first
keep on with Rima who you heard on the phone. And she was
really the brainchild of this, I think, has been
shepherding this for a long time. And pulled together an
amazing event with lots of speakers, including the Mayor of
Lancaster who's a Clean Air Champion, a Republican, and
really a big believer in this opportunity to use vehicles
to support a clean grid. And just very inspiring to see
how this is a nonpartisan issue. It should be a
nonpartisan issue. And I think that event really
highlighted from a perspective of business, labor,
environment, energy, how these can be brought together.

And as you said, Chair, we really need to unlock
this capability to make our grid more resilient. And I
think about our investments in school buses. There's
25,000 school buses in California, we have the most school
buses of any other state.

If all of those we capitalize on the V2G
capability of them, we would have somewhere between 2.5 to
3.75 gigawatt hours of energy and that would be huge at
this time. So the investments that we have made in the
200-plus electric school buses with V2G, the fact that
we're making investments unlock that, that's going to feed
into this.

The signatories, our national in-scope, we had
Ford and General Motors as Jeffrey highlighted, so big
automatic automakers are invested in this. And other
automakers that I can’t say in private -- they're also looking at this. And so just to be at the cutting edge and learning from across the country what we can do more to accelerate progress in this space, I think, is a real opportunity for us.

And Jeffrey, thanks for your thought partnership and leadership in this space.

I want to say one last thing, which is I want to give kudos to Angelina Galiteva who is our first-ever woman Chair of CAISO. And she also was a force in pulling this together.

CHAIR HOCHSCHILD: Thank you, Commissioner.

Unless there are comments from the Vice Chair, I would welcome a motion from Commissioner Monahan.

COMMISSIONER MONAHAN: I move Item 10.

CHAIR HOCHSCHILD: Yep. Vice Chair Gunda?

VICE CHAIR GUNDA: Second Item 10.

CHAIR HOCHSCHILD: All in favor say aye.

Commissioner Monahan?

COMMISSIONER MONAHAN: Aye.

CHAIR HOCHSCHILD: Vice Chair Gunda?

VICE CHAIR GUNDA: Aye.

CHAIR HOCHSCHILD: And I vote aye as well. That item passes unanimously, 3 to 0.

We’ll turn now to Item 11, innos Incorporated.
Am I pronouncing that correctly Jeffrey?

MR. LU: Yeah, I think so.

CHAIR HOCHSCHILD: Okay.

MR. LU: All right, thanks everyone. Item 11 is with innos Incorporation. This is an agreement package to plan and host a vehicle interoperability testing symposium and conference. Next slide.

All right, so during every charging session the vehicle and charger communicate to make sure that everything is safe and that the proper charging parameters are being exchanged. Making sure that this data exchange occurs consistently across different vehicle manufacturers, charger manufacturers, and all the models between them is key to ensuring that charging is easy and reliable.

Oftentimes, when a customer is unable to start a charge today it is because this communication between the vehicle and charger was not successful.

To help sort through these problems, industry occasionally gets together at large hackathon and conference-like events where different automakers test their products with different charging providers and everyone tries to make sure that everything is working as expected. Industry has told us that these interoperability testing symposia are very useful to their development and interoperability work. Given that California is home to
many EV and charging-related companies it will be useful to host one here in the state and lower the barriers for participation by our local companies, for example, by saving on shipping and travel costs.

These gatherings are an important complement to the charger testing lab, ViGIL, that the CEC is already funding. ViGIL will provide standardized testing procedures to make sure that products meet a baseline level of interoperability. And gatherings like these are good for spurring collaboration among industry and for catching some of those corner cases that you won't catch in lab-based testing.

Beyond just making sure that charging works and is reliable, interoperable charging communication is also the foundation on which industry is building a better and smarter charging experience. This includes features like Plug-and-Charge, so that charging is simple and doesn’t require folders full of charging apps, as well as smart-charging and bidirectional charging. So again, those same topics that we have touched on several times today already.

Next slide.

This $910,000 contract with innos originates from a competitively bid solicitation to plan and host a Vehicle Interoperability Testing Symposium in California, or what we’re calling VOLTS for short. VOLTS is a hackathon-like
event spanning multiple days and will gather industry for round-robin style testing to make sure that products function as expected with each other.

Successfully executing such a symposium requires extensive logistical and electrical planning in order to accommodate and power all the vehicles and chargers in attendance. It also requires thoughtful program planning to ensure that participants have effective testing schedules.

Besides just this testing aspect, innos is planning a conference component to disseminate learnings and to discuss the state of the industry. And innos is also planning a live roadshow portion which will showcase the real-world benefits of communication interoperability in the field. Next slide.

I recommend that the Commission approve this contract agreement with innos and adopt staff’s determination that this project is exempt from CEQA. I’m happy to answer any questions you have, and I think folks from innos are also calling in today. Thanks for your time.

CHAIR HOCHSCHILD: Thank you, Jeffrey.

Let's go to public comment on Item 11.

MS. MURIMI: Thank you Chair. For individuals that are in the room, go ahead and use the QR codes in the
back of the room or see the Public Advisor in the back of
the room as well.

For individuals that are on Zoom go ahead and use
the raised-hand feature, looks like a high-five or an open
palm at the bottom of your screen or device.

And for those that are calling in go ahead and
press *9 to indicate that you'd like to make a comment and
*6 to unmute on your end. You have three minutes or less
per speaker and one speaker per organization.

I see André Kaufung, and apologies if I’ve
misstated your name. Go ahead and state and spell your
name and give your affiliation, if any, and you may give
your comment.

MR. KAUFUNG: Yes, Hello. Good morning, my name
is André Kaufung. I'm the President of the innos, Inc. and
the Managing Director of a CharIN Association. And I would
like to take this opportunity to thank the Chair, the
Commission and the whole CEC team for this contribution.

And as we are executing these kinds of events on
global scale, already a couple of years, and we see the
increasing volumes of EVs and chargers coming up to market
it's a real benefit for the whole industry to be enabled to
secure interoperability.

So that's my comment for now. So thank you and
looking forward together with our CharIN North America and
CharIN Global Team to execute this kind of event.

MS. MURIMI: Thank you, Andre.

Seeing no more hands, Chair, back to you.

CHAIR HOCHSCHILD: Thank you. I did just have a question, and this can be for Andre or Jeffrey, just what are the outcomes that you're most hoping to get from this?

MR. LU: Andre, if you're still there you're welcome to chime in; otherwise, I can go ahead.

MR. KAUFUNG: Yes, I’m happy to answer. So the most value of the outcome is that you open your test results. I mean we all know in that industry that there's a certain development in standards and with this high speed of evolving industry, you cannot have everything answered by the standard, so you'll find some arrows, some mistakes, you find some gaps.

And the big advantage of these kinds of events is that not one individual EV maker is testing with one individual EVSE maker, and then sharing the knowledge of the tests. That you have this kind of round-robin test and share in the whole group and the whole community lessons learned, so a lot of these mistakes and findings are not done a second time. And this increases interoperability on a much larger scale than individual tests. And this is one of our expected outcomes that with a good participation across industry you have on one event a lot of lessons.
learned where others do not take the same test again.

MR. LU: Yeah, Chair. I think that the two things I would add to this are I think there are sort of two buckets of outcomes that I would like to see from this. One is the more basic interoperability, making sure that charging works as expected. These events have already proven that they're really useful for catching some of these bugs, so this will continue to do that.

But I think just as importantly events like these will help push the envelope for what charging can be and what the charging experience can include. So when we want EVs to good grid citizens, to do smart-charging, bidirectional charging, this is the way to get that to scale through standards, interoperability, and everyone doing it in such a way where you don't have to be tied to a certain brand or model and so forth.

CHAIR HOCHSCHILD: Really helpful. Let me turn it over to Commissioner Monahan for comment.

COMMISSIONER MONAHAN: Well, I just I mean building on this a question, which just occurred to me, is will there be a report with major findings that could help inform our grantmaking going forward?

MR. LU: Yeah, there is. So the specific test results between individual companies, that's generally kept confidential. But as part of this agreement there is a
reporting aspect where those results will be aggregated and anonymized and then provided to CEC.

COMMISSIONER MONAHAN: Thank you.

VICE CHAIR GUNDA: Just a quick question, Jeffrey? First of all thank you so much. I love the idea of hackathons. I love the idea of bringing people together. And, obviously, the success of that is predicated on their participation. Could you or Andre kind of comment on how we are ensuring robust participation and really kind of maximize the impact of this?

MR. LU: Yeah, I think two things I'll note on that.

The first one is in innos's application they have provided a really broad range of support letters, including from players like EVgo, Electrify America, Tesla and so forth. So we already see that sort of broad participation from the get-go.

But beyond that, innos partners with CharIN, which is a global charging standardization organization. And I think they have pretty broad reach to be able to reach not only automakers and charging providers, but also folks upstream in that supply chain that provide these products as well.

VICE CHAIR GUNDA: Awesome. Just encouraging the points made by both Chair and Commissioner Monahan, I think
just a report of that would be really helpful, but also
making it accessible to broader stakeholders beyond kind of
the -- like in the industry. How do we bring in
researchers to engage them on these issues as they tackle
the future? So how do we bring them in? So it's great,
I'd love to support it. Thank you.

CHAIR HOCHSCHILD: Great. With that, unless you
have other comments, I would welcome a motion from
Commissioner Monahan on Item 11.

COMMISSIONER MONAHAN: I move to approve Item 11.

CHAIR HOCHSCHILD: Is there a second from Vice
Chair Gunda?

VICE CHAIR GUNDA: Second Item 11.

CHAIR HOCHSCHILD: All in favor say aye.

Commissioner Monahan?

COMMISSIONER MONAHAN: Aye.

CHAIR HOCHSCHILD: Vice Chair Gunda?

VICE CHAIR GUNDA: Aye.

CHAIR HOCHSCHILD: And I vote aye as well. That item passes unanimously, 3 to 0.

We’ll turn now to Item 12, Charging Access for
Reliable On-Demand Transportation Services.

MR. WENSIL: Hello, Chair.

CHAIR HOCHSCHILD: And (indiscernible) with -

sorry, just one thing, with your permission what I'd like
to get through this item and then we'll break for lunch.

(Overlapping colloquy.) Go ahead.

MR. WENSIL: Hello, Chair, Vice Chair, Commissioners. My name is David Wensil with the Fuels and Transportation Division. Today staff is seeking approval for four projects proposed for funding under the Charging Access for Reliable On-Demand Transportation Services solicitation, also referred to as CARTS. Next slide, please.

The proposed projects will demonstrate a replicable model for rapid acceleration of EV charging infrastructure, while building grid and community resiliency in underserved areas. Data collected from these projects will provide key insight into the future scalability of charging equipment for high mileage on-demand transportation services.

These projects will provide models and lessons-learned from the Transportation Network Companies in understanding the technology required for their applications, routes, and environment, helping to achieve California’s Clean Miles standard of 90 percent electric vehicle miles traveled by 2030.

Located throughout the state these projects demonstrate the geographically diverse needs for continued EV infrastructure deployment. The proposed projects will
reduce greenhouse gas emissions and criteria air pollutants, providing air quality benefits to transportation network drivers and the local community, which are often designated as disadvantaged and priority populations.

Lastly, these projects will lead to the creation of green jobs and help contribute to sustainable economic growth, improving the quality of life for those in the surrounding areas. Next slide, please.

Before I present these four projects, I want to provide a brief overview of the CARTS solicitation. The focus of this solicitation is to support electric vehicle charging infrastructure by providing grant funding for high-mileage on-demand transportation services, including services such as ride-hailing, taxis, and meal and grocery delivery. Proposed projects must demonstrate participation of or written support from on-demand transportation service companies, and the charging infrastructure can be either publicly or privately available.

The four projects that I will be presenting today account for roughly $6.1 million out of the total $16.6 million proposed for awards under this solicitation. The rest of the agreements are expected for the June and July business meeting. Next slide, please.

Overall, there are a total of 642,000 vehicles
associated with Transportation Network Companies throughout California. CARB’s Clean Miles Standard could raise the number of zero-emission vehicles actively used in ride-hailing to 400,000 by 2030.

AB 2127 analysis also shows that Transportation Network Companies account for 30 percent of the market use for DC Fast Chargers, indicating that they are and will continue to be a major use for California’s expanding EV infrastructure network.

These projects will help support thousands of new electric vehicles in California and aid in the effort to reach 90 percent electric vehicle miles traveled for Transportation Network Companies. Next slide, please.

The first project for your consideration is an agreement with the Latino Equity Advocacy and Policy Institute. They are requesting a $415,000 dollar grant and will be providing match funding in the same amount to support the expansion of chargers for the Green Raiteros ridesharing program in the city of Huron, California. The Green Raiteros program was created to provide a clean, safe, and inexpensive form of transportation for community members going to jobs, schools, medical appointments, and social services.

LEAP has a fleet of seven EVs which were donated to their program, with an additional three electric
vehicles expected through CARB’s Clean Mobility Options
grant. However, the program does not currently have access
to fast-charging equipment to charge their vehicles.

This project will install four Direct Current
Fast Chargers along with a solar carport and onsite battery
storage, which will be managed by a Distributed Energy
Resource system. These Direct Current Fast Chargers will be
utilized by the Green Raiteros as well as the public. And
with the additional fast charging, the LEAP Institute
anticipates greater utilization of the program fleet,
allowing cars to be on the road for a longer portion of the
day. Next slide, please.

The next proposed agreement is with TeraWatt
Infrastructure. They are requesting approximately $2
million and providing over $2 million in match funding to
install a charging hub that will support the
electrification of vehicles near the John Wayne Airport.
TeraWatt is partnering with Kaptyn, which is a ride hailing
company that is expanding its operations in Santa Ana,
California, to include 200 electric vehicles which will
provide services not only to the airport, but to the
surrounding disadvantaged community where the site is
located. The funding requested from this project will go
towards the installation of electric vehicle infrastructure
to support Kaptyn’s fleet. As part of the project’s match
funding, the project team will provide 12 Level 2 electric vehicle supply equipments, 7 dual-port DC fast chargers, and a battery energy storage system.

Kaptyn expects to recruit, hire, and train 500 new employees with 50 percent of the new hires residing in low-income and disadvantaged communities in the surrounding area. The image on this slide shows an aerial view of the project site and indicates where the chargers will be installed. Next slide, please.

The third proposed agreement is with KIGT. They are requesting a $2 million grant to install 180 electric vehicle charging stations for low-income residents and Transportation Network Company drivers, including Uber drivers, in Ontario, California.

KIGT will also be providing over $4.7 million in match funding for this project. As a part of their proposed match funding, KIGT will provide electric vehicle charging equipment, as well as a microgrid with a 2-megawatt carport solar array, and a 500-kilowatt-hour onsite battery storage.

KIGT’s eStation model will be located within half a mile of the Ontario International Airport and will provide workforce training for low-income and disadvantaged community residents to train for high-paying jobs as EV network technicians.
This model, which uses EV charging plus a microgrid, will provide grid resiliency for low-income and disadvantaged community members by reducing the number of brownouts and blackouts during peak demand periods. Their EV chargers will also be accepting credit or debit cards with alternative payment options including EBT and Metro Cards, helping to reduce barriers for unbanked individuals. Next slide, please.

The final proposed agreement is with EVgo Services. They are requesting a $1.7 million grant and providing over $2.6 million in match funding to support the expansion of chargers in two locations within the Bay Area. The San Francisco Hub site, located in the heart of Mission District will involve the installation of 26 Direct Current Fast Chargers. Of that total, 18 will be dedicated to private charging for Cruise’s autonomous ride-sharing service. Cruise is committed to serving the community not only through ride-sharing accessibility, but also through the establishment of their FutureWorks program, which offers career support to people with identities that are historically underrepresented in tech by providing educational and skill-building activities including interview training and networking. The remaining eight stalls will be open to public use and available for all on-demand transportation service drivers.
The second site, referred to as Oak Hub, will install four Direct Current Fast Chargers. These chargers will be available to Uber, other service providers, and the general public. The site is less than four miles from Oakland International Airport, making it a convenient stop for the many rideshare drivers completing airport pick-ups and drop-offs.

Finally, both San Francisco and Oak Hubs will incorporate the use of high-powered 350-kilowatt charging stations, which will reduce the time needed to recharge and increase productivity for on-demand drivers. Next slide, please.

Staff’s recommendation is to approve these four agreements and adopt staff CEQA findings. Rey Leon from the LEAP Institute, Adrian (phonetic) from KIGT, David Schlosberg from Terawatt and Lars Peters from EVgo are all online if you have any questions. Thank you for your consideration. This concludes my presentation and I’m happy to answer any questions.

CHAIR HOCHSCHILD: Thank you.

Let's go to public comment on Item 12.

MS. MURIMI: Thank you, Chair.

Again, for individuals that are in the room go ahead and use the QR code located in the back of the room or see the Public Advisor as well who is in the back of the
For individuals on Zoom go ahead and use the raised-hand feature, looks like a high-five or an open palm at the bottom of your screen or device.

And for individuals that are calling in go ahead and press *9 to indicate that you'd like to make a comment.

With that, Jatomis Stevenson, and apologies if I have misstated your name. Go ahead and state and spell your name, give your affiliation if any. You have three minutes or less. You may begin.

MR. STEVENSON: Hi, my name is Jatomis Stevenson, J-A-T-O-M-I-S, Stevenson like Robert Louis. I’m speaking on behalf of KIGT. And I’d like to thank the CEC, Climate Finance Solutions, Uber, the county of San Bernardino and the city of Ontario. And KIGT is thrilled to bring such an iconic project to the nation's largest county by landmass, creating a mobility hub with a safe, stylish cafe supported by a microgrid that was outlined in the project. It’s the first of its kind in our region and we are grateful for the opportunity.

Working with Uber on this charging access for reliable on-demand transportation services within a disadvantaged community will provide tremendous value to the Inland Empire regarding jobs, economic empowerment, along with access to more affordable and clean fueling.
Collaborating with the Ontario International Airport to curate a mobility option for the city along Interstate 10 within a half mile from the airport and within a mile from the Convention Center will help the Inland Empire transition to a clean mobility future.

KIGT is grateful for this opportunity to shape 100 years of human habit in southern California. Thank you.

MS. MURIMI: Thank you.

I see Rey Leon.

MR. LEON: Hello and good afternoon, buenas tardes. I’m Rey Leon with the LEAP Institute, and I too would like to thank the Commission, the Energy Commission. Greetings to Chair Hochschild and Commissioner Monahan and Commissioner Gunda. I don't think we've had the pleasure to meet yet, Commissioner Gunda. But we are very grateful for this support so we may continue the electric vehicle ride-sharing in the west side of San Joaquin Valley and more so in Fresno County.

But this is going to help us really turn around our vehicles, because we'll be able to get them charged quick so that they can get on the road and take another farmworker family to their medical appointment, or any other essential appointment that they may have.

Thank you very much. It's beautiful to be able
advance clean energy in California. We are always part of the struggle with LEAP in fighting for 100 percent. And I love seeing that not only is it unfolding throughout the state with colleagues, partners, and allies, but that we're making that happen in the farmworker community of Huron and making the dream green and keeping Huron really on the top in terms of EV charging infrastructure. And I hope that that continues with other poverty populations as well, and I work to help in making that happen. Thank you very much and I salute you all.

MS. MURIMI: Thank you, Rey.

Next, we have David Schlosberg, apologies if I’ve misstated your name. Go ahead and unmute on your end, state and spell your name, give your affiliation, if any. You may begin.

MR. SCHLOSBERG: Thank you, this is David Schlosberg, D-A-V-I-D, last name Schlosberg, S-C-H-L-O-S-B-E-R-G. I’m with TeraWatt Infrastructure. We’re the applicant for the CARTS grant in Santa Ana, California. We just wanted to take a moment to give our appreciation and thanks to the CEC, both the Commissioners and staff, in bringing the CARTS program forward and expanding the CARTS program which was really fantastic.

We are working with our partner Kaptyn, who's a ride-hail service that's bringing its business to southern
California and helping to bring 200 electric vehicles to provide ride services in southern California, both in Orange County and the greater Los Angeles area.

Special thanks to the Santa Ana Airport and the city of Santa Ana for helping, to date, with this project and supporting this project. And we are looking forward to working with Southern California Edison and bringing the path, the site online and starting to electrify rides in the area out of the site in Santa Ana there.

MS. MURIMI: Thank you, David.

Chair, I see no other comments.

CHAIR HOCHSCHILD: Well thank you for those members of the public commenting. Rey Leon, great to see you my friend, and thank you for all your work in Huron. You know, you don't have to be a big city to make a big difference. I think we've seen that again and again in California’s communities leading the way. And I am really pleased to support this.

I did want to ask a question, if I could of staff, just could you recap roughly the cost per charger? We're talking about the fast chargers. What is the overall capital cost, just ballpark, for the chargers that are going in now?

MR. WENSIL: Are you -- for all the agreements or just for the
CHAIR HOCHSCHILD: Well, just we heard like --
I'm just interested the fast charger. I'm remembering
roughly like 70K or so, for that. Is that ballpark about?
MR. WENSIL: Yeah, that's about right. Yeah,
that's about ballpark. And then I think for the Level 2s
it's around $10, $15, $20,000 I want to say.
CHAIR HOCHSCHILD: Yeah, okay. I just wanted to
see that was still in the ballpark. Okay.
COMMISSIONER MONAHAN: Well, I think the 350-
kilowatt chargers are more expensive.
CHAIR HOCHSCHILD: Okay. What would a 350-
kilowatt charger be, ballpark, now?
COMMISSIONER MONAHAN: Do you know that, David?
MR. WENSIL: Off of my head, no I don't.
(Overlapping colloquy.).
COMMISSIONER MONAHAN: I think either the staff
can, but I can give you some data from ICCT specific to the
overall cost of the chargers, not necessarily the share
that we would be calculating.
CHAIR HOCHSCHILD: Yeah. Okay, that'd be really
helpful. I would love to see that when you have it ready.
Thank you.
So let's go to Commissioner discussion, starting
with Commissioner Monahan.
COMMISSIONER MONAHAN: Well, I want to thank you
Chair, you were partly the inspiration for this one. And to highlight something that David said, which is a profound statistic, that 30 percent of the DC fast charging is going to Transportation Network Companies. I mean, that's just a staggering amount of the energy from DC fast charging that's being used for very specific purpose.

And what I love about these projects is that they integrate equity, together with this, what we're seeing in the real world around how Transportation Network Companies are using our public charging system and how that will accelerate as more with the Clean Mile Standard that CARB approved, and now is going through the CPUC. That's going to just increase the amount of electrification of the Transportation Network Companies. And to layer equity on top of that, I think, is a really critical aspect of this.

And Mayor Leon highlighted Green Raiteros, and the fact that they're using those vehicles in a car -- mobility as a service, it's also a little bit car-sharing -- to get people to medical appointments and critical to have farmworkers be able to get to where they need to go and have it be zero-emission. So Mayor Leon has been a real leader in this space.

KIGT, if you haven't talked to the leader of KIGT, Paul Francis, he's really visionary in this space as well. And really working to make sure that electrification
is not just something for wealthy communities, but for all communities. So I’m just really excited about this, I feel like the fact that it was so oversubscribed too shows how much appetite there is in the community for this.

CHAIR HOCHSCHILD: Yeah, I just wanted to build on that point. And just so when you look at the population of people driving for Uber and Lyft there’s a lot of low- and moderate-income drivers. And I tended to ask when I ride just about what it would take to go electric. And I found most drivers want to do that, but it needs to work for their life.

And for them time is money. And if you're in a situation where you can't charge quickly you're not going to do it, because many of these folks are driving into a major urban area an hour or more. And to then have to do a slow charge to re -- it won't work. And so really like the cost of the vehicle and the cost of these, the vehicle and the ability to get a fast charge, those are negating items.

And so I really want to commend you, Commissioner Monahan and your team for leading on this and I think it's a really important step forward. And it's an equity policy to do this, I really believe that. So Vice Chair Gunda?

Yeah, please go ahead.

VICE CHAIR GUNDA: Yeah, I think I just want to
start by just noting like we have at so many business meetings we have these transportation-related items that we approve. Just what an incredible job FTD is doing overall, just a shoutout to Hannon, but also the HR team that's behind the admin team who make all this happen, so just incredible.

And I think, and I just want to commend Chair, you and Commissioner Monahan, and what (Indiscernible) vision that you're all bringing to make this happen. And also thanks to the administration for the support we've been receiving in advancing the clean transportation goals. So I mean, again to note totally every time I see a new program presented or an expansion it's just a pleasure to learn the thinking behind it. And thank you for commenting on the equity lens on the top of the TNC need.

So I have a just a couple of questions, David to you, first of all thank you for the presentation. And we can follow up on this, but it definitely caught my eye that we it’s reliable services and we want to keep them reliable from the grid perspective. So a couple of thoughts on when we are kind of funding these, obviously we want to understand better data on the charging plans, right? So I want to understand what we're doing in terms of making sure that CEC receives some of the data as it relates to charging so we can continue to build it into our planning.
That's one.

The second element is when we are thinking about funding these, to Commissioner Monahan and you, you raised it too, which is there's a large appetite. What are we talking about? Like what's the scale of need here? And when we think about locationality and funding them, how coordinated are we or the overall stakeholder group, right? Like, for example, if a grantee comes in how are they coordinating with the utility to ensure this long-term build? Sorry, I’m throwing a lot of things there, but maybe we want to start with how are we gathering data? And then how are we thinking about grid capacity and the need as we provide these grants?

MR. WENSIL: Yeah, that's a great question Vice Chair Gunda. So right off the top of my head I don't know the exact data that we're asking for, that we're gathering for. I know part of the projects, the scope of work, we do require that each recipient give data for their chargers that they provide. But again like I said I’ll have to get back to you on the exact statistics that we were acquiring for that.

And to, I’m sorry, what was your second question, again?

VICE CHAIR GUNDA: Just the grid impact (indiscernible) if we want to – I mean, the reliability
here, the way I understood is making sure there are options for charging, right? But then it also has the impact on the grid. How are we thinking about the reliability of the grid as we kind of put this project plan and ensuring that it's reliably reliable?

MR. WENSIL: Yeah definitely. Well, I think with the microgrids and solar carports we're helping to offset grid demand. And so we could use the green power, green energy that's powered by the microgrids to help supply those chargers. And so that helps take a significant demand off of the grid.

And I know for one of the projects, I believe it was KIGT’s e-station model, I know they have a two-megawatt microgrid and that's able to provide, when it's providing power, to supply almost 50 percent of the needs at full utilization for the site. And so that definitely also significantly helps reduce its impact on the grid.

VICE CHAIR GUNDA: Great. So here is my kind of like last kind of more of a thought, so as kind of we discussed an Item 3 as we think about reliability at large, I think, having the funding that we provide, whether through R&D and the storage projects or transportation and the charging I know we are doing a lot on combining some of those opportunities. So, for example, that would be a good example where if the microgrid could really island for a
while for the charging needs to include emergencies it's a great win-win situation.

So I just want to encourage this opportunity of how do we continue to think about these things that we're funding to be more integrated, but also allow for greater reliability and resiliency. And how do we provide that path for integration to our programs? So just wanted to share that thought.

COMMISSIONER MONAHAN: Yeah, I think that's a great comment Vice Chair. And something we should follow up on in the context of DERs, too, like we should be engaging ChargePoint and EVgo and all the big providers in that conversation. And because this is so much bigger than this specific solicitation and these specific grants. And I think it's worthy of getting to more granular with the providers themselves about what activities they could do.

And we should be thinking, I mean we're trying to learn in our grantmaking process as well, how to integrate those. And I think with some grants you can see it really clearly like KIGT, others you can't.

I will say on the TNC drivers, they tend to be driving -- the peak times for the grid are also the peak times for driving, which you would think, "Oh, well that might cause grid stress." The theory is that it's the opposite because they'll be charging before, and they'll be
charging after. But during those peak times they want to keep driving. But that's theoretical I would say, we need more data on that as well.

VICE CHAIR GUNDA: Great, Commissioner Monahan. I love your kind of idea. I think, overall, how do we kind of have maybe a roundtable sort to just think about grid reliability, as you mentioned, the integration and vehicle charging overall into some sort of a paradigm to continue to (indiscernible).

COMMISSIONER MONAHAN: Yeah, and it's the medium-, heavy-duty vehicles where I think that's really an issue too.

VICE CHAIR GUNDA: Yeah, absolutely. Thank you. Thank you, David, so much.

CHAIR HOCHSCHILD: Thank you to the whole team. And with that I would welcome a motion on Item 12 from Commissioner Monahan.

COMMISSIONER MONAHAN: I move Item 12.

CHAIR HOCHSCHILD: Is there a second from Vice Chair Gunda?

VICE CHAIR GUNDA: Second Item 12.

CHAIR HOCHSCHILD: All in favor say aye. Commissioner Monahan?

COMMISSIONER MONAHAN: Aye.

CHAIR HOCHSCHILD: Vice Chair Gunda?
VICE CHAIR GUNDA: Aye.

CHAIR HOCHSCHILD: And I vote aye as well. That item passes unanimously.

What we'll do is recess now for lunch. It's 12:20, why don't we reconvene at 1:30 here, okay.

(Off the Record at 12:21 p.m.)

(On the Record at 1:30 p.m.)

CHAIR HOCHSCHILD: I’m ready when you are, Dorothy.

MS. MURIMI: And we are back

CHAIR HOCHSCHILD: Okay, welcome back from lunch everyone.

My apologies, I failed to move Item 2, which was the Resolution honoring Tom Gates. We took public comment on that and heard from Tom directly, but I would like to formally adopt that Resolution. So Vice Chair Gunda if you'd be willing to move the Adoption to the Resolution for Tom Gates, Item 2.

VICE CHAIR GUNDA: I move Item 2.

CHAIR HOCHSCHILD: And Commissioner Monahan would you be willing to second?

COMMISSIONER MONAHAN: I second.

CHAIR HOCHSCHILD: All in favor say aye. Vice Chair Gunda?

VICE CHAIR GUNDA: Aye.
CHAIR HOCHSCHILD: Commissioner Monahan?

COMMISSIONER MONAHAN: Aye.

CHAIR HOCHSCHILD: And I vote aye as well. That item passes unanimously.

And we'll return to the regular agenda. I believe we're on Item 13. Is that correct?

MS. MURIMI: That is correct.

Okay let's begin, San Diego Community College District. Larry Rillera, welcome. Thank you.

MR. RILLERA: Good afternoon, Chair and Commissioners, my name is Larry Rillera. I am staff with the Fuels and Transportation Division. I will be presenting Item Number 13 seeking approval of an amendment to an existing agreement. Next slide.

According to CARB's Heavy-Duty Truck and Bus Voucher Incentive Project, there are over 1200 zero-emission trucks deployed in the United States. Over 700 of those zero-emission trucks are in California with pending orders over 1200, and there are 145 zero-emission truck models available for purchase which is a 625 percent increase since 2019.

Investing in a workforce for this heavy-duty market segment is critical given the impact of pollution reduction from this class of vehicles.

The benefits of investment of clean
transportation programs, workforce training and development includes:

The development of ZEV and ZEV infrastructure career pathways, and high road training partnerships.
The creation of high-quality jobs.
Advocacy for the ZEV industry.
Support for priority community solutions and skills development.
And support for ZEV supply chains. Next slide.

San Diego Community College has been a long-time Energy Commission workforce training-and-development partner. Partnership success of the Clean Transportation Program, its collaboration with the college automotive programs and local dealerships.

This project will augment an existing agreement by $1.8 million and extend the term of the agreement by 24 months to accomplish specific tasks and deliverables.

At the core of the project will be the establishment of medium- and heavy-duty ZEV maintenance and service programs for trucks, buses, and other non-light-duty vehicles. Curricula and training will also include charging and hydrogen refueling.

The project will create an immediate pipeline of trained, certified, and degreed public and private fleet technicians.
Six colleges will see an investment of CEC funds to establish these programs and is aligned with CARB truck and bus deployments. Next slide.

Staff recommends approval of the San Diego Community College District contract amendment. Thank you for consideration of this item.

CHAIR HOCHSCHILD: Thank you.

Let's go to public comment on Item 13.

MS. MURIMI: Thank you, Chair.

For those in the room go ahead and use the QR code in the back of the room or see the Public Advisor. For those that are on Zoom go ahead and use the raised-hand feature, it looks like an open hand at the bottom of your screen or device.

And for those of you calling in go ahead and press *9 to indicate that you'd like to make a comment and *6 to unmute on your end.

We'll start with Jonathan Kropp, apologies if I've misstated your name. Go ahead and state and spell your name, give your affiliation if any, and you have three minutes or less to give your comment. Thank you.

MR. KROPP: Good afternoon, it's Jonathan Kropp, J-O-N -- I just go by Jon -- K-R-O-P-P, and I'm representing San Diego Community College District. And I've been overseeing the CEC projects over the last four
years here.

CHAIR HOCHSCHILD: I’m sorry, Mr. Kropp, if you could speak up, it’s a little hard to hear you.

MR. KROPP: Sorry about that.

CHAIR HOCHSCHILD: Thank you.

MR. KROPP: Sure, sorry for that. San Diego Community College Districts have been overseeing our CEC projects for the last four years. So far, we have received two rounds of funding for zero-emission vehicle training enhancement program primarily supporting our light-duty vehicles. And I just wanted to present some quick figures from those past rounds.

Thus so far, we’ve had 22 colleges funded; approximately 2,700 students a year continue to benefit from the equipment, supplies, and critical modifications; over 156 faculty received professional development; 260 incumbent transfer workers were trained; 41 ZEV training vehicles were purchased; 48 courses created or modified; and 7 certificates or degrees were created, which are comprised of multiple courses. So as you can see the CEC support has gone a long way to benefit California workforce in the zero-emission space.

However, since the vast majority of the funding has been allocated toward light-duty vehicles we’ll now need to start focusing on investments on medium- and heavy-
duty programs in order to meet California’s workforce demands as well as CARB’s Advanced Clean Truck Program, requiring all new medium- and heavy-duty vehicles sold in California to be ZEV by 2045.

Out of approximately 26.6 million vehicles registered in California there's about 1.5 medium- and heavy duty trucks. So despite this small vehicle population, trucks are responsible for over 70 percent of the smog pollution, thus illustrating the importance of the transition as well as investment in the workforce work capacity.

The community colleges have over 20 programs throughout the state that are primed to support the state mandates for zero-emission medium- and heavy-duty vehicle adoption. But because of the expensive nature of these programs faculty find it extremely difficult to secure funding for these new technologies needed to support technicians in this industry.

So if approved, and like Larry mentioned, the augmentation would provide income and worker training to fleets, provide program improvement funding for up to 6 colleges throughout the state, which would allow them to invest in new curriculum and training materials needed to support that emerging market.

Lastly, I’d just like to thank the Commissioners
for their support on this item. And specifically I’d like
to thank Commissioner Patty Monahan for her continued
support in workforce training and development, and the
continuation of this agreement in the heavy-duty ZEV space.

MS. MURIMI: Thank you.

Seeing no other comments, Chair, back to you.

CHAIR HOCHSCHILD: Thank you.

Let's go to Commissioner discussion, starting
with Commissioner Monahan.

COMMISSIONER MONAHAN: Well, I was thinking Chair
on the heels of Battery Day when we heard from all these
battery manufacturers that one of their number one concerns
was lack of a skilled workforce. And when it comes to
zero-emission vehicles we need to make sure there is a
workforce ready to deal with the vehicles that are here,
and while creating really good jobs for people who need it.

So I just think this series, I mean, we got a lot
of strong support from our advisory committee and from
other stakeholders that workforce training is really
important, and to businesses across the state as well. So
I’m just very strongly supportive of the grant, the whole
basket of grants -- this, and the next item that Larry is
shepherding.

CHAIR HOCHSCHILD: Thank you. Any comments
Commissioner Gunda? Okay hearing none, I’d welcome a
motion on Item 13 from Commissioner Monahan.

    COMMISSIONER MONAHAN:  I move Item 13.

    CHAIR HOCHSCHILD:  Thank you.  Vice Chair Gunda?

    VICE CHAIR GUNDA:  I second Item 13.

    CHAIR HOCHSCHILD:  All in favor say aye.

    Commissioner Monahan?

    COMMISSIONER MONAHAN:  Aye.

    CHAIR HOCHSCHILD:  Vice Chair Gunda?

    VICE CHAIR GUNDA:  Aye.

    CHAIR HOCHSCHILD:  And I vote aye as well.  That item passes unanimously.

    Thank you, Larry.  I appreciate your work.  And we’ll turn now to Item 14, IDEAL ZEV Workforce Pilot.

    MR. RILLERA:  Great.  Good afternoon, Chair and Commissioners.  My name is Larry Rillera.  I am staff with the Fuels and Transportation Division at the California Energy Commission.  I will be presenting Item Number 14, seeking approval of nine agreements as a result of this solicitation.  Next slide.  Thank you.

    The IDEAL ZEV Workforce Pilot solicitation was released in October of 2021 as a competitive solicitation with over $6 million in available funding.  Fourteen projects are proposed for award for a total of $6.5 million in funding.  Nine agreements are recommended for funding today.
The solicitation is a partnership with the California Air Resources Board. CARB contributed $1 million to project work and is building staff capacity for clean transportation workforce training and development.

Benefits of the solicitation include:

- The development of ZEV and ZEV infrastructure career pathways.
- The creation of high roads and high-quality jobs.
- Advocate for the ZEV industry and supply chain businesses.
- And support for priority community solutions and skills development. Next slide.

The first project is a proposed agreement with Fresno City College for $500,000. The project will establish a dual enrollment program and will establish new automotive programs for zero-emission vehicles at three Fresno area high schools. The purpose of the project is to orient lower-income communities to ZEVs and ZEV careers.

Fresno City College will leverage an existing advisory committee structure for curricula development, training, and position graduates for high-road careers.

Well, I would also note that this project will continue past the project agreement period. Next slide.

The second project is with the Housing Authority of the County of San Joaquin for $500,000. This low-income
A resident-focused trainee project will leverage existing community resources and educational partners to provide training on ZEV skills development. Approximately 75 trainees will participate in the project where the Housing Authority estimates that trainees will be placed into 70 jobs after the training. Next slide.

The third project is a proposed agreement with the County of Los Angeles for $499,530. The project will train municipal electricians on EV charger installation, operation, service, and end-of-life replacement.

The project is modeled after the Energy Commission’s successful partnership with the California Conservation Corp launched last year.

A goal of the project is to provide municipal electricians with Electric Vehicle Infrastructure Training Program training and certification as they prepare to meet the state’s ZEV goals. The project anticipates approximately 100 trainees and 60 jobs. Next.

The fourth project is a proposed agreement with the National Indian Justice Center for $500,000. The project will establish the Tribal ZEV Training Project in partnership with California Native American Tribes located in Humboldt and San Diego Counties.

Project partners include the Electric vehicle Infrastructure Training Program and the California Transit
Training Consortium.

The project anticipates creating 80 new jobs.

Next.

The fifth project is a proposed agreement with the Cal State University Long Beach. The project will establish a new ZEV Engineering Training Program comprised of classroom and laboratory education, with hands-on-training as well. The project will also provide tuition assistance and support for lower-income students. Next slide.

The sixth project is a proposed agreement with Los Angeles Pierce College for $500,000. The ZEV Training Program will span three existing college programs for automotive, electronics, and environmental disciplines. Tuition assistance and support will be provided for lower-income students to participate in the program.

The project will leverage an existing advisory committee for curricula development, training, and preparation for job placement, expecting approximately 130 jobs. Next.

The seventh project is a proposed agreement with Cal State University Los Angeles. The California ZEV Engineering Workforce Pilot will focus on hydrogen and will leverage their existing hydrogen refueling station located on campus for hands-on-training.
Tuition assistance will also be available for lower-income students. Next.

The eighth project is a proposed agreement with Green Paradigm Consulting for $250,000. The Electric Vehicle Military Service Pilot Project will train California veterans, disabled veterans, and military personnel transitioning out of service and active duty to become EV Charging Technicians.

Significant project partners that will lead these technicians into EV charger jobs include VetJobs, a military job placement entity, and The Next Education, a small, women-owned business that specializes in online technical education. About 50 trainees are expected to participate. Next.

The ninth and final project is a proposed agreement with West Oakland Job Resource Center for $350,000. The Greening the Transportation, Distribution, and Logistics Industry Project is a partnership with the Northern California Teamsters Apprenticeship Trust that will provide instruction and hands-on-training for heavy-duty ZEV technologies. Training will lead to certification and place trainees into good quality jobs in the freight sector. The project expects about 100 trainees. Next.

Staff recommends approval of all nine agreements as noted. Staff also recommends a determination these
actions are exempt from CEQA. Thank you for your
consideration of these items and would note that
representatives from a couple of the projects are present.

CHAIR HOCHSCHILD: Thank you, Larry.

We’ll go to public comment.

MS. MURIMI: Thank you, Chair.

For individuals in the room, go ahead and use the
QR Code and the room or see the Public Advisor at the back
of the room.

For individuals on Zoom go ahead and use the
raised-hand feature, it looks like an open palm or a high-
five at the bottom of your screen or device.

And for those calling in go ahead and press *9 to
indicate that you’d like to make a comment and *6 to unmute
on your end.

Once called go ahead and unmute on your end,
state and spell your name, give your affiliation, if any.
You have three minutes or less per person, one person per
organization.

We’ll start with Tarecq Amer, and apologies if
I’ve misstated your name. Go ahead and state and spell
your name and your affiliation.

MR. AMER: Good afternoon, Commissioners, my name
is Tarecq Amer. The first name is spelled T-A-R-E-C-Q, the
last name is A-M-E-R. I am the Program Director at the
West Oakland Job Resource Center.

About three years ago, three-and-a-half years ago, we started an initiative with the Teamsters, an NCTAT, which is their training arm, to develop a pre-apprenticeship program and an affiliated apprenticeship program focusing on the transportation, distribution, and logistics industry. We have since grown that program considerably. And in that period have determined that there is a lot that needs to be done that is specific to the environmental impact of the industry itself, as I’m sure everybody in the room knows.

TDL has been historically an industry that’s ignored or, even worse, has contributed to the crisis of global climate change. It’s also, however, right now an industry that’s poised to undergo fundamental change to meet the challenges by shifting from energy sources that are exacerbating our position to ones that are green energy sources.

Our work in this project aims to train workers to be fully competent and conversant in participating in the transition to zero-emissions energy sources. Our trainees will gain expertise in the use of battery electric energy for a host of different port and TDL-related operations, from forklifts going all the way up to trucks, battery-electric trucks.
As the Port, and by extension its tenants -- the Port of Oakland, that is -- and its tenants rise to meet the challenge of global climate change, the West Oakland Job Resource Center will train up a strong workforce to ensure that businesses are positioned to move goods in a far less detrimental way.

We’d like to thank the Commissioners, all of them, for their support on this. And specifically, we would like to thank Commissioner Monahan for her support of workforce training as it pertains to the TDL industry, and we look forward to doing work with you. Thank you.

MS. MURIMI: Thank you, Tarecq.

Next, we have the National Indian Justice Center. Please state and spell your name, give your affiliation, and give your comment. (No audible response.) Apologies, yes.

MS. MYERS: Sorry, I hit that unmute button a second time. I'll start over. The first name is Raquelle, R-A-Q-U-E-L-L-E, last name is Myers, M-Y-E-R-S. I’m the Executive Director for the National Indian Justice Center and I'm a member of the Pinoleville band of Pomo Indians located in Mendocino County in Northern California. And I just want to thank everybody for supporting our proposed project, which is the Tribal Zero-Emissions Vehicle Training Project. And we're proposing to serve 23 tribes
across two counties, the county of Humboldt and San Diego, over an 18-month period. The project itself is a pilot that will use existing workforce training curricula. And our hope is to provide a career pipeline from tribal communities into the ZEV industries and occupations.

Tribal communities are primary champions, if you will, for climate protection and making sure that clean energy is available. But we often have lacked the resources to participate fully. And we're hoping that this project will bring training and education to tribal communities and allow them to work on this important issue from their communities and support the long-term goals of the State of California.

For this project we're hoping to address the short-term goal of training and developing the ZEV occupations pipeline. But it’s a long-term goal, so to increase awareness and skills to provide a future foundation for expanded tribal transit routes using zero-emission vehicles to connect to existing transit routes.

These existing transit routes often do not reach tribal communities. And the funding and resources available to create those linkages between those transit points is often hard to come by. So we're hoping that as tribes are able to focus on those resources and bring them to bear for the betterment of all communities, that they
can do that with ZEV vehicles.

So it's our hope that this project, once funded, will bring a lot of multifaceted results to tribal communities as well as to surrounding communities.

I just want to thank you all for your support for this particular project, and particularly thank Commissioner Monahan for your workforce training, work and your support of tribes in accessing clean transportation.

Thank you.

MS. MURIMI: Thank you, Raquelle.

Chair, there are no more comments.

CHAIR HOCHSCHILD: Thank you.

Let's go to Commissioner discussion, beginning with Commissioner Monahan.

COMMISSIONER MONAHAN: Well, I just really appreciate the range of different grantees in this space. And congratulate Larry in partnership with the Air Resources Board. I think the fact that they ponied up funds for this shows, also the shared commitment that we have to making sure there's a trained workforce with a strong focus on equity. And I mean to have a partnership with tribes, with labor, the military, the transportation distribution logistics -- which is hard to say, that's a mouthful -- industry. And the fact that we're looking at junior colleges, Cal State, just all these different -- the
range of different opportunities here to cultivate a ZEV workforce with a kind of attentiveness to equity is really just manifested by this package of grants.

So people who have been thanking me, I would say, “Thank all the stakeholders who have informed us and advised us.” And Larry, his leadership in particular I want to just commend for his thoughtfulness in this space. So I’m strongly supportive of this series of grants.

CHAIR HOCHSCHILD: Thank you.

Yes, Vice Chair Gunda.

VICE CHAIR GUNDA: I just wanted to note thanks and appreciation to Larry and the FTD team for the workforce development work that you’re doing. And Larry, you’ve been really good at bringing a lot of different voices to the table in developing these things and I just really appreciate the diversity and the engagement that you’ve been able to do in this space, so thank you for your work.

Commissioner Monahan, thank you for your leadership on this. I’m looking forward to supporting the item.

CHAIR HOCHSCHILD: Thank you. With that I’d welcome a motion on Item 14 from Commissioner Monahan.

COMMISSIONER MONAHAN: I move Item 14.

CHAIR HOCHSCHILD: Is there a second from Vice
Chair Gunda?

VICE CHAIR GUNDA: Second.
CHAIR HOCHSCHILD: All in favor say aye.

Commissioner Monahan?

COMMISSIONER MONAHAN: Aye.
CHAIR HOCHSCHILD: Vice Chair Gunda?
VICE CHAIR GUNDA: Aye.
CHAIR HOCHSCHILD: And I vote aye as well. Item 14 passes unanimously.

We’ll turn now to Item 15, NORESCO, LLC.

Elizabeth Thomsen.

MS. THOMSEN: Good afternoon, Chair and Commissioners. My name is Elizabeth Thomsen, and I am the Contract and Grant Analyst for the Efficiency Division. Today I will be presenting Items 15 and 16.

The first of these, Item 15, is a request to approve a $7.5 million three-year agreement with NORESCO, LLC, to provide the Building Standards Office with Energy Code research and analysis support and development. Next slide, please.

This three-year NORESCO agreement will provide the highly specialized technical support essential for developing, updating, and maintaining the California Energy Code for nonresidential, single-family residential, and multifamily buildings.
It will also advance two major state energy efficiency goals of building decarbonization in newly constructed residential and nonresidential buildings. And decreasing energy consumption by 30 to 70 percent in existing residential and nonresidential buildings. Next slide, please.

Work on this three-year architectural and engineering agreement will focus on the development and implementation of the 2022 and 2025 Energy Code updates; maintenance and enhancements to the 2019 Energy Code update; and preliminary work on future Energy Code updates, 2028 and beyond.

Co-funding for this agreement is $6 million from the Energy Research Program Account, or ERPA, and $1.5 million from the Cost of Implementation Account, or COIA funds. Next slide, please.

The proposed scope of work with NORESCO includes three core tasks:

Nonresidential and Residential Energy Code Updates.

Measure Identification and Analyses, respectively.

And Energy and Climate Accounting Methodologies for the Energy Code.

Together these tasks provide the technical
resources needed to help the CEC develop future Energy Code updates. Next slide, please.

I recommend approval of the NORESCO agreement to provide the Efficiency Division with Energy Code research and analysis support and development. Thank you for your consideration. I am available for questions.

CHAIR HOCHSCHILD: Thank you. We’ll go to public comment on Item 15.

MS. MURIMI: Thank you, Chair.

For those in the room you can use the QR Code in the back of the room or reach out to the Public Advisor at the back of the room.

For those on Zoom go ahead and use the raised-hand feature, it looks like a high-five or open palm at the bottom of your screen or device.

For those calling in go ahead and press *9 to raise your hand and *6 to unmute on your end.

Seeing no comments, Chair, back to you.

CHAIR HOCHSCHILD: Okay, no comments from me on this. Oh yeah, go ahead Vice Chair Gunda.

Vice Chair Gunda: Yeah, just thank you for that presentation. Just one quick question, Elizabeth, if you're able to answer? I see one of the tasks mentioned kind of the climate impacts are into the analysis, could you expand on what the task is a little bit?
MS. THOMSEN: Yes, I can get that for you. Let me grab that. I apologize, I don't have it in front of me.

VICE CHAIR GUNDA: Okay, no problem. It’s just more of an ask to just coordinate with the Forecasting team to the extent that there are climate impacts baked into the building analysis. It will be helpful to coordinate what the assumptions are to help with the forecasting elements, so I just wanted to connect that dot. That’s it. Thank you.

CHAIR HOCHSCHILD: Unless there are other Commissioner comments, I'd welcome a motion from Vice Chair Gunda on Item 15.

VICE CHAIR GUNDA: Yeah, I'll move Item 15.

CHAIR HOCHSCHILD: Is there a second from Commissioner Monahan?

COMMISSIONER MONAHAN: I second.

CHAIR HOCHSCHILD: All in favor say aye. Vice Chair Gunda?

VICE CHAIR GUNDA: Aye.

CHAIR HOCHSCHILD: Commissioner Monahan?

COMMISSIONER MONAHAN: Aye.

CHAIR HOCHSCHILD: And I vote aye as well. Item 15 passes unanimously.

We’ll turn now to Item 16, Bruce A. Wilcox, P.E. Incorporated. Elizabeth.
MS. THOMSEN: Good afternoon, Chair and Commissioners. My name is Elizabeth Thomsen, and I am the Contract and Grant Analyst for the Efficiency Division. I will now present Item 16. This is a request to approve a $4.5 million three-year agreement with Bruce A. Wilcox, P.E. Incorporated, to provide the Building Standards Office with Energy Code Compliance software support and development. Next slide, please.

This three-year Wilcox agreement will provide the highly specialized technical support essential for developing, updating, and maintaining residential and nonresidential compliance documents, performance modeling tools, and related materials to support the California Building Energy Code Compliance, or CBECC, software.

It will also advance two major state energy efficiency goals of building decarbonization in newly constructed residential and nonresidential buildings. And decreasing energy consumption by 30 to 70 percent in existing residential and nonresidential buildings. Next slide, please.

Work on this three-year architectural and engineering agreement will help fulfill regulatory requirements associated with the Energy Code, including delivery of free public domain software certified for compliance with the Energy Code, also known as CBECC.
Energy Code supporting documents, such as compliance manuals, reference manuals, and compliance forms; and Other tools that help provide compliance flexibility, data collection, and field verification. Funding for this agreement is from the Cost of Implementation Account, or COIA funds. Next slide, please. The proposed scope of work with Wilcox includes three core tasks: Energy Standards Software Tools Development and Maintenance. Enhancing and Supporting Data Exchange Infrastructure for the Energy Code. And Software Tools Documentation and Deployment. All these tasks together are essential for the building industry to demonstrate compliance with the Energy Code. Next slide, please.

I recommend approval of the Wilcox agreement to provide the Efficiency Division with Energy Code Compliance software support and development. Thank you for your consideration. I am available for questions.

CHAIR HOCHSCHILD: Thank you.

Let’s go to public comment.

MS. MURIMI: Thank you, Chair.

For those in the room, go ahead and use the QR Code in the back or reach out to the Public Advisor.
For those on Zoom go ahead and use the raised-hand feature, it looks like an open palm at the bottom of your screen or device.

And for those calling in press *9 to raise your hand and *6 to unmute.

We have Paul Sumal. (No audible response.) Paul Sumal? He may be having technical difficulties. Please reach out to the Public Advisor’s Office at publicadvisor@energy.ca.gov to relay your comments or give your comments at the general public comment period near the end of the business meeting.

And we'll try that once more, Paul Sumal, your line is unmuted.

MR. SUMAL: Yeah, go ahead. Can you hear me?

MS. MURIMI: Yes, we can.

MR. SUMAL: Well, what’s happened? I don't know. I wasn’t planning to make any comment. But I must have pressed something.

MR. SUMAL: Thank you, Paul.

All right Chair, back to you.

CHAIR HOCHSCHILD: Thank you. We’ll go to Commissioner discussion. I support the item. Unless there's other comments, I’d welcome a motion from Vice Chair Gunda on Item 16.

VICE CHAIR GUNDA: I'll move Item 16.
CHAIR HOCHSCHILD: Is there a second from Commissioner Monahan?

COMMISSIONER MONAHAN: I second.

CHAIR HOCHSCHILD: All in favor say aye. Vice Chair Gunda?

VICE CHAIR GUNDA: Aye.

CHAIR HOCHSCHILD: Commissioner Monahan?

COMMISSIONER MONAHAN: Aye.

CHAIR HOCHSCHILD: And I vote aye as well. Item 16 passes unanimously.

We’ll turn now to Item 17, Advancing Cost and Efficiency Improvements for Low Carbon Hydrogen Production.

MR. LASAM: Good afternoon, Chair, Vice Chair, and Commissioners. My name is Baldomero Lasam and I’m a mechanical engineer in the Energy Research and Development Division. This is a total of four recommended projects for this solicitation, but today I’m requesting approval for two agreements. The goal of this solicitation and the projects recommended today is to advance emerging hydrogen production technologies that achieve cost-competitiveness with fossil-based steam methane reforming pathways and displace the use of fossil natural gas. Next slide, please.

As shown in the graph the vast majority of hydrogen in the United States emanates from steam methane...
reforming processes using fossil fuels, mostly natural gas. The conventional steam methane reforming process produces greenhouse gas emissions that do not align with the decarbonization goals of California, providing an area of need in which emerging renewable hydrogen production technologies could provide a solution.

These recommended projects will reduce greenhouse gas emissions in the state by developing and deploying novel pathways or processes that displace the use of conventional fossil-based steam methane reforming. Instead, these projects utilize 100 percent renewable feedstock to produce low-carbon hydrogen.

The research and development efforts will advance approaches that will reduce costs and increase adoption of low-carbon hydrogen production technologies.

Lastly, these projects will inform future deployment strategies to support upscaling and commercialization and to identify areas for further technology improvement. Next slide, please.

The project with The Regents of the University of California Los Angeles Campus will develop a bench-scale technology that leverages a concentrated solar energy to convert renewable biogas into low-carbon hydrogen and a high value form of solid carbon that can be used for multiple applications.
As opposed to steam methane reforming that uses multiple expensive catalysts to convert natural gas into hydrogen, the project’s novel approach will use the deposited solid carbon to serve as a catalyst to decompose the biogas and convert it to hydrogen, which eliminates the complexity of the process, reduce the costs and increase the durability limits of the system. This method is a first-of-its kind that releases zero direct greenhouse gas emissions, potentially making it a carbon negative process.

The project with Technology and Investment Solutions will develop and deploy a pilot-scale low-carbon hydrogen production system that will integrate proven process components consisting of a catalytic reforming system, a water gas shift reactor, pressure swing adsorption system, and hydrogen storage systems. These components will be installed with an existing food waste digester in Phelan, California, to convert waste biogas into low carbon hydrogen.

The synergistic interaction of these components will significantly reduce greenhouse gas emissions by eliminating the conventional use of biogas compressors and gas treatment components and increase hydrogen conversion efficiency by enhancing biomethane production.

In addition, the proposed method will increase hydrogen production and achieve high hydrogen purity.
allowing for pipeline injection or local distribution.

Next slide, please.

Both recommended projects aim to provide cost-parity with fossil-based steam methane reforming, benefitting California’s gas ratepayers. Staff recommends approval of these grant awards and adoption of staff's determination that these projects are exempt from CEQA.

Thank you and I'm available for any questions.

We'll go public comment on item 17.

MS. MURIMI: Thank you, Chair.

So individuals in the room, go ahead and use a QR code or reach out to the Public Advisor.

For individuals on Zoom go ahead and use the raised-hand feature at the bottom of your screen or device, looks like an open palm or a high-five.

For those calling in go ahead and press *9 to indicate you'd like to make a comment and *6 to unmute.

Giving that one moment. Seeing no comments Chair, back to you.

CHAIR HOCHSCHILD: Unless there's -- oh well sorry, Commissioner Monahan did you want to speak to this?

COMMISSIONER MONAHAN: Well, it's just a brief comment that California has really been invested, as we all know, for a long time in hydrogen for transportation. Now I think the focus is expanding to exploring what it means
for the grid, what it means for long duration storage, even
direct combustion is being considered. And yet the
production of the hydrogen is a key piece of this to make
sure that it's low carbon.

And I think as the state looks for ways to get a
hydrogen hub in California, the fact that we're ponying up
so much more money than any other state on the production
side, on the use side, and really trying to figure out how
we scale and how we produce truly low carbon hydrogen. The
RNG to hydrogen is one pathway. Electrolysis is another
pathway to get to really deep decarbonization of hydrogen.
So just I’m supportive of the ways that California is
really trying to advance the technology and make sure that
it is low carbon, truly low carbon.

CHAIR HOCHSCHILD: Yeah, I would just echo that
and say that we are, again, fully supportive of a hydrogen
hub in California and getting this introduction money into
the state and support the efforts of GO-Biz in particular
on that. But generally I’m still very mindful that 95
percent of hydrogen that’s in use today does come from
fossil. And we’ve talked a lot about hydrogen, but that
you're not getting an environmental advantage when it’s
from fossil, so we really have to pursue these other
avenues. So I’m pleased to support this today.

I’d welcome a motion on Item 17 from Commissioner
COMMISSIONER MONAHAN: I move Item 17.

CHAIR HOCHSCHILD: Is there a second from Vice Chair Gunda?

VICE CHAIR GUNDA: Second Item 17.

CHAIR HOCHSCHILD: All in favor say aye.

Commissioner Monahan?

COMMISSIONER MONAHAN: Aye.

CHAIR HOCHSCHILD: Vice Chair Gunda?

VICE CHAIR GUNDA: Aye.

CHAIR HOCHSCHILD: And I vote aye as well. Item 17 passes unanimously.

We’ll turn now to Item 18, The Next EPIC Challenge: Reimagining Affordable Mixed-Use Development in a Carbon-Constrained Future. Rachel Salazar.

MS. SALAZAR: Hello, Commissioners. I’m Rachel Salazar with the Market Facilitation Office in the R&D Division. I'm here requesting approval of 3 awards, totaling approximately $3 million, and stemming from our solicitation titled, “Next EPIC Challenge: Reimagining Affordable Mixed-Use Development in a Carbon-Constrained Future.”

We did receive approval of the initial 9 projects at the April business meeting, so these will round out the last of the 12 in the design phase. Next slide, please.
The expected benefits to California stemming from this solicitation include providing a suite of technologies and design plans for decarbonized, affordable mixed-use developments that can improve grid reliability; demonstrate the value of emerging grid-interactive technologies; and provide economical approaches for developers.

And I'll provide some additional project benefits later in the presentation. Next slide, please.

The Next EPIC Challenge seeks to address two of the major issues facing California, climate today, change and the shortage of affordable housing, while at the same time trying to accelerate achievement of the state’s building decarbonization goals.

There are several benefits to co-locating residential and commercial or office spaces, especially those in more dense urban areas. However, technical and economic challenges continue to stand in the way of decarbonizing these buildings.

The Next EPIC Challenge provides a two-phase competition for multi-disciplinary teams to overcome these challenges to design and ultimately build a mixed-use development that incorporates four primary goals: Adoption of advanced clean energy technologies across onsite generation, storage, and load management that leverages innovations supported by the EPIC program.
Integration of advanced practices in the planning, design, and construction to help lower the cost and lead-time for these projects.

Development of sustainable business models to ensure a good mix of market-rate and affordable housing that avoids gentrifying existing neighborhoods.

And finally, protection against the impacts of climate change and extended power outages. Next slide.

To ensure projects meet the solicitation goals, there are several minimum requirements for the development’s site and design.

For example, the mixed-use must include residential space.

And at least 20 percent and 10 percent of the residential units must be available as affordable and lower-income housing, respectively.

Developments must be all-electric with a capability to “island” from the grid and prioritize different loads that will be powered by onsite resources.

DER assets must be integrated with aggregation platforms.

And finally, at least 20 percent of parking spaces must include EV-charging that can respond to grid- and building-signals. Next slide.

This slide provides a summary of how the funding
was allocated to different regions across the state as well as the intended number of awards in both the design and building phases. Again, we are concentrating on the design phase today. Next slide.

The first project is planned for San Jose and will be led by the Association of Energy Affordability, a nonprofit recognized as one of the foremost advocates for multifamily energy efficiency across the country. Their project, Harmonized Resilience at Roosevelt Village, is a proposed 100 percent affordable development with 175 units per acre, which is 5 times the solicitation’s minimum for housing density.

With this, the project represents an opportunity to identify cost-effective pathways to addressing the unique energy generation, noise, and indoor air quality challenges inherent in the planning of a dense, urban, mixed-use development.

The project team is also seeking to contribute replicable ownership models for the large amounts of behind-the-meter energy assets, as well as provide dispatch strategies that are appropriate for affordable housing developments more broadly.

These will be provided in an open-source guide to affordable housing projects that are intended to be adaptable. And the guide will lead users through a menu of
available technologies and best-practice solutions based on each development’s unique parameters, including the building height and construction type, residential population and non-residential programs, and standardized performance metrics that align with the housing development’s priorities. Next slide.

Next up, Self-Help Enterprises will lead the design of an affordable housing complex, comprised of 120 rental units for low and very low-income tenants, as well as a community center which will serve as a cooling center and emergency response hub during power outages and natural disaster incidents.

The team will assess a variety of Passive House design elements, with a lens towards affordability. Also, because drought is so prevalent in the Central Valley, the team will consider different landscaping designs such as using bioswales and a sand filter for water reusage.

Finally, Self-Help is planning to use this design as a new prototype for future developments. Next slide.

And last but not least, the SoLa Impact Opportunity Zone Fund, an urban real estate fund, will lead the design for approximately 75 units with community support facilities on a ground-up development being planned for a church-owned property in Compton. The planned
residential units include one-bedroom rental apartments as well as three-bedroom townhomes designed to be sold to low-income households to build enabling increased equity for home ownership.

Community support facilities include a childcare center, cooperative kitchen space, and social gathering areas.

The project also plans to design for a microgrid that will power a multi-purpose community room, enabling it to act as a local resilience hub in the case of power outages.

Excess power could be used by the residents to power their electric vehicles, saving on the cost of electricity and encouraging the adoption of electric vehicles. Next slide.

And with that, staff recommends approval of these grant agreements and staff’s findings that these projects are exempt from CEQA. Thank you for your consideration and I’m available for comments.

CHAIR HOCHSCHILD: Thank you so much, Rachel.

We’ll go to public comment on Item 18.

MS. MURIMI: Thank you. Thank you, Chair.

For individuals in the room, go ahead and use the QR code or reach out to the Public Advisor.

For those on Zoom go ahead and use the raised-
hand feature, it looks like an open palm or a high-five at
the bottom of your screen or device.

And for those calling in press *9 to indicate
that you'd like to make a comment and *6 to unmute.

We have Kristin Ainley.

MS. AINLEY: Hi. Good afternoon, I'm Kristin
Ainley from Self-Help Enterprises.

On behalf of Self-Help Enterprises --

MS. MURIMI: Apologies, Kristin. We can't hear
you very well.

MS. AINLEY: Hello, can you hear me?

CHAIR HOCHSCHILD: Yeah, Kristin, we can hear you
but just barely. If you could speak up that'd be great.

MS. AINLEY: Okay. Hi, I'm Kristin Ainley with
Self-Help Enterprises. On behalf of Self-Help Enterprises
our project partners and the low-income families we serve,
we really wanted to thank the California Energy Commission
for this award.

We have a strong commitment to sustainability
efforts and energy conservation, but our ability to utilize
new and emerging technologies is often constrained by a
lack of funding. So this grant allows us to test a
building product we've constructed in over 10 rental
communities and analyze how we can make improvements to
conserve energy and be more efficient.
This also allows the opportunity for us to develop a better community for our low-income residents, including reduced operating bills, education on energy use and consumption patterns, and a more sustainable-built environment.

So we're excited and eager to move this project forward in partnership with the CEC. Thank you for this opportunity.

MS. MURIMI: Thank you, Kristin.

Chair, there are no more comments.

CHAIR HOCHSCHILD: All right. Well, let me thank you Rachel and your team for the work on this. I love this portfolio of projects. I love the geographic diversity. I love the partnership with all these entities, all of whom are highly regarded, including Self-Help in my view. And I love the vision around both electrification and water conservation. I think this is a grand-slam proposal, very thrilled to support it. And I also I think it's just comprehensive.

There's a few of these projects that really tie together all the pressing needs for housing, for building without fossil fuels in a way that conserves water. And this really checks all the boxes, so I'm thrilled to support.

I just want to recognize all the hard work. I
know when you get these kinds of proposals that we just saw in transportation that are so comprehensive there's a lot of staff work involved to line those up, so I see that, we see that, thank you for all the prep, it really --

I just want to say, again public agencies are only as good as the people in them. And these jobs do not pay as well as the private sector. There are all kinds of challenges. But we're hitting home runs as an agency right now, I really feel that we're getting seen for that progress. And we're getting the largest infusion of resources, the biggest budget we've ever had in our nearly 50-history. And that's because of the team, that's because of the staff that are working on this.

And executing success, I really believe success begets success. And so this is exactly the kind of thing that's important in its own right, but it also paves the way for more. So I just really want to commend the team, and this is really a broader comment than just for this project. I just am sitting here, reading through this whole agenda, and all the agendas we've been approving lately, I mean, we're firing on all cylinders -- oh, I should probably have electrification a more appropriate analogy -- we're hitting the electric accelerator particularly well, I would say, so I just want to commend the whole team.
And I would welcome if there’s any comments from -- Vice Chair Gunda, please go ahead.

VICE CHAIR GUNDA: I just want to say thank you and extend my gratitude. Rachel, nice to see you, thank you for all the work to you and the R&D team on this. It’s just really important as the Chair mentioned. These are the kind of projects that really allow us to think about more integrated systems and really think about how we transition into the future, so wonderful work. Thank you.

CHAIR HOCHSCHILD: Great. I would welcome a motion from Vice Chair Gunda on Item 18.

VICE CHAIR GUNDA: Yeah, I'll move Item 18.

CHAIR HOCHSCHILD: Is there a second from Commissioner Monahan?

COMMISSIONER MONAHAN: I second.

CHAIR HOCHSCHILD: All in favor say aye. Vice Chair Gunda?

VICE CHAIR GUNDA: Aye.

CHAIR HOCHSCHILD: Commissioner Monahan?

COMMISSIONER MONAHAN: Aye.

CHAIR HOCHSCHILD: And I vote aye as well. That item passes unanimously. Congratulations.

MS. SALAZAR: Thank you, Commissioners.

CHAIR HOCHSCHILD: Let's move on to Item 19, Lawrence Berkeley National Lab.
MR. THIND: Good morning afternoon Chair, Vice Chair, and Commissioners. I am Dr. Maninder Thind. I am an Air Resources Engineer in the Energy Research and Development Division. Today I am requesting your approval of one agreement resulting from a solicitation intended to support a randomized trial study to investigate the impact of kitchen electrification on children with asthma in under-resourced communities within California.

Next slide, please.

The proposed agreement, “Cooking Electrification and Ventilation Improvement for Children’s Asthma” with Lawrence Berkeley National Lab, will quantify the indoor air quality and health impacts of cooking electrification and other interventions on asthmatic children.

This research which will help guide policies related to building electrification, investments in low-income housing retrofits, and asthma and healthy homes programs to mitigate the environmental and health impacts of energy end uses in California.

The study findings will potentially inform the CEC and other policymakers about the indoor air quality and health impacts of cooking electrification when considering an all-electric building standard.

Given the proposed schedule for the project, initial results are expected by 2025 to inform the 2028
Past research has shown that natural gas-cooking burners introduce air pollutants into the home in quantities that can exceed health hazard thresholds. Pollutants from gas burners include nitrogen dioxide and particulate matter, exposure to which leads to increased risk of breathing and respiratory problems. Both gas cooking and household nitrogen dioxide levels are thought to contribute to asthma and other breathing symptoms in children. Thus, there is a potential for cost savings if childhood asthma prevalence and emergency healthcare utilization can be reduced through electrification and other exposure mitigation interventions.

The project invests in three low-income and disadvantaged communities in the California’s Central Valley, thus contributing to CEC’s goal of equitable energy transitions in California. Next slide, please.

The proposed study with $4 million CEC funding and a $400k cash match commitment from US DOE will be conducted in and around the communities of Bakersfield, Fresno, and Stockton.

The study will use a randomized controlled trial method to discern the impacts of multiple interventions in the selected sample of households.

Interventions in the proposed research include...
replacing natural gas with electric induction cooking ranges.

Providing kitchen exhaust ventilation with education on proper use to reduce air pollutant exposures.

And thirdly, displacing use of a gas cooking range with 120-volt countertop, electric cooking appliances as a moderate-cost and scalable intervention that could reach renters and homeowners for whom gas range replacement is not readily feasible.

Education and portable air cleaners as a synergistic mitigation with countertop cooking electrification will be included as well. Next slide, please.

CEVICA is an exciting study that brings together a diverse team of academic institutions, noted in blue, and community-based organizations, noted in green in this flow chart.

The study will be conducted by a very strong team, led by Dr. Brett Singer at LBNL, who is a leader in indoor air quality research. And the team also includes Dr. John Balms, who is the Physician Member of the California Air Resources Board and Professor of Medicine Emeritus at UC San Francisco.

The team includes active participation of community-based organizations representing DACs, for
example, the recruitment of households in this work will be based on the Central California Asthma Collaborative’s established home-based asthma management program. Next slide, please.

So the staff recommends approval for this agreement and adoption of staff's determination that this project is exempt from CEQA. Staff, including myself, are available for any questions you may have. And also Dr. Brett Singer is the PI and Dr. Rangie Chan is the co-PI from LBNL for this project, are also online for answering any questions, relevant questions. This concludes the presentation and thank you for your consideration.

CHAIR HOCHSCHILD: Thank you, Maninder.

Let's go to public comment on Item 18.

MS. MURIMI: Thank you, Chair.

For those in the room you can use the QR code or reach out to the Public Advisor in the back.

For those on Zoom go ahead and use the raised-hand feature, it looks like an open palm or a high-five at the bottom of your screen or device.

And those calling in press *9 to indicate that you'd like to make a comment and *6 to unmute on your end. State and spell your name. You have three minutes or less per person to give your comments. Giving that one moment. Chair, no comments.
CHAIR HOCHSCHILD: Thank you. Well, I’m thrilled to see this. I think we know that indoor air pollution is a major concern, as is outdoor air pollution. And so one of the things that really struck me the last year is looking at this issue is the disparity by income of indoor air pollution. And we have seen studies that suggest up to seven times higher NOx levels in homes that are low-income households that have gas stoves, compared to basically smaller, cheaper oven hoods that are further recessed or are so cheap that they're quite loud. And so people elect not to use the fan when they're cooking and that has health consequences.

As we're working on these issues it is a climate issue, that's true, and it's a significant climate issue. I think the emissions from leakage and fusions emissions from both the distribution and transmission of natural gas are major issues. And leakage in a typical gas appliance, like a hot water heater, will emit up to one half of one percent of the gas that doesn't get combusted. And so that is a climate issue, but this is also a health issue, and we have to remember that.

And I think, particularly an era where air quality can be really poor due to wildfires and extended wildfire season, it's especially important to do everything we can to clean up indoor air pollution and to study that.
And so I’m really pleased to support this one.

I want to thank you, Maninder, you and your colleagues for moving this forward. And unless there are – – Vice Chair Gunda, please go ahead.

VICE CHAIR GUNDA: Thank you, Maninder, thanks for the presentation; very clear. Just to you or the PIs on the call, just on the number of sites that are being planned to recruit is there any engagement strategy? Just kind of thinking through the importance of having good sites for this project. I just want to understand if there is any thinking on that already done

MR. THIND: Great, I can -- and Brett can also chime in, but I can (indiscernible) that the proposal mentions about 160 households in 3 different disadvantaged and low-income communities. And several CBOs, including CCAC, will be partners, which will help in the recruitment of the households in this project.

Brett, if you have any anything to add you are welcome.

MS. MURIMI: Brett Singer.

MR. SINGER: Hello. Can you hear me, okay?

CHAIR HOCHSCHILD: Yes, we can hear you.

MR. SINGER: Perfect, great. Well, thank you very much for this opportunity. We’re very excited about this project, and we thank Maninder and the staff for
developing this solicitation.

A key part of the strategy work with the Central California Asthma Collaborative that runs a very effective and successful home asthma intervention program. So this, one of the key things of this proposal is that we’re going to build on that program rather than trying to displace or compete with it. So we're building on success. That program already recruits many families in those communities working with them, working with the communities themselves, and healthcare providers. So they actually already have contracts to provide those home asthma services. So we would be recruiting from within that population where there's already action and a trust. And then we're also building the resources that are being used and provided by the health plans for supporting those (indiscernible) services.

So this would be the more sophisticated and thorough kitchen ventilation. And thank you for pointing out some of those deficiencies. The electrification, of course, on the stove retrofits and then this other intervention looking at sort of lower-cost cooking electrification in the space, hopefully, has much better gas use as possible.

So we have a really good (indiscernible) as part of the (indiscernible).
VICE CHAIR GUNDA: Yeah. Thank you so much for that. As the Chair mentioned that it's an extremely important topic, right, as we think through the lens of energy transition and equity it's important to think through air quality, you know, air, water, energy, all link together, so thank you so much for this project, looking forward to supporting it. Thanks Maninder.

CHAIR HOCHSCHILD: Thank you. Unless there’s other -- yeah go ahead Commissioner Monahan, please.

COMMISSIONER MONAHAN: Just a quick comment is that it's so rare that we have research that actually is looking at households and tracking over time with children with asthma. Like it's a really unusual study. And I think it could be pretty groundbreaking.

And I just want to commend the team and just the researchers, that this scope and the vision and really helping inform the processes at the Air Resources Board and the Energy Commission to mitigate harmful air pollution, harmful indoor air pollution, so I think it could be a really foundational study. So yeah, congratulations to the team.

CHAIR HOCHSCHILD: And just one other point, because it’s also sort of an indoor air pollution story we should bear in mind, I would argue one of the single greatest public health success stories in our country's
history, is the campaign to reduce smoking.

So in World War II every soldier was given a pack of cigarettes as part of daily rations and so you had a generation of American men come home from the war as smokers. And the population was about 50 percent of Americans smoked and it was everywhere. President Kennedy smoked, doctors smoked, Fred Flintstone used to smoke on the cartoons, Johnny Carson smoked on the Tonight Show. And it was just a -- and then the science came out that hey, smoking causes cancer, secondhand smoke causes cancer. And so that science was instrumental.

And then interestingly what happened next was the tobacco industry in the United States went from manufacturing one product, cigarettes, to manufacturing two products. They manufactured cigarettes and they manufactured doubt. They put $100 million into junk science to distort that basic truth that smoking causes cancer. And they were coming up with all sorts of other ridiculous explanations for why lung cancer was going up the United States.

But ultimately that was beaten back by precisely the kind of thing we're funding now, which is good science and good research. And the result of that is that we went from about half of the population smoking to today it's down to close to 12 percent and falling. And it's really
one of the great, great public health success stories of our country's history.

And I think this is another important source of indoor air pollution that we don't talk a lot about. And I think this will help shine a light on that. So thank you, Maninder, for your work and your team. And I'm pleased to support this.

I would welcome a motion on Item 19 from Vice Chair Gunda.

VICE CHAIR GUNDA: I move Item 19.

CHAIR HOCHSCHILD: Commissioner Monahan, would you second?

COMMISSIONER MONAHAAN: I second.

CHAIR HOCHSCHILD: Second, thank you. All in favor say aye. Vice Chair Gunda?

VICE CHAIR GUNDA: Aye.

CHAIR HOCHSCHILD: Commissioner Monahan?

COMMISSIONER MONAHAAN: Aye.

CHAIR HOCHSCHILD: And I vote aye as well. Item 19 passes unanimously. Thank you.

MR. THIND: Thank you.

CHAIR HOCHSCHILD: We'll turn now to Item 20, CalSEED Concept and Prototype Small Grant Awards.

MR. CROFT: Good afternoon, Chair and Commissioners. Anthony Ng and I are here before you today
to present for your approval a total of 30 small grant
awards under the CalSEED Initiative, which is under EPIC
program funding. Next slide.

Since its inception in 2017, CalSEED has awarded
$21 million to 95 clean energy startups with innovative
technologies. To date, these companies have garnered over
$138M in various types of follow-on funding.

Furthermore, three companies have been acquired
and three have completed series A VC funding rounds. The
growth of these companies can also be measured in terms of
an increase in career opportunities, technology ownership
rights, advancement on the technology readiness level
scale, and successful small-scale validation of the unique
technologies.

In reflection of the CEC’s commitment to
diversity, CalSEED actively conducts outreach to ensure
that the applicant pool is representative of all
Californians, including women, low-income entrepreneurs,
veterans, communities of color, and other underrepresented
groups. Next slide.

CalSEED provides small grants to entrepreneurs
with early-stage clean energy technologies. Applicants
first apply for a $150,000 Concept Award, which also comes
with access to technical resources and business development
expertise. Those that receive a Concept Award are then
eligible to compete for $450,000 additional dollars via a follow-on CalSEED Prototype Award to further develop their innovation.

The awards under consideration today are the fifth round of those $150,000 Concept Awards. I will be presenting on these 23 recommended awardees. Anthony Ng will then present on 7 additional Prototype awardees. Next slide.

CalSEED held its fifth open application period in the fourth quarter of last year and received over 150 applications. CalSEED directed applicants to submit proposals to one of four groups based on their geographic location. There are 5-6 highest ranked applications per region that are up for your consideration today. Next slide.

This application period CalSEED chose new eligible technology categories and specified technologies within each category that was eligible.

For example, the eligible technologies for Renewable Electricity were:

- Technologies to enable offshore wind.
- Improved biomass power generation.
- Enhanced Geothermal systems.
- And Materials manufacturing and module assembly methods for emerging thin-film solar PV, such as
perovskites, quantum dots, and organic semiconductors.

Next slide.

These applications spanned a wide range of innovations over these technology areas. Some were at the concept stage, whereas others had basic prototypes already tested in the lab.

The applications were evaluated for long-term potential impacts, including technical, environmental and social impact, business strategy, and the expertise and experience of the team.

I’ll now overview each of the technology areas and highlight some of the exciting small grants before you today. Next slide.

The first technology group is energy storage. As our grid adds clean generation, next generation energy storage solutions hasten our journey to a carbon-free grid that is consistently available and affordable. The energy storage solutions before you today include a fast-charging and safe, solid-state battery, recycling innovations based on cell packaging, and more.

One interesting innovation is from RCAM Technologies who is developing a long-term energy storage solution for offshore wind, pumping seawater in and out of 3D printed concrete spheres below the ocean surface. Next slide.
Next is EV charging and powertrain technologies. This year we have small grant awards for autonomous chargers, dynamic air injection for better EV trucking range, and an EV charger designed for high-voltage charging while avoiding grid upgrades. Next slide.

Next is our three water technologies. Pumping and desalinating water can use a large amount of energy. OmniFlow is working on more efficient irrigation. SolarFlux wants to make desalination less expensive. And Benchmark Labs wants to save water in our farmlands by being able to better forecast how much moisture will be in the soil. Next slide.

As we move towards 100 percent clean generation, building a diverse set of technologies will help safeguard against changing climate conditions.

One company I will highlight is Horizon PV Incorporated, who is developing an environmentally friendly and recyclable transparent PV technology that can be laminated onto windows or a laptop cover. They will be building a small prototype with their CalSEED award. Next slide.

The last category of CalSEED Concept Awards this year is Energy Efficiency. I’d like to highlight Modulium Incorporated who is seeking to create a refrigeration unit that uses small, modular solid-state Peltier coolers that
can be individually activated to enhance energy efficiency based on the cooling need.

This cooling technology also can reduce GHG emissions by eliminating the need for liquid refrigerants.

In areas that need hot water, this innovation would pre-heat water as well.

All together this is a great batch of Concept Awards that I’m excited to present to you today. I’ll now pass it on to Anthony who will present the Prototype Awards.

MR. NG: Great. Thank you, Josh. Next slide, please.

As mentioned earlier companies who received the initial $150,000 Concept Awards are eligible to compete again for $450,000 in follow-on funding that we call the Prototype Award.

The competition, the business plan competition as we refer to was held at the same time as Concept Award last year, and I will cover the seven Prototype Awards under consideration today. Next slide, please.

First is Tolo, who has developed a remote inspection platform for utility infrastructure. The technology pairs state-of-the-art cameras with unmanned aerial vehicles and collects thousands of detailed photos from every angle of a utility tower. Leveraging Tolo’s
machine-learning techniques, these images are provided to an inspector to give insights into the status and reliability of the asset, resulting in more accurate, sharable, and monitorable inspections that ultimately drive better maintenance decisions and enhanced grid reliability.

Tolo will manufacture and field-test their field-capable minimal viable product as part of their project. Next slide, please.

RePurpose Energy has developed a technology that tests, reassembles, and redeploys used EV batteries for stationary storage applications. RePurpose’s technology is able to precisely measure the health of an EV battery pack in less than 90 seconds using their proprietary machine learning algorithms. The batteries are then reassembled and optimized into new circuitry to maximize safety, efficiency and longevity utilizing the company's novel battery management system.

During the Prototype Award, RePurpose seeks to achieve the necessary UL certifications for both their repurposing process and their product. Next slide, please.

ALD Technical Solutions has developed a lightweight and long-lasting, cost-effective structural composite reinforcement material that, when wrapped around existing transmission lines to increase can help decrease
sag, increase power capacity, and extend lifespan, and improve overall grid. Reliability.

During the CalSEED award ALD seeks to fabricate a robot installer for their composite wrap material and perform a pilot test at a customer site. Next slide, please.

Next is Hago Energetics, who has developed a technology that uses renewable energy to convert agricultural waste to green hydrogen. The technology processes biogas from manure into a novel chemical reactor that produces hydrogen.

During the CalSEED award the project team will demonstrate their technology at a farm, generating data regarding performance metrics and the revenue potential from the generated hydrogen. Next slide, please.

Parthian Energy has developed a new class of advanced electromagnetic sensors that detects internal defects in lithium-ion battery cells by evaluating the change in the battery’s electromagnetic signature. This process helps reduce waste in battery production and can enhance safety by catching defects early in the manufacturing process.

During the CalSEED award Parthian Energy will develop a scalable prototype to demonstrate the feasibility of reducing the duration and cost of battery quality
control, as well as performing pilot tests on battery cell manufacturing lines. Next slide.

Leap Photovoltaics has developed a process to manufacture crystalline silicon cells without wafers. This additive manufacturing approach directly deposits a layer of silicon microparticles on a substrate that is able to absorb light and convert it into electricity, achieving the same performance and reliability as traditional solar cells with up to half the cost.

During the CalSEED award Leap Photovoltaics seeks to demonstrate performance of their device and build their first prototype. Next slide, please.

The last step is Gridware, who has developed a system of low-cost, solar-powered, sensors that can be deployed across a distribution grid to provide real-time monitoring and fault anticipation.

Gridware’s solution is centered around a mechanical sensor package that characterizes and monitors the behavior of electric distribution systems as opposed to the traditional electrical monitoring that is currently deployed by utilities.

Mechanical monitoring can reveal weakening of the system as it ages, identify components that have loading beyond their normal conditions, and indicating precursors to critical failures.
During the CalSEED award Gridware seeks to work with project partners to advance their analytical tool, with a focus on improving fire detection capabilities. Next slide, please.

That concludes our presentation. Staff recommends approving the 30 small grants before you today as well as staff’s determination that the action is exempt from CEQA. Staff is available for any questions you may have, thank you.

CHAIR HOCHSCHILD: Thank you, Anthony. We’ll go to public comment.

MS. MURIMI: Thank you, Chair.

For individuals that are in the room go ahead and use the QR code in the back or reach out to the Public Advisor.

For individuals on Zoom go ahead and use the raised-hand feature, it looks like a high-five or an open palm at the bottom of your screen or device.

And if you’re calling in press *9 to indicate that you'd like to make a comment and *6 to unmute on your end.

We'll start with Denise Rushing from New Energy Nexus. Please state and spell your name, and you may begin.

MS. RUSHING: Yes, my name is Denise Rushing, R-
U-S-H-I-N-G, and I am Managing Director for the California Clean Energy Fund, doing business as New Energy Nexus in California, the operator of a CalSEED Program.

I would like to thank the California Energy Commission for its vision and partnership in supporting early-stage innovators with this critical and timely funding, with a particular shoutout to Josh Croft and Anthony Ng from the CEC for their leadership in this program.

I'd also like to recognize the CalSEED team. Here today with me are Sarah Chester, who's our Director of Grants Management and Compliance and Flora Kaplan who leads our Impact Reporting. This team under very difficult circumstances in 2021, as you can imagine, managed the solicitation that rendered 23 concept awardees and a business plan competition that identified the 7 prototype awardees. The Commission can be proud of the impact of this team and the impact of the CalSEED Program.

The CalSEED companies are having tremendous impacts, as has been indicated by Josh and Anthony. Since its inception in 2017 CalSEED has lifted up 95 early-stage climate startups that were meticulously selected from over 1,000 applicants for the Concept Awards.

Over the years the good news is we've seen increasingly more women, people of color, and others from
underrepresented groups in leadership roles in these companies. For example, across the Concept awardee portfolio 23 percent of companies have women in leadership, and 33 percent have people of color and other underrepresented groups in leadership. To date to our business plan competition has identified 16 standout companies for Prototype Awards from the pool of 53 competitors; 31 percent of prototype companies have women in leadership, and 25 percent have people of color and other underrepresented groups.

Of the reported $139 million in follow-on funding secured by all CalSEED companies, since participating in the program 46 percent of that funding was obtained by the 16 prototype awardees, so this is all good news.

The CalSEED program elevates companies by facilitating research, development and prototype -- prototyping that advances the average participant by two levels on the TRL scale.

As for Cohort 5’s solicitation, this year’s Prototype awardees, these two groups represent some of the best of California’s innovation and are supported by an entire ecosystem to help them succeed.

We are primed and ready to welcome these 30 fresh awardees and continue supporting the work of the entire portfolio. And we look forward to continuing this work.
with the California Energy Commission in the months and years ahead on accelerating equitable clean energy in California. Thank you.

MS. MURIMI: Thank you, Denise.

We’ll go to Gabriel Falzone. Please state and spell your name and give your affiliation, if any. You have three minutes.

Mt. Falzone: Thank you. This is Gabriel Falzone, F-as-in-Frank A-L Z-as-in-Zebra O-N-E, from RCAM Technologies.

We at RCAM just wanted to express our appreciation for this award and for the support from the CEC, New Energy Nexus and the CalSEED team. We're really excited and really grateful to have this opportunity to advance our marine-pumped hydro technology for long-duration energy storage, which will be installed subsea, and integrate with offshore wind plants to make hybrid offshore power plants.

We really look forward to bringing this technology to market and ultimately creating more jobs in California, providing and providing new long-duration energy storage alternatives to help increase grid resilience. So we're just really excited by our progress and the progress of California towards offshore wind and how we can continue to grow our company in the state. So
thank you all very much.

MS. MURIMI: Thank you, Gabriel.

We have Claire Warshaw.

MS. WARSHAW: Hi, my name is Claire Warshaw. I'm a member of the public.

I want to mention that I noticed one of the awardees is planning to use radar, a millimeter-wave radar system in light switches for a building management system. And I have read that radar is thermal. It's an electromagnetic field that is invisible, an electric magnetic field that's thermal. And I know that there's a lot of radar used in society today. And I can't verify that it's thermal.

But what I read was the Navy discovered radar was heating things by candy bars that were melting in personnel’s pockets while they were warming themselves by radar-like devices on like a ship or something. And that's how they discovered that radar was warm. And that discovery led to the radar range, which is now the microwave oven. And so it's curious to me that we are now using a lot of microwave technology, because of that kind of reading. And I would encourage people that use electromagnetic magnetic fields to do some more research on current science come out.

I've read quite a lot about non-thermal
electromagnetic fields that cause damage like DNA damage. And I can provide resources that I have found and they're quite prolific on the Internet and they no longer look like conspiracy theory, crazy science.

For instance, there's a Dr. Martin Pall -- I think his last name is spelled P-A-L-L -- who has discovered that ion transport changes in cell membranes when exposed to electromagnetic fields that aren't considered non-thermal. So when they -- we already know that something is thermal, it seems like we ought to be a little bit concerned about it, and more so because we already know that.

And they've been arguing for a long time that the non-thermal electric magnetic fields are not damaging. But there's a lot of science and research, current science and research saying that they do cause a lot of biological damage. So I do think this is important. Especially in terms of climate change things will get heated and dry out, evaporation and things like that.

So just an extra kind of push for people to read more about current research on EMF. Thank you.

CHAIR HOCHSCHILD: Thank you.

Can I just ask, Anthony, which application is she referring to that has the radar?

MS. WARSHAW: Number 12.
CHAIR HOCHSCHILD: Do you have that in front of you?

MS. MURIMI: Number 12.

CHAIR HOCHSCHILD: Is there any staff response to that concern?

MR. NG: Yes, Chair. Yeah. So yeah, we identified that as Item 12 on the agenda. So I don't think I’ll be able to necessarily speak to the specifics of the scope of the research necessarily. But I can say that if the project is looking at radar or any other electromagnetic frequencies, I would expect that part of the research and part of the scope of the research would be to examine any deleterious or potential negative effects on the environment or the impact as part of that.

CHAIR HOCHSCHILD: Yeah, please report back what you find on that. I mean, I think radar is pretty widely employed, it’s on every ship virtually and airport and stuff like that. But I haven't heard of health effects associated with radar technologies specifically myself. But if you uncover anything I’d appreciate an update on that.

MR. NG: Absolutely.

CHAIR HOCHSCHILD: Were there other public comments Dorothy?

MS. MURIMI: There are no other comments, but Dr.
Subarna Bhattachung (phonetic) -- and apologies if I’m misstating this name -- Bhattacharyya is available for --

CHAIR HOCHSCHILD: -- for questions?

MS. MURIMI: -- questions, yeah.

CHAIR HOCHSCHILD: Okay, thank you.

Well first of all, just what a terrific group of projects; really comprehensive. I remember when we created the CalSEED Program and voted that into existence about five years ago now, I confess I was skeptical. Not of the direction of the companies we were targeting, but only of the design of the program, that $150,000 is not very much money. And I really questioned at the time whether that actually made sense. And should we be doing something that would be more meaningful as a grant size? I was wrong.

Really, I think just looking back what’s happened is I think this program has actually served as a great validator and seal of approval that’s then helping these companies leverage that money to raise more money from investors. And then having those stage gates where you can get to the $450,000 follow-on grant has been a great design.

So I just first just want to affirm the strategy there, I think it's working. I think New Energy Nexus has done a spectacular job, both on the diversity of the
technologies and the diversity of the awardees and the geographic diversity.

So one request I would have going forward, as there are important milestones I would really welcome sort of informational updates on meetings where we have time to do it. Today is a marathon meeting, we're moving $41 million. But we do have some other special meetings where we just hear one or two issues and that's when we can do informational updates.

And I think it's really valuable when there are certain big-stage gates that get hit or we -- because a lot of grants we've done have been basically foundational grants that we're giving that really actually help the company happen. Without that it wouldn't happen.

Home Connect is an example of that, Proterra as well. Commissioner Monahan and I were at Proterra a few weeks ago. You know, they started with like 5 people or something, and they have 1000 employees now, right? And that's an Energy Commission success story as well as a Proterra success story.

When we get to milestones that you view as significant my request would to be to compile those and come back. It’s just great to hear feedback if there is growth and progress and where. Because we recognize, look, not all these grants are going to be homeruns, that is the...
nature of innovation. You try a lot of things. You plant
a lot of seeds. And not everything grows, but the ones
that are taking off it's great to hear those, so that'd be
one request going forward.

I just want to compliment the team again, Josh,
Anthony, really amazing, amazing breadth and depth on the
projects. I'm thrilled to see this. And I'd welcome any
other comments.

Vice Chair Gunda please go ahead.

VICE CHAIR GUNDA: Yeah, thank you, Chair. I
just also want to commend Josh, Anthony, thank you for that
wonderful presentation. I kind of looked at the
information package today and I wondered how you were going
to present it, so many awards. Thank you for bucketing
them and thank you for really articulating the value
proposition.

I also want to thank Denise for your comments and
the work that New Energy Nexus is doing.

Just as the Chair is mentioning one stat that
really kind of presents itself is we are funding about 100
-- we've funded about 100,000 applications to date. This
is what I heard. That's like 10 percent of the interest,
right? Like there’s so many ideas and I really liked the
opening slide you put in, in terms of the representation,
the jobs created, just really good story.
Five years ago, I was at UC Davis, and I remember this being voted at CEC and so excited from the other end of it. So just congratulations on the progress. Thank you for all the work you're doing. I look forward to continuing supporting your team. Thanks.

CHAIR HOCHSCHILD: Any comments Commissioner Monahan?

COMMISSIONER MONAHAN: All I can say is this has one of the -- there's been a lot of good names of CEC funding programs, but I think CalSEED is just like really is it's very appropriate for this. Like we're planting seeds and some of them are going to grow and some of them aren't, but this idea of just like let's really just foster young -- I don't know, maybe not all the companies are young, but the technologies are young and we're just trying to see how many seeds will grow. So I just love the name and I love the application in this program.

CHAIR HOCHSCHILD: Yeah, well said.

With that I would welcome a motion on from Vice Chair Gunda this item.

VICE CHAIR GUNDA: Yeah, I’ll move Item 20.

CHAIR HOCHSCHILD: Is there a second from Commissioner Monahan?

COMMISSIONER MONAHAN: I second.

CHAIR HOCHSCHILD: All in favor say aye. Vice
Chair Gunda?

VICE CHAIR GUNDA: Aye.

CHAIR HOCHSCHILD: Commissioner Monahan?

COMMISSIONER MONAHAN: Aye.

CHAIR HOCHSCHILD: And I vote aye as well. Item 20 passes unanimously. Thank you, Anthony and team.

MR. NG: Thanks very much.

CHAIR HOCHSCHILD: We’ll turn now to Item 21 the April 26 Business Meeting Minutes. Any public comments on that, Dorothy?

MS. MURIMI: Thank you, Chair.

For individuals that are in the room, you can use the QR codes in the back or reach out to the Public Advisor.

For those on Zoom you can use the raised-hand feature at the bottom of your screen or device, it looks like an open palm or a high-five.

For those calling in go ahead and press *9 to indicate that you'd like to make a comment and *6 to unmute on your end.

Give that one moment. No comments, Chair.

CHAIR HOCHSCHILD: Thank you. Is there a motion on Item 21 from Vice Chair Gunda?

VICE CHAIR GUNDA: I’ll move Item 21.

COMMISSIONER MONAHAN: I’ll second.
CHAIR HOCHSCHILD: Thank you. All in favor say aye. Vice Chair Gunda?

VICE CHAIR GUNDA: Aye.

CHAIR HOCHSCHILD: Commissioner Monahan?

COMMISSIONER MONAHAN: Aye.

CHAIR HOCHSCHILD: And I vote aye as well. Item 21 passes unanimously.

CHAIR HOCHSCHILD: We’ll turn now to Item 22, Lead Commissioner and Presiding Member Reports, beginning with Commissioner Monahan.

Commissioner MONAHAN: I realized it was actually pretty recent that we all -- so I would say the only updates I have are that next week the EV Charging Infrastructure Strike Forces is meeting in-person for the first time. And the meeting is in the afternoon. Actually, the members are coming earlier in the day, they're going to, I think, be doing legislator visits around charging infrastructure. So of course that is very separate from the strike force, the strike force contains public policy members as well. But I’m excited to see them all in-person. I think, actually, the timing around zero-emission vehicle infrastructure is pretty perfect and so it should be a great convening. I think that right now there's something like 40 to 50 people coming.

So I think that's the only thing I’ve noticed.
that I wanted to really highlight right now.

CHAIR HOCHSCHILD: Great. Thank you, Commissioner. Vice Chair Gunda.

VICE CHAIR GUNDA: Thank you, Chair. Yes, it's been only two weeks since we met so not much other than what we've already discussed today.

In terms of reliability just a couple of flags, we have the workshop coming on May 20th, so hopefully you all can make it.

We did have the Planning Library IEPR Workshop two weeks ago right after the day after the business meeting. It was a good meeting. We had a good panel discussing (indiscernible) power uses of that information. We got some ideas on how best to organize that. Obviously, it's going to be a multiyear effort, but I think we're beginning to think through the different attributes we might want to apply as we organize our data and then the library of products, so I’m really thankful to the staff that have done that.

A few of us, Commissioner McAllister and myself and then a number of Commissioners from CPUC, we were all at the (indiscernible) CREPSI meeting last week. Really kind of understanding, for me, it's beginning to understand the west-wide energy planning, electricity planning, and being a part of that conversation.
And finally, I just had one other thing I wanted to mention, I’m kind of blanking. You know what, I’ll keep it there, thank you.

CHAIR HOCHSCHILD: Okay.

So a couple updates, I wanted to begin just -- she's not with us in the room today but she's listening online -- and just to extend my gratitude to Noemi Gallardo for agreeing to come onboard as my new Chief of Staff, big shoes to fill following the past three years with Le-Quyen Nguyen, who has been tremendous. Noemi has absolutely distinguished herself as Public Advisor these last few years. She has a law degree, she has a public policy degree, she's bilingual, been a translator and, among other things, worked in the environmental justice community at Greenlining, worked in the solar industry at Sunrun, and has just brought a level of passion to the work that's been amazing to watch.

I think all of us who've had the chance to work closely with her know what a gem she is. And I really appreciate her leadership on the equity outreach, especially the roundtables that she's organized, the tribal engagement, the expansion of her office to include Tribal Affairs. And she's just been incredibly responsive, I think, to all the Commissioners on requests and projects and collaboration, it's just been an amazing -- good
citizen of the Energy Commission and brings so much heart and talent to the work. So I’m really excited to have her in this new role as we build this out.

And I would say, as reflecting a little bit, I’ve been at the Energy Commission, amazingly it's been nine years, and I feel like there's been three distinct chapters for me in this role: The first six years under Chair Weisenmiller I was doing a lot of sort of seeding for the policies I was really passionate on 50 percent, 100 percent renewables, and seeding electrification work.

And then coming in as Chair, being able to focus more directly on -- for the new governor on some of the issues I’d discuss with him. We've got movement on Lithium Valley and energy storage and offshore wind and building decarbonization and reauthorizing our R&D program and some others.

And now it feels like we're really in this incredible implementation period of getting more resources than we've ever had, by an order of magnitude, and executing successfully on that.

There are going to be a few new focus areas. I would point to direct air carbon capture. It’s one of the ones that's top of my list. Tribal engagement, taking that to the next level, but a lot of what we're doing is just implementing successfully. And we have an A-team. We want
to keep growing that. But I’m just really grateful to Noemi for coming in at this stage when the stakes are really high and looking forward to a really successful next chapter and also communicating about it successfully.

And Lindsay Buckley and her amazing team, just the EPIC report that came out recently, the summary, that is so readable. It tells the story so successfully. And that's one of the other things I’m just really proud of as the group leader. I think that's half the battle. Actually it's not just executing successfully, but actually communicating about it.

So anyways, I was just sort of stepping back and it’s kind of becoming clear to me the different chapters of the work. And I’m really charged up for this next chapter and I’m really excited to have Noemi on the team.

The other thing I just wanted to again call out is incredible work of the Efficiency team: Commissioner McAllister, Mike Sokol, my advisor Ken Rider, on the LED work and the Chief Counsel's Office. This was one of the most significant energy efficiency teams we ever adopted at the CEC. And it moved us beyond incandescent lighting towards high-color rendition LEDs (phonetic). And that standard was adopted recently by the Department of Energy. It’s a national standard now. It’s going to save $3 billion a year for the country for ratepayers and reduce
emissions.

And I want to be very intentional and deliberate about pausing to celebrate and take in when there's successes like this, because I think this model of us creating a standard and having it go national, that to me is the template, that's really what the exciting opportunity is about being at the Energy Commission is creating policies that can go national. Or even global as we're seeing with our solar mandate now being actively considered, and I think on a good path to adoption in the International Energy (indiscernible).

So I’m going to be setting up an all-staff by Zoom by Zoom and I’ve invited Linda Barrera and Commissioner McAllister, Commissioner Vaccaro and some key staff to just reflect a little bit on this lighting. So this is a decade's worth of work to get to this and it’s an incredible victory. So we'll be sending that out toward the end of the month. So I think that's it for me.

We’ll turn now to Item 23, Executive Director’s Report.

MR. BOHAN: Thank you, Chair, Commissioners, just a couple quick things. First on the budget, this has been -- I lost count of how many budgets I’ve been through, but this has been probably the most complicated. And I just wanted to call out Rob Cook and his team. And in
particular Damien Mimnaugh who started from Finance, as you know, with us. It seems like yesterday, but it also seems like five years ago, because he's just jumped in and been so incredibly helpful and just working his tail off, so thank-you to him.

And Vice Chair, you mentioned the fact that we're going to need more staff and how critical staff is. And so I just want to also call attention to Lenna Ledesma and her leadership. She runs our HR shop and we're going to need to staff up and she and her team are going to really, really be key to that effort.

Second, we have a second business meeting in May; as you know, it's two weeks from yesterday. Hopefully it'll be our last one here. We're still on track for a June opening of the auditorium across the street.

June 10th we'll have a new building housewarming and our picnic that same day.

And then, finally, I want to just join in the kudos to Noemi. I think she'll be great at her job, she's brilliant and just so capable. Thank you.

CHAIR HOCHSCHILD: Thank you. We'll turn now to Item 24, Public Advisor's Report.

MS. MURIMI: The Public Advisor has nothing to report.

CHAIR HOCHSCHILD: Thank you. We'll turn now to
Item 25, Public Comment.

MS. MURIMI: Thank you, Chair.

This is a period for any person wishing to comment on information items or reports of the meeting agenda or any other item. Each person has up to three minutes to comment and comments are limited to one representative per organization. We may reduce the comment time depending on the number of commenters.

Use the raised-hand icon to indicate your interest in making public comment. If you're on the phone press *9 to raise your hand and *6 to unmute. We will promote you to the panelists. You're welcome to turn on your video box or leave it off.

After you're called on, please restate and spell your first and last name, state your affiliation if you're representing a tribe, agency, or organization. Do not use the speakerphone when talking because we will not be able to hear you clearly.

And to give that one moment. No comments, Chair.

CHAIR HOCHSCHILD: Thank you. We’ll turn to Item 26, Chief Counsel’s Report.

MS. BARRERA: Thank you, Chair. I recommend that the Commissioners break for a closed session to discuss Agenda Item 26i., which provides notice that the Energy Commission may adjourn to a closed session with its legal
counsel pursuant to Government Code section 11126(e) to
discussion litigation to which the California Energy
Commission is a party.

CHAIR HOCHSCHILD: Thank you. We will go into
closed session and come back on when we're done.

(Off the record at 3:11 p.m.)
(On the record at 3:56 p.m.)

MS. MURIMI: We are back on.

CHAIR HOCHSCHILD: Okay, thank you everyone. We
are adjourned.

(The Business Meeting adjourned at 3:56 p.m.)
REPORTER'S CERTIFICATE

I do hereby certify that the testimony in the foregoing hearing was taken at the time and place therein stated; that the testimony of said witnesses were reported by me, a certified electronic court reporter and a disinterested person, and was under my supervision thereafter transcribed into typewriting.

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IN WITNESS WHEREOF, I have hereunto set my hand this 3rd day of June, 2022.

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Notary Public
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I do hereby certify that the testimony in the foregoing hearing was taken at the time and place therein stated; that the testimony of said witnesses were transcribed by me, a certified transcriber and a disinterested person, and was under my supervision thereafter transcribed into typewriting.

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IN WITNESS WHEREOF, I have hereunto set my hand this 3rd day of June, 2022.

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Certified Transcriber
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