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BUSINESS MEETING

BEFORE THE

CALIFORNIA ENERGY COMMISSION

Ιn	the	Matter	of:)
)22-BUSMTG-01
	Ві	ısiness	Meeting)
)

REMOTE ACCESS ONLY

Public comment is accepted solely through the Zoom platform.

The California Energy Commission's (CEC) March 9, 2022 Business Meeting will be held remotely, consistent with Assembly Bill 361 (Rivas, Chapter 165, Statutes of 2021) to improve and enhance public access to state meetings during as extended by Governor Newsom's Executive Order N-1-22 to improve and enhance public access to state meetings during the COVID-19 pandemic. The public can participate in the business meeting consistent with the direction provided below.

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.

WENESDAY, MARCH 9, 2022

10:00 A.M. - 4:00 P.M.

Reported by: M. Nelson

APPEARANCES

Commissioners (Via Remote)

David Hochschild, Chair Siva Gunda, Vice Chair Kourtney Vaccaro Andrew McAllister Patricia Monahan

Staff Present: (Via Remote)

Drew Bohan, Executive Director
Linda Barrera, Chief Counsel
Noemi Gallardo, Public Advisor
Dorothy Murimi, Public Advisor's Office
Kirk Oliver, Staff Counsel
Geoff Lesh, Engineering Office Manager
Brett Fooks, Inspection Team Supervisor
Mary Dyas, Lead Compliance Project Manager
Jaquelyn Record, Engineering Office
Tom Hughes, Engineering Office
Lisa DeCarlo, Lead Counsel
John Heiser, Lead Compliance Project Manager
Jennifer Baldwin, Lead Counsel
Eric Knight, Siting and Environmental Office
Jared Babula, Legal Counsel

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	a.	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.	In the Matter of U.S. Department of Energy (High Level Waste Repository) (Atomic Safety Licensing Board, CAB-04, 63-001-HLW); State of California v. United States Department of Energy (9th Cir. Docket No. 09-71014)							
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 b. Pursuant to Government Code, section 11126, subdivisions (a) and (e), the CEC may also discuss any judicial or administrative proceeding that was formally initiated after this agenda was published or determine whether facts and circumstances exist that warrant the initiation of litigation, or constitute a significant exposure to litigation against the CEC, which might include personnel matters. i. CEC grant with the Vehicle-Grid-Integration Alliance, Inc. (ARV-13-057). 	s d;
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- 2 MARCH 9, 2022 10:03 a.m.
- 3 (Start of Introductory Video.)
- 4 MS. MURIMI: Welcome to the California Energy
- 5 Commission's Business Meeting.
- 6 Zoom's closed captioning feature has been enabled
- 7 to make Energy Commission business meetings more
- 8 accessible. Attendees can use this feature by clicking on
- 9 the "Live Transcript" icon, then selecting either "Show
- 10 Subtitle" or "View Full Transcript." Closed captioning can
- 11 be stopped by closing out of the live transcript or
- 12 selecting "Hide Subtitle." Those participating solely by
- 13 phone do not have the option for closed captioning.
- 14 The Energy Commission will continue to post the
- 15 transcript of this Business Meeting rendered by a
- 16 professional court reporter in the docket system and on the
- 17 Business Meeting webpage.
- 18 This meeting is being held remotely consistent
- 19 with Assembly Bill 361, as extended by Governor Newsom's
- 20 Executive Order N-1-22, to improve and enhance public
- 21 access to state agency meetings during the COVID-19
- 22 pandemic. The public can participate in the Business
- 23 Meeting consistent with the instructions for remote
- 24 participation found in the notice of this meeting, and as
- 25 set forth in the agenda posted to the Energy Commission's

- 1 website.
- 2 Pursuant to California Code of Regulations Title
- 3 20 section 1104(e) any person may make oral comments on any
- 4 agenda item.
- 5 Once the public comment period begins if you'd
- 6 like to speak, please raise your hand by clicking on the
- 7 "Raise Hand" icon at the bottom of your screen. Please
- 8 note that if Zoom were to shut down, we would switch to the
- 9 Verizon phone line at (888)823-5065. The pass code is
- 10 "Business meeting." Public comment would then be accepted
- 11 through Verizon.
- To ensure the orderly and fair conduct of
- 13 business, public comments will be limited to three minutes
- 14 or less per person for each agenda item voted on today.
- 15 Any person wishing to comment on the information items or
- 16 reports, which are non-voting items, shall reserve their
- 17 comments for the general public comment portion of the
- 18 meeting. And shall have a total of three minutes or less
- 19 to state all remaining comments.
- 20 If you're joining by phone press *9 to raise
- 21 your hand and *6 to unmute. After the Public Advisor calls
- 22 on you to speak, spell your name, and state your
- 23 affiliation if any.
- 24 Welcome to the California Energy Commission's
- 25 Business Meeting. The meeting will now begin.

1	(End of Introductory Video.)
2	CHAIR HOCHSCHILD: Thank you, Dorothy.
3	Good morning, friends and welcome. I'm David
4	Hochschild Chair of the Energy Commission and today is
5	Wednesday, March 9th, and I'm calling this meeting to
6	order. Joining me today are Vice Chair Gunda, Commissioner
7	McAllister, Commissioner Monahan, and Commissioner Vaccaro.
8	Commissioner McAllister will lead us in the
9	Pledge of Allegiance.
10	(Whereupon the Pledge of Allegiance was recited.)
11	CHAIR HOCHSCHILD: Well, thank you, Commissioner.
12	And I think I speak for all of us when I say our
13	hearts are heavy with what is happening with the war in
14	Ukraine and the threat to democratic institutions there,
15	and around the world. And I think all of us need to keep
16	these struggles in our hearts as the Governor mentioned in
17	his State of the State speech yesterday. It really is a
18	moment for all of us to pull together and do everything we
19	can to protect democratic institutions and people fighting
20	for their freedom around the world.
21	So with that I wanted to take a minute to make a
22	couple of acknowledgements, starting with Dorothy Murimi
23	who is with the Office of the Public Advisor, Energy
24	Equity, and Tribal Affairs. Dorothy is filling in today
25	for Noemi Gallardo, who we're trying to build out the bench $$10\>$

- 1 role in the Public Advisor's Office, so that we have more
- 2 capability to do that service. And Dorothy, I just want to
- 3 thank you for all your terrific service to the Energy
- 4 Commission over the years. I've just really appreciated
- 5 your diligence and professionalism and happy to have you in
- 6 the Public Advisor's role with us for this meeting today.
- 7 Secondly, I wanted to welcome our newest
- 8 Commissioner, Kourtney Vaccaro, who comes to the Energy
- 9 Commission probably among the most prepared people for this
- 10 job. She has had a distinguished career at the Energy
- 11 Commission as an attorney, as Chief Counsel, and most
- 12 recently as Advisor to Commissioner Douglas. She's also
- 13 been in private practice and (indiscernible) practices at
- 14 the Commission.
- 15 And her appointment was made possible by
- 16 Commissioner Douglas getting appointed to go to be the
- 17 Energy Advisor to the Governor, which we're really excited
- 18 about. And she'll be able to continue to build on so much
- 19 of the work she was doing here at the Energy Commission on
- 20 offshore wind and renewable energy project planning, and
- 21 Lithium Valley and so many other issues. So we are so
- 22 proud of her and her 14-year career. We will celebrate
- 23 that properly at the right time in the months to come.
- 24 But for now I just wanted to extend a warm
- 25 welcome to our newest Commissioner, Commissioner Vaccaro.

- 1 And thank you for your willingness to serve. And I've
- 2 really appreciated the incredible institutional knowledge
- 3 that you bring. And the diligence and hard work, really, I
- 4 think, has defined your career and I would welcome you to
- 5 make a few remarks if you'd be willing.
- 6 COMMISSIONER VACCARO: Yes. Well, thank you so
- 7 much Chair Hochschild. And I appreciate that warm welcome
- 8 and the kind words. And it's truly an honor and a
- 9 privilege to serve alongside such a distinguished and
- 10 esteemed group of colleagues. And it's also truly
- 11 humbling, I think to have been appointed by the Governor to
- 12 serve Californians and to serve the public interest in this
- 13 way.
- So just I'll take a few moments here just to kind
- 15 of let you know a little bit of, I guess, my thinking and
- 16 it helps people understand a little bit about me. So I
- 17 was sworn in last Friday at the end of the day. And after
- 18 that I spent some time really refreshing my recollection
- 19 about the legislative findings and the declarations around
- 20 the creation of the Energy Commission.
- 21 And there was a provision in particular that
- 22 really resonated with me, because the Legislature made it
- 23 plain that electrical energy is essential to the health,
- 24 safety, and welfare of the people of the state and to the
- 25 state's economy. And importantly, that it's the state

- 1 government's responsibility to ensure reliable supply
- 2 needed for protection of public health and safety,
- 3 protection of environmental quality, of promotion of the
- 4 general welfare.
- 5 And I just feel that this call to action, it's
- 6 even more urgent today in the face of just undeniable
- 7 climate crisis that's compelling all of us to be thoughtful
- 8 as we accelerate development and deployment of
- 9 decarbonization and clean energy and climate strategies.
- 10 And that we do all of this without compromising essential
- 11 principles of energy equity, accessibility, and
- 12 affordability.
- So for me, I mean this is all really -- it's
- 14 very weighty and it's very sobering. And it brings to the
- 15 forefront of my mind a lesson that I've learned throughout
- 16 my career, which is that substantive knowledge, analytical
- 17 rigor, critical thinking, those are the expected minimum
- 18 requirements for leaders to get things done. But to truly
- 19 be effective it's essential to be intentional about
- 20 demonstrating a capacity and a willingness to collaborate
- 21 with, and to learn from others. And so I believe that I
- 22 have something to offer to this decision-making solution
- 23 set.
- 24 And I also know with absolute certainty that
- 25 there's so much that I have to learn. So I will be

- 1 inviting, welcoming, prioritizing engagement with varied
- 2 and various stakeholders, tribal governments, individuals,
- 3 and entities that represent both public and private
- 4 interests among others that come from the state's many
- 5 diverse regions, including the urban and rural regions.
- 6 And of course through all of this I'm going to be looking
- 7 to the wisdom, the expertise, the counsel of all of you, my
- 8 colleagues on the dais. And also looking to the
- 9 exceptional Energy Commission staff to help inform my
- 10 understanding, and my decision making.
- 11 So I think with that I'll just kind of conclude
- 12 I just want to reaffirm my gratitude for this honor. I
- 13 know that the Chair and I have yet to go over what my lead
- 14 areas will be. I'm hoping to continue working on offshore
- 15 wind, supporting the Lithium Valley Commission, working on
- 16 the Lithium Valley vision, supporting the tribal program
- 17 that we have at the Commission. And really doing what I
- 18 can to continue partnering with the staff in the Renewable
- 19 Energy and Siting, Transmission and Environmental
- 20 Protection Divisions.
- 21 So I think with that I'll close with where I
- 22 started, which is I understand that this is an honor, and
- 23 this is very humbling. And it's my commitment to strive
- 24 every day that I do this work to be worthy of this
- 25 appointment by the Governor. So it was a little longer

- 1 maybe than we expected for an opening statement, but I just
- 2 felt it was important to share my thinking, my values, just
- 3 my excitement for this opportunity. So thank you so much,
- 4 Chair Hochschild.
- 5 CHAIR HOCHSCHILD: Well, thank you and I was glad
- 6 to hear you refer to the Warren-Alquist Act. I mean, I
- 7 think there is so much embedded wisdom in that document.
- 8 And when I started, right after I was appointed, I spoke to
- 9 then Chair Weisenmiller, who I was interested to meet
- 10 Charlie Warren who had written that act, and he put me in
- 11 touch with him, and I went to have lunch with them. And I
- 12 was just so impressed by how bold a man he was and how
- 13 visionary. And really, I think we're all called upon to
- 14 carry that spirit of boldness forward, because I think it
- 15 was an act of great vision. That other states don't have
- 16 what we have. We have something really special and
- 17 powerful here, and I think it's played a huge role in
- 18 building up so many of the climate solutions that we
- 19 desperately need.
- 20 So I'm happy to have you on the team. I'd just
- 21 invite my colleagues if anyone would like to make welcome
- 22 remarks, maybe starting with Vice Chair Gunda?
- VICE CHAIR GUNDA: Thank you, Chair.
- 24 And I think it's a hard act to follow,
- 25 Commissioner Vaccaro, kind of like real elementary

- 1 (indiscernible) Warren-Alquist Act again and just reflects
- 2 on who she is as a person.
- 3 So I kind of want to share a couple of thoughts
- 4 here. One, kind of just having Commissioner Douglas
- 5 transition out of the CEC was, the way it felt is it's a
- 6 mixed feeling, right? I mean, she's such a thought leader.
- 7 And, as you said, for 14 years she's been leading the
- 8 Commission in various efforts, so congratulating
- 9 Commissioner Douglas.
- 10 And kind of I was worried and (indiscernible) and
- 11 what better person can you ask for? I mean, to fill in
- 12 that role so seamlessly and bring a new level of thinking
- 13 and a different vision and thought process. So I welcome
- 14 Commissioner Vaccaro. I had the pleasure of working with
- 15 her when I was a division director kind of getting her
- 16 quidance from the Chief Counsel's Office. We've developed
- 17 a friendship over the time, and I just think of her as a
- 18 friend, a colleague. And as she stated in her vision and
- 19 statement, she is somebody that I know of as deeply
- 20 committed, competent and has a compassionate vision for
- 21 boldness. So Commissioner Vaccaro, it's great to call you
- 22 Commissioner. Welcome on board, looking forward to working
- 23 with you and supporting you as you see fit. Thanks.
- 24 CHAIR HOCHSCHILD: Let's go next to Commissioner
- 25 McAllister.

1 COMMISSIONER MCALLISTER:	Sure.	Well	first	of
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- 2 all welcome, Commissioner Vaccaro. I'm just really
- 3 pleased to welcome you.
- 4 And well first, again, congratulations to
- 5 Commissioner now -- or former Commissioner Douglas. And
- 6 she's obviously very excited to take on that role and just
- 7 a lot of new horizons for her as well, so we're all very
- 8 happy for her. And having worked for three governors for
- 9 14 years she just showed in so many ways her leadership
- 10 capacity and her ability to collaborate. I mean, so nimble
- 11 and so intellectually flexible and just collaborative, but
- 12 without changing her core values and principles. I just
- 13 have so much admiration for her. And I think having that
- 14 deep institutional knowledge of the Energy Commission, sort
- 15 of right at the heart of the administration now, it is
- 16 highly appropriate.
- 17 And as Chair said, if you read the Warren-Alquist
- 18 in many parts of it, a little -- not all of it, but a lot
- 19 of it seems like it just could have been written yesterday.
- 20 And we're actualizing or sort of actuating some of the
- 21 lesser-used authorities in that Act, such as Load
- 22 Management Standards. And they are so relevant. They're
- 23 just prescient really. And so I think I certainly share
- 24 your enthusiasm, Commissioner Vaccaro, for sort of caring
- 25 for that vision that was laid out many years ago.

1	And	as	vou	said	Chair,	other	states	iust	do	not
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- 2 have -- people sort of look at us with some envy from other
- 3 states. Because we do have authorities that allow us to
- 4 act boldly, whereas in other states they have to go to
- 5 their legislatures every time they want to do something new
- 6 and different. And we just have that latitude, which is
- 7 fantastic.
- 8 So Commissioner Vaccaro, so I guess we go back to
- 9 the really very first days of my sitting down at the Energy
- 10 Commission. And I just really -- I don't know, I warmed to
- 11 you immediately just with sort of your humor, and just sort
- 12 of intellectual honesty, and when needed ferocity. I mean
- 13 I really just admire you. Back then it was a hearing
- 14 officer in a citing case. And just you ran those meetings
- 15 in a way that just commanded respect from all the parties.
- 16 And just very much injecting with your intellectual rigor
- 17 and sort of your knowledge of the law, injected just a very
- 18 high level of gravitas into those proceedings, which is
- 19 absolutely appropriate for the kinds of things that we do
- 20 particularly siting and some of the other sort of more
- 21 deeply -- not that the other things we do that aren't
- 22 serious. But more the sort of really implementing a
- 23 regulatory authority on cases like siting and sort of
- 24 quasi-legislative type of activities with all the parties
- 25 having to really be on the record and be on their best

- 1 behavior. So I just appreciated you're running those
- 2 meetings like that and I'm looking forward to working with
- 3 you on whatever cases we do work together on, so I really
- 4 appreciate that.
- 5 And then as Chief Counsel, again, you brought
- 6 that same sort of seriousness and rigor and critical
- 7 thinking skills. I think you yourself mentioned critical
- 8 thinking and I just really look to you, have always looked
- 9 to you for that to bounce ideas off of and sort of get a
- 10 more complete view of some of the things that I might
- 11 wrestle with. And so I'm really looking forward to working
- 12 with you in your new capacity and just sharing the
- 13 excitement for our mission in making California a better
- 14 place equitably and muscularly. So thanks for stepping up
- 15 into another stage of your public service. It's so
- 16 appropriate and I just really was happy to get the news
- 17 when you were appointed, so congratulations.
- 18 CHAIR HOCHSCHILD: Thank you, Commissioner.
- 19 Let's go to Commissioner Monahan.
- 20 COMMISSIONER MONAHAN: Well, Commissioner
- 21 Vaccaro, welcome. You can see how excited we all are to
- 22 have you on the dais. And I've got to say that when I
- 23 heard that then-Commissioner Douglas was transitioning to
- 24 the Governor's Office, I had a little panic about, "Oh my
- 25 gosh, all these siting cases. We need a big legal brain."

- 1 And then to hear that you were being appointed in her stead
- 2 was such a relief.
- I think we all -- you're hearing quite loud and
- 4 clear, that we all count on you for that legal expertise,
- 5 grounded also in empathy and thoughtfulness more broadly
- 6 than just the legal words on the page. And I just couldn't
- 7 be happier to have you as a colleague. And I really look
- 8 forward to our tribal visit next week and to having more
- 9 time to just process this transition.
- 10 And I thought your opening remarks were really
- 11 reflective of why we're so excited to have you. I mean, to
- 12 immediately go turning to the law and thinking about how
- 13 that integrates with your work is remarkable. I mean the
- 14 rest of us would be maybe celebrating with our family and
- 15 friends and you're going right back to the law. So we need
- 16 that. I mean I've found actually even on my team of
- 17 advisors it's so helpful to have somebody for grounding.
- 18 And with all these important siting cases before us it's
- 19 just really a relief to have you as a partner in that.
- 20 CHAIR HOCHSCHILD: Thank you, beautifully said.
- 21 And I would just close by saying in addition to
- 22 being an accomplished professional, Commissioner Vaccaro is
- 23 also the mother of an amazing young woman. And I can
- 24 assure you she and I have bonded over raising teenage
- 25 girls, which I believe is an act that that builds great

- 1 fortitude, so we'll be using that fortitude in the coming
- 2 months and years. So again welcome on board, great to have
- 3 you.
- 4 Let's close just with this announcement, that
- 5 today's Commission meeting we're going to be seeking to
- 6 approve over \$25 million in grants. This is part of our
- 7 state's economic recovery, and I just want to thank the
- 8 team for all the work to get us to this point.
- 9 And let's turn now to the Consent Calendar. Do
- 10 we have any public comment on the consent calendar?
- MS. MURIMI: Thank you, Chair.
- So for folks who are on Zoom you can go ahead and
- 13 use the raised-hand feature. And for folks that are on the
- 14 phone press *9 to raise your hand and *6 to unmute on your
- 15 end. Once you're called, you can go ahead and state your
- 16 name and affiliation and spell your name as well.
- 17 So checking for hands, I see none, I see no hands
- 18 at this time, Chair.
- 19 CHAIR HOCHSCHILD: Okay. Unless there's
- 20 Commissioner discussion, Commissioner Vaccaro, would you be
- 21 willing to move the Consent Calendar?
- 22 COMMISSIONER VACCARO: Yes. Yes, I move approval
- 23 of this item.
- 24 CHAIR HOCHSCHILD: Okay, is there a second?
- 25 Commissioner Monahan, would you be willing to second?

- 1 COMMISSIONER MONAHAN: I second.
- 2 CHAIR HOCHSCHILD: All in favor say aye.
- 3 Commissioner Vaccaro? (Silence on the line.) Are you
- 4 muted?
- 5 COMMISSIONER VACCARO: Aye. Aye.
- 6 CHAIR HOCHSCHILD: There we go. And Commissioner
- 7 Monahan?
- 8 COMMISSIONER MONAHAN: Aye.
- 9 CHAIR HOCHSCHILD: Commissioner McAllister?
- 10 (Silence on the line.) Are you muted?
- 11 COMMISSIONER MCALLISTER: Aye.
- 12 CHAIR HOCHSCHILD: There we go. Vice Chair
- 13 Gunda?
- 14 VICE CHAIR GUNDA: Aye.
- 15 CHAIR HOCHSCHILD: And I vote age as well. That
- 16 item passes unanimously.
- 17 Let's turn now to Item 2, Moss Landing. Shawn
- 18 Pittard. (Silence on the line.)
- MS. MURIMI: Shawn, you're muted.
- MR. PITTARD: There we go.
- MS. MURIMI: Now we hear you.
- MR. PITTARD: Okay, terrific. Thank you.
- 23 Good morning, Chair and Commissioners, and
- 24 welcome Commissioner Vaccaro. I'm getting a little note
- 25 asking me to unmute myself. Am I good?

- 1 MS. MURIMI: Yes, you're good, Shawn.
- MR. PITTARD: Right on, I like those thumbs-ups.
- I am here today to request your approval of a
- 4 settlement agreement between the California Energy
- 5 Commission and the Moss Landing Power Company. With me
- 6 today is Staff Counsel Kirk Oliver. Also with me from STEP
- 7 Division are Elizabeth Huber, Compliance Monitoring and
- 8 Enforcement Office Manager; Geoff Lesh, our Engineering
- 9 Office Manager; and our Inspection Team Supervisor Brett
- 10 Fooks. Representatives of the Project Owner are also here
- 11 today. Next slide, please. Thank you.
- The CEC has established a monitoring and
- 13 enforcement system to ensure that any facility it certifies
- 14 is constructed, operated, and decommissioned in compliance
- 15 with applicable laws, ordinances, regulations, and
- 16 standards. And in compliance with the Conditions of
- 17 Certification specified in the Commission decision. The
- 18 Siting, Transmission and Environmental Protection Division
- 19 implements this program. Next slide, please.
- The Moss Landing Power Plant project is a 1060-
- 21 megawatt natural gas-fired combined-cycle facility located
- 22 near the Moss Landing Harbor in Monterey County. The
- 23 project was certified by the CEC on October 25th, 2000, then
- 24 began commercial operation on July 11th, 2002. Next slide,
- 25 please.

1	The	Moss	Landing	Power	Plant	Commission	decision
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- 2 requires the project owner to report in its monthly and
- 3 annual compliance reports a listing of complaints, notices
- 4 of violation, official warnings and citations received
- 5 during the year, a description of the resolution of any
- 6 complaints which have been resolved, and the status of any
- 7 unresolved complaints.
- 8 In addition to the monthly and annual compliance
- 9 reporting requirements the Project Owner shall provide,
- 10 shall report, and provide copies of all complaint forms,
- 11 notices of violations, notices of fines, official warnings,
- 12 and citations within ten days of receipt to the Compliance
- 13 Project Manager. Next slide, please.
- On August 6, 2019, a manager at the Moss Landing
- 15 Power Plant facility informed the CEC staff by email that
- 16 Cal/OSHA had issued the facility a citation and
- 17 notification of penalty six months earlier on February 1,
- 18 2019. CEC staff opened an investigation. Staff's
- 19 investigation indicated that the OSHA citation concerned an
- 20 incident that occurred at the facility on August 15, 2018,
- 21 in which electrical contractors did not wear appropriate
- 22 Personal Protection Equipment and were injured.
- 23 Staff reviewed the facility's annual compliance
- 24 report and determined that the OSHA citation had not been
- 25 reported as required by the facility's compliance reporting

- 1 conditions that I described earlier. Staff's review also
- 2 determined that the facility had not reported on April 6,
- 3 2020, an audit conducted by the California Public Utilities
- 4 Commission, which is required by the facility's compliance
- 5 reporting conditions. The facility had reported other
- 6 citations to the CEC, however.
- 7 CEC staff also reviewed a November 7,2018,
- 8 agreement reached between the CEC and the Moss Landing
- 9 Power Plant facility to settle alleged violations of the
- 10 compliance reporting conditions that occurred under a
- 11 predecessor owner. The agreement concerned the facility's
- 12 failure to report notices of violation it received from the
- 13 Monterey Bay Unified Air Pollution Control District. Next
- 14 slide, please.
- 15 CEC staff and the Moss Landing Power Company
- 16 believe that rather than engaging in a formal adjudication
- 17 it would be more productive to enter into a settlement
- 18 agreement. The legal requirements at issue as well as
- 19 staff's allegations are included in the settlement
- 20 agreement, which provides for a payment of \$75,000 by the
- 21 Moss Landing Power Company to the CEC. In addition,
- 22 changes to the reporting requirements and the Commission
- 23 decision are also included in the settlement agreement.
- 24 Next slide, please.
- 25 Staff recommends that the Commission approve the

- 1 settlement agreement and changes to the reporting
- 2 requirement in the Commission decision and direct the
- 3 Executive Director to execute the settlement agreement on
- 4 behalf of the CEC. That's our presentation, thank you.
- 5 CHAIR HOCHSCHILD: Thank you, Shawn.
- Any public comment on Item 2, Dorothy?
- 7 MS. MURIMI: Thank you, Chair Hochschild.
- 8 I'm just going to prompt for individuals who are
- 9 interested in making a public comment. Go ahead and use
- 10 the raised-hand feature to the bottom of your screen or
- 11 device, and that's if you're on Zoom. And if you're on the
- 12 phone go ahead and dial *9 to raise your hand.
- 13 Seeing no hands. There are no more hands at this
- 14 time, Chair Hochschild.
- 15 CHAIR HOCHSCHILD: Okay let's go to Commissioner
- 16 discussion starting with Commissioner Vaccaro.
- 17 COMMISSIONER VACCARO: Thank you.
- 18 First of all thank you, Shawn, for the
- 19 presentation and thanks to you and your entire Division and
- 20 the Chief Counsel's Office for the diligence that I know is
- 21 involved when you investigate matters such as those
- 22 described in your presentation, and such as described in
- 23 this settlement agreement.
- I think, just before getting to the merits of
- 25 the agreement, I wanted to briefly note I've had a lot of

- 1 visibility over the years into the STEP Division developing
- 2 an effective and just high-quality investigation and
- 3 inspections program. And I just continue to be impressed
- 4 with how that program is evolving.
- 5 And specifically with respect to the agreement I
- 6 read it pretty carefully and I know we generally have to
- 7 stick within the four corners of the agreement and I'm
- 8 going to do that. And I'm going to let you know that I
- 9 think it does lay out very fairly. But honestly, I think
- 10 what staff found, which is that the CEC has requirements
- 11 for timely information and that information is what allows
- 12 the CEC to come in with its team and ensure the protection
- 13 of health, safety of people, and of property, but most
- 14 importantly of people.
- 15 And what we learned from you today is there were
- 16 other entities right, who also have an interest. OSHA, the
- 17 regional Air Quality Management District, PUC, a lot of
- 18 entities that are engaged in ensuring that there is a
- 19 mindfulness and a timely responsiveness to incidents at
- 20 these facilities. And the CEC was prevented, I think, from
- 21 having that timely information that's essential to
- 22 discharge its duties under the Warren-Alquist Act. So I
- 23 applaud the work here.
- 24 And I appreciate what you meant when you said
- 25 it's more productive to enter into a settlement agreement.

- 1 I think what I take from that is it is very resource-
- 2 intensive to litigate, whether that's through an
- 3 administrative adjudication or something in the court
- 4 system. And to be able to be mindful of that resource-
- 5 intensive action and still reach a resolution where there
- 6 is a penalty. And this \$75,000 is a pretty serious penalty
- 7 as far as I can understand, so I think that this agreement
- 8 is something for us to support.
- 9 But I would like to know from you and Kirk Oliver
- 10 if you could share just a bit about the factors and the
- 11 criteria, what led you to this \$75,000 amount? Because I
- 12 do think it's a little on the high side, but I don't think
- 13 it's unreasonable given the context of what we're talking
- 14 about. So it'd be great if you could just address that a
- 15 little bit.
- MR. PITTARD: Great. Thank you, Commissioner.
- 17 Kirk, can you join in here?
- MR. OLIVER: Yes, absolutely.
- 19 Thank you, Commissioner Vaccaro. And your
- 20 remarks as thoughtful as they are, actually preempt a lot
- 21 of the things that I would say about the magnitude of that
- 22 penalty. It is crucial to a core function of the CEC that
- 23 it obtains timely notification of possible instances of
- 24 noncompliance at the jurisdictional power plants that it
- 25 oversees. That's something that's established by the

- 1 Warren-Alquist Act. And it makes it very clear that it's a
- 2 very, very important function that we discharge and that
- 3 the STEP Division has authority over.
- And to that point careful consideration is given
- 5 to crafting notification requirements that are placed in
- 6 the licenses of every power plant that's under the CEC's
- 7 jurisdiction. So those circumstances were involved in the
- 8 violations, the alleged violations that occurred in this
- 9 case. And those circumstances weighed heavily in the
- 10 balance for determining the penalty, but that's not the
- 11 final inquiry here and not the final word on it.
- 12 You know, the Warren-Alguist Act also establishes
- 13 the maximum penalties for violations at power plants under
- 14 the CEC's jurisdiction. And they can total a potential of
- 15 \$125,000 per violation.
- And they also, in addition to setting those maxim
- 17 potential penalties, the Warren-Alquist Act provisions here
- 18 establish factors or criteria that are to be taken into
- 19 account in adjusting the potential penalties. And those
- 20 include some very broad interests, including the interest
- 21 of justice, but they also include things like the history
- 22 of compliance at the facility and the cooperation that the
- 23 facility exhibits in the investigation and in the
- 24 resolution of the complaint here. So we had all of those
- 25 factors to weigh in our determination of what would be a

- 1 proper penalty here. And again this isn't a penalty or a
- 2 settlement, it's a settlement that's been derived by mutual
- 3 negotiation with the responsible party who did act
- 4 responsibly and cooperated throughout the investigation and
- 5 in the resolution process.
- And, in addition to reaching the agreement on the
- 7 penalty amount we were also able to reach agreement on some
- 8 refinements to the notification procedures, the
- 9 notification that will have to take place going forward.
- 10 And that's just as important part of this settlement, as
- 11 the settlement amount.
- 12 And we're also here to ask you today as a
- 13 Commission to approve an amendment to the underlying
- 14 license here that will refine and improve the notification
- 15 requirements. And we have every expectation that with your
- 16 approval of both parts of the settlement that we will be in
- 17 a position going forward where this kind of thing will not
- 18 happen again.
- 19 There's a third provision in the settlement
- 20 agreement of interest here too in which the company has
- 21 also agreed specifically to notify the Energy Commission of
- 22 any future CTUC audit findings that the company receives
- 23 with respect to this project, so it's a complete package
- 24 that looked at the totality of the circumstances here. It
- 25 includes a fair settlement amount that both sides of the

- 1 table have agreed upon. It includes fair notification
- 2 requirement refinements. And it is very important to us
- 3 when we undertake these types of activities with the
- 4 companies that are under our jurisdiction that this is
- 5 something that we will both live with going forward. And
- 6 not just a settlement resolution here, but the confidence
- 7 and trust that both sides gain with one another in going
- 8 through this type of negotiation and determining a
- 9 resolution of the situation that can be difficult at times
- 10 to find a way out of. But we feel that we've attained all
- 11 of those things with this settlement.
- 12 And for that reason we commend its approval to
- 13 the Commission as a whole. But thank you very much for
- 14 your question and welcome Commissioner Vaccaro.
- 15 CHAIR HOCHSCHILD: Thank you for that.
- And because we do have a really lengthy agenda
- 17 today, so I'd like to keep us moving expeditiously, unless
- 18 there are other Commissioner comments, Commissioner
- 19 Vaccaro, would you be willing to move the item?
- 20 COMMISSIONER VACCARO: Yes, it'd be my pleasure.
- 21 I move approval of this item.
- 22 CHAIR HOCHSCHILD: Okay, Commissioner McAllister,
- 23 would you be willing to second?
- 24 COMMISSIONER MCALLISTER: I second Item 2.
- 25 CHAIR HOCHSCHILD: All in favor say aye.

1	Commissioner Vaccaro?					
2	COMMISSIONER VACCARO: Aye.					
3	CHAIR HOCHSCHILD: Commissioner McAllister?					
4	COMMISSIONER MCALLISTER: Aye.					
5	CHAIR HOCHSCHILD: Vice Chair Gunda?					
6	VICE CHAIR GUNDA: Aye.					
7	CHAIR HOCHSCHILD: Commissioner Monahan?					
8	COMMISSIONER MONAHAN: Aye.					
9	CHAIR HOCHSCHILD: And I vote aye as well. That					
10	item passes unanimously. Thank you to the staff for all					
11	the work on that.					
12	And we'll turn now to Item 3, Campbell					
13	Cogeneration Project.					
14	MS. HUBER: Hello, Chair, Vice Chair and					
15	Commissioners. My name is Elizabeth Huber and I manage the					
16	Office of Compliance Monitoring and Enforcement of the					
17	Siting, Transmission and Environmental Protection Division.					
18	With me this morning is the Lead Compliance Project Manager					
19	Mary Dyas. From the Engineering Office we have Jacquelyn					
20	Record and Joseph Tom Hughes (phonetic) and Lead Counsel					
21	is Lisa DeCarlo. Representing the Sacramento Municipal					
22	Utility District we have Ryder Couch and Rene Toledo here.					
23	We're here to present on Campbell Power Plant's					
24	petition to increase the cooling tower's volatile organic					
25	compound emission rate contained in their air quality					

- 1 conditions of certification and in the corresponding
- 2 Sacramento Metropolitan Air Quality Management District's
- 3 air quality permit condition. Next slide, please.
- 4 The Campbell Power Plant was licensed on November
- 5 16, 1994, and began commercial operation in October of
- 6 1997. Located in Sacramento County, this 158-megawatt
- 7 combined-cycle cogeneration facility originally provided
- 8 steam to the nearby Campbell Soup food processing plant
- 9 until its closure and now continues to provide electricity
- 10 back to SMUD.
- In July of 2016, the CEC approved Campbell Power
- 12 Plant's petition allowing them the option to use recycled
- 13 water as make-up water for the cooling tower. In November
- 14 2018, the CEC once again approved a petition for the plant
- 15 to replace their combustion system with a wet suppression
- 16 system in order to increase electric generation for summer
- 17 reliability. Recently at the September 8th, 2021, Business
- 18 Meeting the CEC approved an ownership transfer to the SMUD
- 19 Financing Authority, and the current name change.
- 20 Finally, under SMUD's recently adopted 2030 Zero
- 21 Carbon Plan, the Campbell Power Plant is the first of their
- 22 five-natural gas-fired power plants scheduled to retire,
- 23 which will begin as early as 2025. Next slide, please.
- On May 27, 2020, the CEC approved Campbell Power
- 25 Plant's petition to repurpose their existing water storage

- 1 tank and install a new water pump and piping system
- 2 utilizing recycled water for their fire suppression system
- 3 and eliminating the potential for any backflow of the
- 4 potable water system. The recycled water is delivered from
- 5 the Sacramento Regional Sanitation District.
- 6 By 2021, the Sacramento Regional Sanitation
- 7 District had implemented a major new water treatment system
- 8 upgrade and during their testing they determined that the
- 9 recycled water's VOC concentration could be up to ten times
- 10 higher than is currently permitted under the facility's
- 11 existing CEC license for their cooling tower. As a result
- 12 we received the petition to amend on March 15^{th} , 2021,
- 13 requesting to increase their air quality conditions
- 14 specific to the cooling tower VOC emission rate and the
- 15 corresponding air quality permit conditions from the local
- 16 Air District. This will allow the Campbell Power Plant to
- 17 utilize the Sacramento Regional District's recycled water
- 18 as an alternative option to the potable water in their
- 19 cooling towers. No construction is required, and no ground
- 20 disturbance is necessary.
- 21 Following our notification protocols for all
- 22 project teams petitions, we mailed what is called a Notice
- 23 of Receipt of the Petition for Post Certification Project
- 24 Change to the facility's mail list of interested parties
- 25 and property owners within a six-mile radius of the

- 1 facility site. This notice was sent at the end of March
- 2 2021.
- Then on February 4th, 2022, we sent a second
- 4 mailer to the same recipients, providing the staff analysis
- 5 cover letter and summary. Along with notifying the
- 6 community we also make ourselves available to address any
- 7 questions and/or concern.
- 8 A landowner who lives adjacent to the facility
- 9 reached out to my office, and with the assistance of the
- 10 Public Advisor staff and our technical experts, we held a
- 11 virtual meeting. As a grandfather whose grandkids come
- 12 over to play in the backyard and eat fruit directly off his
- 13 trees, he had his concerns. We were able to walk through
- 14 our comprehensive analysis, answering all of his questions
- 15 and assuring him that his grandchildren can continue to
- 16 play and eat the fresh fruit from the trees; sounds yummy.
- 17 The increase in VOC concentrations is the result
- 18 of organic compounds that the recycled water treatment
- 19 process did not remove and that stay entrained in the
- 20 water. It is not expected that all this entrapped VOC from
- 21 the water will in fact be expelled into the air, but our
- 22 analysis conservatively assumes that it will. The
- 23 modification is very minor, only increasing the facility's
- 24 total daily VOC emissions from 147.2 pounds per day to 153
- 25 pounds per day. Our staff analysis was comprehensive,

- 1 considering all environmental justice technical impacts on
- 2 the local EJ population from the use of the recycled water
- 3 in the cooling tower.
- 4 We were able to conclude that the modified
- 5 project would not have a significant impact on air quality
- 6 and to public safety. And the project will offset these
- 7 VOC emissions using emission reduction credits from the
- 8 shutdown of the Campbell Soup Company previously located
- 9 adjacent to the project. Next slide, please.
- 10 The CEC recommends your approval of the Order,
- 11 including the revised Conditions of Certification. We are
- 12 here to answer any questions, thank you.
- 13 CHAIR HOCHSCHILD: Thank you.
- 14 Any public comment on Item 3, Dorothy?
- MS. MURIMI: Thank you, Chair Hochschild.
- So I'll just prompt for individuals once more.
- 17 So if you're interested in making public comment, go ahead
- 18 and use the raised-hand feature. It looks like an open
- 19 hand at the bottom of your screen or device on Zoom. And
- 20 if you are calling in go ahead and press *9 to raise your
- 21 hand. You will then state and spell your name, give your
- 22 affiliation, and begin your comments.
- I see Ryder Couch, and apologize if I misstated
- 24 your name, go ahead and state your name correctly. Unmute
- 25 and go ahead and give your comment.

- 1 MR. COUCH: Oh, this is Ryder Couch, spelled R-Y-
- 2 D-E-R C-O-U-C-H. I'm the Thermal Generation Assets Manager
- 3 for SMUD.
- 4 I'd like to thank the CEC and Air District staff
- 5 for the review and analysis of this project. SMUD is
- 6 excited about utilizing recycled water at the Campbell
- 7 Power Plant, which can save up to a million gallons a day
- 8 of potable water. We look forward to partnering with
- 9 Rachel and Stan (phonetic) in saving the water in the
- 10 Sacramento area. Thank you.
- 11 Thank you, Ryder.
- 12 Again, if you'd like to make a comment go ahead
- 13 and use the raised-hand feature, it looks like an open hand
- 14 at the bottom of your screen or device.
- 15 Seeing no more hands, back to you, Chair
- 16 Hochschild.
- 17 CHAIR HOCHSCHILD: Thank you. Let's go to
- 18 Commissioner discussion, starting with Commissioner
- 19 Vaccaro.
- 20 COMMISSIONER VACCARO: Thank you. I just have a
- 21 few brief comments. Thank you, Elizabeth and team, for
- 22 presenting this. I had the opportunity to review the
- 23 backup materials, they were pretty extensive, that were
- 24 provided for this. The staff analysis I thought was
- 25 clearly written, easily understood, I think this is

- 1 straightforward.
- I did want to underscore I appreciate the story
- 3 that you told about the Public Advisor's Office and staff
- 4 really taking seriously that responsibility to help people
- 5 understand what we're doing. We send these mailers out.
- 6 They're not always clear to folks who don't have a
- 7 technical background. And so I think that's a really great
- 8 news story of the commitment that your staff and the Public
- 9 Advisor's Office bring to the work.
- 10 And if I recall correctly this project is within
- 11 a six-mile radius of an environmental justice community as
- 12 well, so I think it's that much more important that we're
- 13 accessible and that we're helping people understand what
- 14 air quality impacts there might or might not be from these
- 15 types of amendment. So I support this, and I thank you all
- 16 for your work.
- 17 CHAIR HOCHSCHILD: Thank you.
- 18 Unless there is Commissioner discussion on any of
- 19 these I would welcome --
- 20 VICE CHAIR GUNDA: Chair?
- 21 CHAIR HOCHSCHILD: Oh yeah, go ahead Vice Chair
- 22 Gunda, please.
- 23 VICE CHAIR GUNDA: Yeah, I just wanted to
- 24 reiterate Commissioner Vaccaro's support of this,
- 25 especially thank you Elizabeth for briefing our office on

- 1 this issue. And really appreciate my understanding of this
- 2 issue where the CEC staff have really gone beyond to kind
- 3 of help engage with the public and the stakeholders to help
- 4 inform and answer questions. I really appreciate it.
- 5 That's a critical part of our work as a state agency, the
- 6 transparency and awareness. I just wanted to say thank you
- 7 to you and your leadership on this issue, thanks.
- 8 MS. HUBER: Thank you.
- 9 COMMISSIONER MCALLISTER: I just want to make a
- 10 quick comment too --
- 11 CHAIR HOCHSCHILD: Yeah, please.
- 12 COMMISSIONER MCALLISTER: -- if I might, Chair.
- 13 CHAIR HOCHSCHILD: Yes.
- 14 COMMISSIONER MCALLISTER: Yeah, so I totally
- 15 appreciate the -- won't reiterate, but appreciate the
- 16 diligence of staff on all these different fronts and
- 17 aspects of this project. But also just to point out that
- 18 the avoidance of potable water and also the fact that this
- 19 recycled water would have gone elsewhere to be processed.
- 20 It would have required a lot of energy, which would emit
- 21 many more emissions elsewhere in the system, the water and
- 22 electricity system even though we're potentially seeing a
- 23 slight increase in outgassing with that recycled water on
- 24 this site. So we take a more integrated view, a broader
- 25 view, which is actually the net reduction in emissions.

- 1 CHAIR HOCHSCHILD: Yeah. Excellent, excellent
- 2 point.
- 3 With that, Commissioner Vaccaro I'd welcome a
- 4 motion from you on Item 3.
- 5 COMMISSIONER VACCARO: Yes, I move approval of
- 6 Item 3.
- 7 CHAIR HOCHSCHILD: Vice Chair Gunda, would you be
- 8 willing to second?
- 9 VICE CHAIR GUNDA: Second Item 3.
- 10 CHAIR HOCHSCHILD: All in favor say aye.
- 11 Commissioner Vaccaro?
- 12 COMMISSIONER VACCARO: Aye.
- 13 CHAIR HOCHSCHILD: Vice Chair Gunda?
- 14 VICE CHAIR GUNDA: Aye.
- 15 CHAIR HOCHSCHILD: Commissioner McAllister?
- 16 (Silence on the line.) You are muted.
- 17 COMMISSIONER MCALLISTER: Aye, aye. I'm
- 18 unmuting, but it's taking a second or two.
- 19 CHAIR HOCHSCHILD: Commissioner Monahan?
- 20 COMMISSIONER MONAHAN: Aye.
- 21 CHAIR HOCHSCHILD: And I vote aye as well. That
- 22 item passes unanimously.
- Let's turn now to Item 4, Los Medanos Energy
- 24 Center.
- MS. HUBER: Hello again, Chair, Vice Chair, and

- 1 Commissioners. Once again for the record I am Elizabeth
- 2 Huber, Manager of the Office of Compliance Monitoring and
- 3 Enforcement of the STEP Division. With me this morning is
- 4 lead Compliance Project Manager John Heiser, and Lead
- 5 Counsel Jennifer Baldwin. Representing the Project Owner
- 6 of Calpine Corporation is Director of Strategic Origination
- 7 Barbara McBride. And from their project partner, Blue
- 8 Planet Systems Corporation, is Founder, CEO and Chief
- 9 Scientist Brent Constantz.
- 10 We're here to present for your approval a
- 11 petition that would allow Calpine's Los Medanos Energy
- 12 Center to install a pipe that will transport their treated
- 13 stack gas offsite for carbon dioxide CO2 removal. Next
- 14 slide, please.
- We are asking for your consideration of this
- 16 proposed change that could otherwise be approved by staff
- 17 because this carbon sequestration project is an innovative
- 18 approach to reducing greenhouse gas emissions at a thermal
- 19 power plant.
- The proposed demonstration project would supply
- 21 approximately 1 percent of the Los Medanos Energy Center's
- 22 flue gas via an above-ground pipe to a neighboring carbon
- 23 capture and utilization system being developed by Blue
- 24 Planet's San Francisco Bay Aggregates. The pipe is 8
- 25 inches in diameter and will be routed 80 feet along

- 1 existing pipe racks and a new brace will be installed near
- 2 the road crossing. The flue gas pipe is being designed to
- 3 building codes and has been approved under the city of
- 4 Pittsburg zoning ordinances. Also, the flue gas will not
- 5 be compressed. Next slide, please.
- 6 For some history, the Los Medanos Energy Center
- 7 is a nominal 500-megawatt combined-cycle facility. It was
- 8 licensed by the Energy Commission on August 17th, 1999; and
- 9 began commercial operation on July 9th, 2001.
- In 2011, the CEC approved an efficiency
- 11 improvement project at the facility allowing an increase in
- 12 the turbine firing temperature to the Advanced Gas Path for
- 13 additional generation to support the state's early
- 14 reliability initiatives. Next slide, please.
- The goal of the Carbon Dioxide Capture Project,
- 16 as it is called, is to reduce CO2 emissions and realize
- 17 growth of the circular economy by transforming the CO2 into
- 18 a permanently sequestered calcium carbonate limestone that
- 19 will be used in place of guarried sand and aggregates in
- 20 concrete and other construction materials. The Los Medanos
- 21 Energy Center's flue gas will be combined with locally
- 22 sourced recycled and crushed concrete aggregate to produce
- 23 new carbon-sequestered and upcycled rock products. The
- 24 demonstration project anticipates capturing 11 tons of CO2
- 25 per day for the beneficial use of sequestered carbon and

- 1 will provide the project owners a first-hand opportunity to
- 2 learn about the benefits as well as possible implications
- 3 of integrating post-combustion carbon capture with thermal
- 4 power plant operations prior to progressing to commercial
- 5 scale. Next slide, please.
- 6 This concludes our presentation, and we recommend
- 7 your approval of the Order allowing for Los Medanos Energy
- 8 Center to install a flue gas pipe for delivery offsite for a
- 9 carbon sequestration project. And we are here and happy
- 10 to answer any questions. Thank you.
- 11 CHAIR HOCHSCHILD: Thank you, Elizabeth.
- 12 Let's turn to public comment. Do we have any
- 13 public comment on Item 4?
- MS. MURIMI: Yes. We do, Chair Hochschild.
- 15 Let me give a quick talk for folks again. Again,
- 16 if you are on the phone dial *9 to raise your hand and *6
- 17 to unmute. And if you're on Zoom use the raised-hand
- 18 feature to indicate you'd like to make a comment.
- 19 I'll start with Brent Constantz. Brent, you can
- 20 go ahead and unmute on your end, state, and spell your
- 21 name, and give your comments and give your affiliation as
- 22 well. Thank you, Brent.
- 23 MR. CONSTANTZ: I thank you very much. This is
- 24 Brent Constantz from Blue Planet, C-O-N-S-T-A-N-T-Z.
- This project is a leading project in carbon

- 1 utilization. The CO2 is converted to carbonate at a very
- 2 low energy cost, and it provides one of the most practical
- 3 means of capturing CO2 from a flue gas stream. And also,
- 4 it does it all in one step, which is unique. And it
- 5 provides a way to mineralize the collagen into limestone,
- 6 which can be used in a variety of ways. So it's a very
- 7 interesting way and new possibility for decarbonizing power
- 8 generation.
- 9 At the plant in Pittsburg next to Los Medanos,
- 10 we've already created seven jobs as the plant develops. We
- 11 expect to develop many more jobs, including higher paying
- 12 jobs. The location is close enough to a BART location,
- 13 that we can hire people from all over the Bay Area who can
- 14 come in on BART, it's an excellent location. Some of the
- 15 employees we've already hired grew up in Pittsburg and went
- 16 to school there, were actually born there. And we've
- 17 developed a great relationship with the community there.
- 18 The aggregate from the plant has already been
- 19 used in Terminal One at San Francisco Airport, which has
- 20 set guidelines for carbon neutrality and a large part of
- 21 their carbon footprint is in the embodied carbon in the
- 22 concrete they pour. And you can actually go to the SFO
- 23 website and see that they're now specifying low carbon and
- 24 carbon-neutral concrete for the airport. And we worked
- 25 with our local partner, U.S. Concrete, who is also

- 1 providing the raw materials to form a basis of the circular
- 2 economy. That we bring in the raw materials, we process
- 3 them, and they get reused in the built environment lowering
- 4 the carbon footprint of the buildings like at the airport
- 5 around the Bay Area.
- 6 So thank you very much. I really appreciate your
- 7 consideration of this application. Thank you.
- 8 MS. MURIMI: Thank you, Brent.
- 9 We'll move on to Barbara McBride. Barbara, go
- 10 ahead and state and spell your name, give your affiliation,
- 11 and begin your comments.
- MS. MCBRIDE: I'm Barbara McBride with Calpine,
- 13 M-C-B-R-I-D-E. And I wanted to thank the Commissioners and
- 14 staff for work on this project, and also wanted to
- 15 congratulate Commissioner Vaccaro on her new position.
- 16 The San Francisco Bay Aggregates Project is one
- 17 of two carbon capture and utilization in storage projects
- 18 Calpine has underway at the Los Medanos Energy Center. The
- 19 other project is a carbon-capture pilot project using ion
- 20 clean energy proprietary solvent, being conducted under a
- 21 DOE grant which will be in front of the Commission in the
- 22 next few months.
- Calpine also just began a front-end (phonetic)
- 24 engineering and design study at our Delta Energy Center,
- 25 which is also being funded by DOE.

- 1 Calpine is greatly invested in CCUS technologies,
- 2 not just in California but throughout the U.S. And we
- 3 believe that CCUS best plays a critical role in
- 4 decarbonizing the electricity sector in California in
- 5 meeting its climate goals. Calpine believes our pipeline
- 6 offers a potential for significant reduction of CO2
- 7 emissions from our own facilities, but also the opportunity
- 8 to spearhead industrial hubs and rapidly scale CCUS more
- 9 broadly in facilitating carbon reduction for other hard-to-
- 10 reach industries.
- 11 We look forward to working with the Energy
- 12 Commission not only on permitting these facilities and on
- 13 this project, but also on furthering technologies. We're
- 14 really excited about this project and look forward to the
- 15 results of this project so we can implement further.
- Thanks again, that's it.
- MS. MURIMI: Thank you, Barbara.
- 18 Chair Hochschild, I see no other hands raised at
- 19 this time.
- 20 CHAIR HOCHSCHILD: All right, well, thank you.
- 21 I'm encouraged by this. And I just wanted to say when I
- 22 was in Scotland for the Climate Summit in November, I did
- 23 have the opportunity to sit down with the whole team from
- 24 Blue Planet. And just really am encouraged by this
- 25 progress in this, I think, really important and emerging

- 1 area of focus.
- 2 And one of the things that we're going to be
- 3 doing in the years ahead there's \$210 million for
- 4 industrial decarbonization. We are going to be focusing
- 5 pretty heavily on cement and this type of chemistry in that
- 6 category of our work, so really encouraged to see this.
- 7 I will open it up if there's any other
- 8 Commissioners wishing to make a comment. If not,
- 9 Commissioner Vaccaro, would you be willing to move the
- 10 item?
- 11 COMMISSIONER VACCARO: Yes, and before I do, I
- 12 just wanted to make one quick statement. I echo your
- 13 enthusiasm, Chair Hochschild. And in fact I recognize
- 14 staff as well for having a good judgment to bring this item
- 15 to the full Commission.
- This is one of the items, as I understand it,
- 17 that staff could have approved at the staff level, but it's
- 18 so important. And it shows that STEP staff is really
- 19 paying attention to things that are important outside of
- 20 just the STEP Division and really daylighting for the full
- 21 Commission just important, important work and important
- 22 technology. So I just wanted to recognize that, share your
- 23 enthusiasm, Chair. And yes, I would move approval of this
- 24 item.
- 25 CHAIR HOCHSCHILD: Thank you, great, great point.

1	Commissioner McAllister, would you be willing to
2	second?
3	COMMISSIONER MCALLISTER: Second.
4	CHAIR HOCHSCHILD: Okay. All in favor say aye.
5	Commissioner Vaccaro?
6	COMMISSIONER VACCARO: Aye.
7	CHAIR HOCHSCHILD: Commissioner McAllister?
8	COMMISSIONER MCALLISTER: Aye.
9	CHAIR HOCHSCHILD: Vice Chair Gunda? (Silence on
10	the line.) Vice Chair Gunda, we missed you there. You're
11	still muted. Do you have a double mute on? (Audio
12	difficulties.) Okay, can you just do a thumbs up?
13	VICE CHAIR GUNDA: (Affirms physically.)
14	CHAIR HOCHSCHILD: Okay. Commissioner Monahan?
15	COMMISSIONER MONAHAN: Aye.
16	CHAIR HOCHSCHILD: And I vote age as well. That
17	item passes unanimously. Let's see if the Vice Chair can
18	get his mic figured out.
19	We'll turn now to Item 5.
20	Actually before we do, I'll just share on this
21	topic. We had a terrific tour that I did with my team and
22	Jonah Steinbeck on Monday visiting four different carbon
23	capture companies in the Bay Area. And I want to say this

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space is really taking off in a way that I find really

exciting, just the level of investment, technology

24

25

- 1 progresses coming in.
- 2 And it appears about half of the carbon capture
- 3 innovation in the United States is happening in California.
- 4 And there's a big opportunity upcoming with some federal
- 5 infrastructure funds, which again would be a great
- 6 opportunity for us to keep building on that while it -- so
- 7 just thanks to the stakeholders working on this and to the
- 8 staff for bringing this up. That's a great point,
- 9 Commissioner, that they especially brought this to us.
- 10 So let's turn now to Item 5, The Integrated
- 11 Energy Policy Report.
- MS. RAITT: Great. Good morning, Chair, Vice
- 13 Chair and Commissioners. Staff is requesting your
- 14 approval of Volume III of the 2021 Integrated Energy Policy
- 15 Report, or the 2021 IEPR for short. I'm Heather Raitt, the
- 16 Program Manager. And I was going to be joined by the lead
- 17 author, Melissa Jones, but unfortunately she couldn't be
- 18 here today. So instead we're happy to have Jennifer
- 19 Campagna here, and she also made important contributions to
- 20 this volume. So next slide, please.
- 21 The statute requires the CEC to assesses major
- 22 energy trends and issues facing the state's electricity,
- 23 natural gas, and transportation fuel sectors. The report
- 24 develops policies to advance clean and reliable energy
- 25 systems with benefits to reach all Californians. This

- 1 volume focuses on the clean energy transition needed for
- 2 the gas sector. Next slide, please.
- 3 Commissioner Andrew McAllister led the overall
- 4 development of the 2021 IEPR. And it is comprised of four
- 5 volumes and an appendix, with a Lead Commissioner for each
- 6 topic as shown on this slide.
- 7 The other volumes were adopted in February, and
- 8 they are Volume I on building decarbonization; Volume II on
- 9 energy reliability; Volume IV on the forecast; and an
- 10 Appendix on the Clean Transportation Program.
- 11 Volume III is under consideration today and is on
- 12 decarbonizing the state's gas system. Next slide, please.
- 13 The 2021 IEPR reflects the input and analysis
- 14 from a broad array of stakeholders. And the Energy
- 15 Commission sought input from industry experts, the public,
- 16 sister agencies throughout the report development process.
- 17 We had 21 remote access workshops, 5 of which addressed the
- 18 state's gas system. The public had opportunities to
- 19 comment on each workshop and on the draft report that was
- 20 made available in January and then on the final report
- 21 posted late February.
- We greatly appreciate and carefully reviewed the
- 23 thoughtful comments received and we appreciate the time and
- 24 expertise shared by the public and workshop participants.
- 25 And this final version of Volume III that include changes

- 1 to the draft in response to those comments.
- 2 Also, an errata reflecting a few minor edits was
- 3 posted yesterday. And Commissioners, I do have a copy of the
- 4 errata and it was included in your meeting materials.
- 5 So with that background, I'd like to go ahead and
- 6 ask Jennifer Campagna now to go ahead and provide a very
- 7 high-level summary of the key findings of Volume III. Go
- 8 ahead, Jennifer. Next slide, please.
- 9 MS. CAMPAGNA: Thank you, Heather.
- 10 Good morning, Chairman Hochschild and
- 11 Commissioners. My name is Jennifer Campania. I am the
- 12 Supervisor of the Natural Gas Unit. And as Heather
- 13 mentioned I am filling in for Melissa Jones, the lead
- 14 author of Volume III and I will be providing an overview of
- 15 the volume. Next slide, please.
- 16 California will need to reduce greenhouse gas
- 17 emissions, both carbon dioxide and methane, from the gas
- 18 system in order to meet our long-term climate goals.
- 19 Transitioning away from fossil gas is key to that. Gas has
- 20 been the dominant fuel for space and water heating in
- 21 residential and commercial buildings, for electric
- 22 generation, and as an industrial feedstock and fuel. We
- 23 expect long-term gas demand for residential and commercial
- 24 customers to decline in response to the state's building
- 25 decarbonization policies, but this is only 25 percent of

- 1 total gas demand in the state.
- 2 That said, we will need to find decarbonization
- 3 strategies to address the remaining 75 percent of gas
- 4 demand, including difficult-to-electrify end uses in
- 5 industry, agriculture, and electricity generation. Next
- 6 slide, please.
- 7 Okay, a brief overview of the Volume III, gas
- 8 assessment and forecasts that are required for IEPR are
- 9 every two years and provide situational awareness on gas
- 10 demand, prices, and infrastructure.
- 11 The report also addresses key emerging gas
- 12 issues, including building electrification is expected to
- 13 reduce residential and commercial gas use over the coming
- 14 decades. But questions do remain about when, where, and
- 15 how much demand will decline.
- There are critical interdependencies between the
- 17 gas and electric systems as the state develops zero-carbon
- 18 resources on the electric grid, such as renewables and
- 19 storage, and for some transition period a safe and reliable
- 20 gas system will be needed to support electrical
- 21 reliability.
- 22 Renewable gas and renewable hydrogen may also
- 23 have the potential to address hard to electrify gas uses in
- 24 the longer term and could allow gas utilities to repurpose
- 25 at least portions of the gas system. The state must make

- 1 decisions about decarbonization pathways for the gas system
- 2 and take actions in the near term if we are to ensure to
- 3 meet our greenhouse gas reduction goals. Next slide,
- 4 please.
- 5 A key challenge in long-term gas planning is to
- 6 strike a balance between competing objectives for the gas
- 7 system. Ensuring a safe and reliable gas system is
- 8 essential to meet California's energy and reliability needs
- 9 for some transition period. The state has a multi-billion-
- 10 dollar gas system that requires ongoing safety investments
- 11 and maintenance. We must begin to prioritize these
- 12 investments to avoid creating large amounts of stranded
- 13 investments, investments that will not be needed in the
- 14 long-term as gas demand declines.
- 15 Equity is paramount. As buildings electrify
- 16 there will be fewer customers left on the gas system to
- 17 spread the costs over, which can increase rates. Many who
- 18 remain on the gas system will either be low-income or
- 19 located in disadvantaged communities, and the least able to
- 20 afford the higher gas rates or perhaps invest in
- 21 electrification.
- 22 Also, an adequate workforce will be needed to
- 23 reduce gas demand from electrification and maintain the gas
- 24 system during the transition.
- 25 Additionally, a shrinking gas system can displace

- 1 utility workers. Next slide, please.
- 2 A coordinated, transparent, and rigorous long-
- 3 term gas planning process in the state is critical to avoid
- 4 potential negative impacts on energy reliability, rates,
- 5 and equity.
- 6 It will ensure that decisions about gas utility
- 7 operations, rates, and infrastructure are aligned with
- 8 climate goals to achieve GHG emission reductions.
- 9 It will require coordination among CEC, CPUC, and
- 10 Air Resources Board and stakeholders to develop a roadmap
- 11 and analytical framework for gas planning. The agencies
- 12 are working on a White Paper for 2022.
- 13 We also need to explicitly plan for extreme
- 14 events, such as extreme cold from a polar vortex, for
- 15 example, to ensure reliability and contain costs.
- 16 Long-term pipeline constraints that jeopardize
- 17 reliability and cause higher prices need to be addressed.
- 18 Finally, we need to develop a plan for the
- 19 retirement of Aliso Canyon Storage Facility that can ensure
- 20 reliability. Next slide, please.
- 21 The CEC's role in forecasting and assessments can
- 22 play a key analytical role in supporting long-term gas
- 23 planning.
- In the 2021 IEPR proceeding, for the first time,
- 25 staff collected filings from the gas utilities such as

- 1 those used for the electricity demand forecast to support
- 2 the CEC's gas demand forecast. Staff has already begun
- 3 expanding the CEC's gas demand forecast and is developing
- 4 long-term demand scenarios to support long-term gas system
- 5 planning. The CEC will collaborate with other agencies and
- 6 stakeholder on the level of granularity needed for
- 7 geographically targeted electrification.
- 8 For this IEPR, staff already implemented
- 9 significant improvements in price forecast products through
- 10 revised modeling methods and newly created tools for
- 11 forecasting gas commodity prices, gas transportation rates,
- 12 and delivered gas prices for customers. More are planned
- 13 to look at long-term revenue requirements.
- Over the last year, staff also developed new
- 15 analytical capabilities, such as supply and demand balance
- 16 tools and hydraulic modeling skills for assessing
- 17 infrastructure that will allow the CEC to explore gas
- 18 system issues at greater depth and with the sophistication
- 19 closer to that applied by the utilities. The CEC will also
- 20 begin modeling the distribution system to help target
- 21 building electrification. Next slide, please.
- The gas utility obligation to serve needs to be
- 23 reevaluated and may require a legislative fix. The
- 24 obligation to serve locks in gas demand for decades. Hold-
- 25 outs have to be served, preventing decommissioning of

1	distribution	systems.	The	gas	extension	allowances	for

- 2 residential and commercial customers need to be modified or
- 3 eliminated. Line extensions incentivize gas use in
- 4 buildings. CPUC staff propose in the building
- 5 decarbonization proceeding to eliminate them.
- Rate structures are needed that support deep
- 7 reductions in fossil gas usage and electrification efforts
- 8 for residential and commercial customers. For this, we
- 9 need to look beyond the three-to-four-year rate cycles and
- 10 focus on the long-term gas transition.
- 11 Equity in building decarbonization is essential.
- 12 Electrification subsidies should focus on low-income and
- 13 disadvantaged community customers who are least able to
- 14 afford new electric appliances and who could be left on the
- 15 gas system and face higher gas rates. Low-income customers
- 16 and disadvantaged communities should have priority for
- 17 decarbonization incentives and programs, so they aren't
- 18 left behind to bear the disproportionate share of gas
- 19 system costs.
- 20 Successful building decarbonization and
- 21 distribution decommissioning will need R&D efforts and
- 22 funding of pilot projects. Next slide, please.
- 23 Incentives are necessary to produce renewable gas
- 24 at a cost that is competitive with fossil gas. Converting
- 25 waste to usable energy is a primary strategy in CARB's

- 1 Short-lived Climate Pollution Policy.
- 2 The state should continue funding renewable gas
- 3 research to enable advancements and lower costs in
- 4 renewable gas production, consider modifications to the
- 5 LCFS program so that renewable gas incentives that apply to
- 6 transportation fuels are expanded to applications other
- 7 than transportation, such as in the industrial sector.
- 8 Evaluate other incentives for renewable gas
- 9 production including from feedstocks beyond the primary
- 10 feedstocks currently used, such as crop residue or forest
- 11 biomass.
- Many industrial customers do not have access to
- 13 cost-effective decarbonization strategies. Renewable
- 14 hydrogen has the potential to meet some of these end-uses.
- 15 The state needs to further research and develop pilot
- 16 projects for renewable hydrogen as a replacement for fossil
- 17 gas and hard to electrify gas uses. The state should build
- 18 on the current R&D and pilot efforts to explore the amount
- 19 of hydrogen that can safely be blended into existing gas
- 20 pipelines and the potential costs to modify the gas system
- 21 to deliver this clean fuel.
- 22 California could explore producing hydrogen
- 23 onsite at generation stations or large industrial users,
- 24 which could also co-locate facilities to do double-duty by
- 25 also providing hydrogen in transportation. Next slide,

- 1 please.
- 2 That concludes my presentation. Staff recommends
- 3 adoption of Volume III with the errata. And with that I
- 4 will turn it back over to Heather Raitt. Thank you very
- 5 much.
- 6 MS. RAITT: Thank you, Jennifer.
- 7 So yes, and just before concluding I'd just like
- 8 to take a moment to thank you, Commissioner McAllister, for
- 9 your guidance and leadership on the overall IEPR. And to
- 10 thank Vice Chair Gunda, for your leadership on this volume.
- 11 I'd also like to thank Melissa Jones, who I'm sorry
- 12 couldn't be here today. And thanks to Jennifer and all the
- 13 others who made important contributions in the Energy
- 14 Assessments Division: Stephanie Bailey, Raquel Kravitz, and
- 15 Denise Costa who help make everything happen from behind
- 16 the scenes.
- 17 And so that concludes our presentation. And Lisa
- 18 De Carlo from the Chief Counsel's office is available to
- 19 address any questions you may have. And again, staff
- 20 requests that you adopt Volume III of the 2021 IEPR
- 21 incorporating changes detailed in the errata. Thanks so
- 22 much.
- 23 CHAIR HOCHSCHILD: Well thank you so much,
- 24 Heather and Jennifer, and to the whole team. And I add my
- 25 thanks to Commission McAllister and the Vice Chair for all

- 1 the hard work on this substantial document.
- 2 So with that let's go to public comment on Item
- 3 5.
- 4 MS. MURIMI: Thank you, Chair.
- 5 So just checking for hands. Again, for folks
- 6 that are on Zoom you can go ahead and use the raised-hand
- 7 feature. And if you're calling in go ahead and press *9 to
- 8 indicate that you'd like to make a comment.
- 9 I see a Rachel Kuykendall, and apologies if I've
- 10 misstated your name. Go ahead and state your name, spell
- 11 your name and give your affiliation and unmute on your end.
- 12 Thank you, Rachel.
- MS. KUYKENDALL: Great. So this is Rachel
- 14 Kuykendall, K-U-Y-K-E-N-D-A-L-L with PG&E. We just want to
- 15 first thank the Commission and staff who worked on this for
- 16 what was a very comprehensive and collaborative effort to
- 17 create this draft language. In particular, we do want to
- 18 cheer the emphasis on zonal electrification. We do think
- 19 this is a very important solution lever to maintain
- 20 affordable gas rates while decarbonizing our buildings.
- In particular, I wanted to point out the need
- 22 regarding zonal electrification for two things. First,
- 23 external funding to ensure that the cost of decommissioning
- 24 gas infrastructure doesn't fall solely on our low-income
- 25 customers. In particular, being able to leverage some of

- 1 the governor's proposed budget for some of this work, I
- 2 think, is very critical in being able to advance zonal
- 3 electrification.
- 4 And secondly, being able to leverage financing
- 5 mechanisms to make this work happen. So, in particular,
- 6 being able to capitalize these projects will be very
- 7 important for us to be able to unlock this work further and
- 8 be able to use non-pipeline alternatives as a replacement
- 9 for upcoming capital investments in the gas infrastructure.
- 10 With that, again we just want to thank the
- 11 Commission and staff for all the hard work that went into
- 12 this and the really great and thorough recommendations.
- 13 And we look forward to working with you all on
- 14 implementation.
- MS. MURIMI: Thank you, Rachel.
- Next, I see Jennifer Lu. Go ahead and state and
- 17 spell your name and your affiliation. And you may begin
- 18 your comment.
- MS. LU: Good morning, Commissioners and staff, my
- 20 name is Jennifer Lu, J-E-N-N-I-F-E-R, last name L-U. And I
- 21 represent SoCalGas.
- 22 First, I wanted to say congratulations to
- 23 Commissioner Vaccaro, great to have you here. And these
- 24 are my comments. I appreciate the opportunity to provide
- 25 public comment on the CEC 2021 IEPR. It is in the public

- 1 interest to decarbonize the gas system as part of meeting
- 2 California's climate and energy goals. Clean molecules
- 3 such as renewable gas and renewable hydrogen have a
- 4 critical role to play in this transition, especially in
- 5 decarbonizing hard-to-abate sectors such as the cement and
- 6 steel industries and heavy-duty vehicles.
- 7 The CEC recognizes the role of clean fuels and
- 8 has recommended the development and use of renewable gas
- 9 and renewable hydrogen in the 2021 IEPR. SoCalGas is fully
- 10 supportive of this recommendation.
- 11 Furthermore, as end users electrify over time, we
- 12 recognize that the role of gas in the distribution system
- 13 will diminish. It is clear that the state needs a balanced
- 14 evolution and transformation of the gaseous network. We
- 15 look forward to continuing to collaborate with the CEC on
- 16 the upcoming 2022 IEPR update. Thank you.
- MS. MURIMI: Thank you, Jennifer.
- 18 Chair Hochschild, I see no other hands raised at
- 19 this time.
- 20 CHAIR HOCHSCHILD: Okay, thank you.
- 21 Let's turn to Commissioner discussion, starting
- 22 with Commissioner McAllister.
- 23 COMMISSIONER MCALLISTER: Well great, thank you
- 24 very much.
- 25 First of all I just wanted to thank Heather for

- 1 all of your work, and also the staffs, your direct staff
- 2 Stephanie, Raquel, and Denise. You're just a pleasure to
- 3 work with. And your responsiveness and just breadth of
- 4 knowledge, understanding is -- and sort of your
- 5 facilitation of a lot of moving parts in making sure they
- 6 all fit together on what can be extremely tight timelines,
- 7 so I just really value that for this chapter and just
- 8 throughout this IEPR and previous ones that I've overseen
- 9 so just thank you for that competency and capability.
- Jennifer, thank you for that presentation. And
- 11 please pass along our collective thanks to Melissa as well.
- 12 We just had such a great team on gas.
- 13 And I'll make some brief comments and then pass
- 14 the baton to Vice Chair Gunda, who was the Lead
- 15 Commissioner on this topic area. But I have been lead in
- 16 the past on this topic area, and I think we're seeing this
- 17 intimate, increasingly intimate relationship or linkage
- 18 between gas and electricity. And as we discuss strategies
- 19 and figure out how to move forward with some big
- 20 investments on decarbonization, in particular of our end
- 21 uses and building stock. And this chapter, I think, lays
- 22 that out nicely and really forms a strong foundation for a
- 23 more detailed discussion of the gas transition that will be
- 24 taking place going forward in next year's IEPR,
- 25 particularly under Vice Chair Gunda's leadership. So I'm

- 1 very excited to continue this discussion going forward.
- 2 And I have a sort of a rule that I always fall
- 3 back to, it's "count the molecules." And I was happy to
- 4 hear SoCalGas's comments along those lines. But we have to
- 5 count the molecules, be rigorous about that, and also track
- 6 where they're coming from and name them appropriately.
- 7 And I think we're getting away from the term
- 8 "natural" attached to natural gas and trying to be more
- 9 specific with respect to the flavors, types, origins of
- 10 that, of the methane and other gases that we have in the
- 11 gaseous fuel system. And this chapter actually does that
- 12 quite well, only using the term "natural" when it's there
- 13 and has to be capitalized pretty much for sort of proper
- 14 noun reasons. But most of the time the term is not used,
- 15 rather it's renewable gas, power-to-gas, embedded gas,
- 16 hydrogen gas. So I think when we shift terminology like
- 17 that, we're helped in the level of rigor we think at, with
- 18 which we think as we approach these issues in earnest.
- 19 I'm really excited to be sort of having an
- 20 attentional discussion about this, as we get towards some
- 21 expected big investments in building decarbonization and
- 22 electrification. And that intentionality of planning to
- 23 manage costs is just right there. It's a parallel theme,
- 24 it's just linked at the hip with our building
- 25 decarbonization. And the hard-to-reach sectors and hard-

- 1 to-electrify sectors absolutely there's going to be a role
- 2 for different forms of thermal energy, including liquid or
- 3 gaseous fields. And so we just need to be very intentional
- 4 to manage that transition optimally.
- 5 And then finally just equity. Really many, if
- 6 not most of our investments going forward are going to be
- 7 in equity communities and frontline communities, extreme
- 8 heat communities where we really need not sort of sources
- 9 of capital that come from -- not from the consumers or the
- 10 ratepayers themselves, but from the federal government.
- 11 We're getting a significant amount there. We'll be getting
- 12 some significant funds from the state government. We have
- 13 a few other activities, notably, Southern California
- 14 Edison's application for the wind decarb. So I wanted to
- 15 just sort of paint a little bit of a broader picture within
- 16 which this gas transition will take place.
- 17 So the importance of this really can't be
- 18 overstated. This is a generational shift and we're laying
- 19 the foundation and this chapter does a really nice job of
- 20 that. And this conversation will go on for years and
- 21 decades as we really in earnest start down this transition
- 22 and finish it by 2035, 2040, or 2045.
- So, a big task ahead, but I'm confident that we
- 24 have a team to manage the discussion and do it in a
- 25 rigorous way with all the analytical chops that the

- 1 Commission brings to bear on this.
- 2 And with that I'll pass off to Vice Chair Gunda
- 3 for his comments. Thanks for all your leadership on this
- 4 topic.
- 5 VICE CHAIR GUNDA: Thank you, Commissioner
- 6 McAllister. I just want to echo thanks to you first for
- 7 leading the 2021 IEPR. I think it's a monumental scope
- 8 that we tackled in 2021. I think most of the 2021
- 9 information was in the spirit of developing a foundational
- 10 data information that we could really think through the
- 11 next 10 years of transition, so really appreciate your kind
- 12 of ask for more embedded wisdom in the process, but also
- 13 your leadership on making it as comprehensive and thorough
- 14 as possible.
- 15 Again, you've already laid out the thanks to
- 16 Heather. But just we can't thank her enough, so Heather to
- 17 you and your entire team I really appreciate your guidance,
- 18 your thoughtfulness and just kind of keeping us all
- 19 together in the most collaborative fashion anyone can
- 20 possibly give us all. So thank you, Heather, so much to
- 21 you and your team.
- 22 And as Commissioner McAllister noted, and Heather
- 23 noted we didn't have Melissa Jones today here, but I really
- 24 want to give her a special callout for the incredible work
- 25 that she has done in pulling together this volume. I think

- 1 a part of pulling this volume was to really stitch together
- 2 disparate efforts at CEC and elsewhere in the state to
- 3 really think through foundational documents that can help
- 4 us lay out an overall vision and view for future of gas
- 5 work at CEC, so I really appreciate Melissa's incredible
- 6 work on this.
- 7 It was also not done in isolation, it really
- 8 needed collaboration broadly, so there was a gas working
- 9 group that was put together with a bunch of stakeholders.
- 10 And so it's really important for that, for them to help
- 11 bring together utilities and other top leaders in the space
- 12 to really help shape this volume, so thanks to everybody
- 13 who participates in that, including our sister agencies.
- 14 And to, as the name that you noted, thanks to
- 15 Melissa. It cannot happen without the collective efforts
- 16 of Jennifer and her entire team, so Jennifer thank you for
- 17 your leadership and the entire gas team.
- 18 I also want to note thanks to Katie Elder who is
- 19 our consultant on gas issues at Aspen, so just Katie, a
- 20 shoutout to you and your team. Thanks for all your
- 21 support.
- 22 As the stakeholders noted, PG&E Rachel, and
- 23 SoCalGas Jennifer, thank you for your comments and support
- 24 of the volume.
- 25 I think we are, as Commissioner McAllister

- 1 pointed out, in this incredible transition and really
- 2 thinking through the dimensions of the different elements
- 3 of work we need to do. I think we're all pulling on the
- 4 same thread, which is clean, reliable, safe, affordable
- 5 energy future for all Californians as soon as possible.
- 6 And an important element of this is really thinking through
- 7 the gas transition, both in terms of the impact of
- 8 identification on the broader economy. But also, how do we
- 9 ensure the hard to decarbonize or electrify segments
- 10 through clean molecules and lay out the plan to still
- 11 ensure affordability and safety.
- 12 So I think we have a lot of work to do. And I
- 13 don't want to preempt my comments for the OII, which is a
- 14 couple of items from now, but really thank you everybody
- 15 for the incredible work and to looking forward to
- 16 supporting this.
- 17 CHAIR HOCHSCHILD: Thank you.
- 18 Other Commissioners wishing to make a --
- 19 Commissioner Monahan, please go ahead.
- 20 COMMISSIONER MONAHAN: Well, I'll just be really
- 21 quick to say that I found this volume to be really
- 22 fascinating and it's tackling such a critical issue facing
- 23 California.
- 24 And the fact that equity was really highlighted,
- 25 how do we make sure that families aren't left behind, is

1	such a	critical	issue.	And	as	Vice	Chair	Gun da	is	going	to
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- 2 elaborate, I mean, this is a thread that we're going to
- 3 continue and want to make sure we get it right.
- 4 Add I really also appreciate the fact that we are
- 5 -- the colors of hydrogen as Commissioner McAllister said -
- 6 that we're getting really more, a lot more specific about
- 7 what we're talking about. And I think we will continue as
- 8 we hopefully get a hydrogen hub in California to make sure
- 9 that our analysis informs the direction that California
- 10 goes as a state and that we really incentivize industries
- 11 here in the state of California that will provide truly
- 12 zero-carbon, sustainable hydrogen for the future and other
- 13 investments.
- So just I think this was a really particularly
- 15 important volume and I just appreciated the attentiveness
- 16 of all the staff and Heather's team in pulling it together.
- 17 CHAIR HOCHSCHILD: Yeah, I agree. I just want to
- 18 call out Commissioner McAllister's point about the
- 19 nomenclature, which really matters when we're trying to
- 20 distinguish between fossil gas versus others as we go
- 21 forward.
- 22 So with that I'd invite a motion from
- 23 Commissioner McAllister on Item 5.
- 24 COMMISSIONER MCALLISTER: Happy to move Item 5.
- 25 CHAIR HOCHSCHILD: Okay, Vice Chair Gunda would

- 1 you be willing to second?
- 2 VICE CHAIR GUNDA: Second Item 5.
- 3 CHAIR HOCHSCHILD: All in favor say aye.
- 4 Commissioner McAllister?
- 5 COMMISSIONER MCALLISTER: Aye.
- 6 CHAIR HOCHSCHILD: Vice Chair Gunda?
- 7 VICE CHAIR GUNDA: Aye.
- 8 CHAIR HOCHSCHILD: Commissioner Monahan?
- 9 COMMISSIONER MONAHAN: Aye.
- 10 CHAIR HOCHSCHILD: Commissioner Vaccaro?
- 11 COMMISSIONER VACCARO: Aye.
- 12 CHAIR HOCHSCHILD: And I vote age as well. That
- 13 item passes unanimously.
- We'll turn now to Item 7 and 8, which we'll take
- 15 out of order before going back to Item 6. So Item 7 is
- 16 Order Instituting Informational Proceeding on Decarbonizing
- 17 the Gas System.
- MR. ERNE: Good morning, Chair, Vice Chair, and
- 19 Commissioners can you hear me all right?
- 20 CHAIR HOCHSCHILD: Yes, we can.
- 21 MR. ERNE: Great. I'm David Erne at the
- 22 Assessments Division. I'm here to request opening a new
- 23 informational proceeding on decarbonizing the gas system.
- 24 This proceeding is in direct support of the recommendation
- 25 that was just discussed in the IEPR Gas volume to develop a

- 1 comprehensive gas planning process for the state. And Vice
- 2 Chair Gunda will be the Lead Commissioner on this
- 3 proceeding. Next slide, please.
- 4 To meet California's clean energy goals the state
- 5 really needs to evaluate a variety of options for
- 6 decarbonizing the gas system. And critically, we need to
- 7 ensure that it's a safe, reliable, and equitable transition
- 8 as was just discussed in the IEPR volume. It's a complex
- 9 process, it requires us to look at a lot of different
- 10 options and evaluate those options in a quantitative way.
- 11 Also, it requires a very collaborative process,
- 12 engagement of all of the other critical agencies in this
- 13 state as well as all of the interested and effective
- 14 stakeholders. CEC is initiating this informational
- 15 proceeding to support that allowing us to gather and
- 16 analyze the information we need and conduct the assessments
- 17 to support policy decisions and also providing that forum
- 18 for the collaboration. Next slide.
- 19 A key challenge ahead for the state is really
- 20 balancing the many objectives that we have to address.
- 21 Clearly, meeting our greenhouse gas emission targets is
- 22 critical. And as we've seen from the impacts of climate
- 23 change on the state with excessive heat waves, droughts,
- 24 and wildfires it's even more critical that we incorporate
- 25 our contribution to the world by reducing our greenhouse

- 1 gas emissions.
- 2 Also we need to keep a constant focus on the gas
- 3 infrastructure and making sure that it's safe and reliable
- 4 to serve customers.
- 5 We also need to optimize our investments. There
- 6 are opportunities to take advantage of our current
- 7 infrastructure, invest where we need to, but also determine
- 8 whether there is a value in retiring assets that are no
- 9 longer providing value. So ultimately, we can keep the cost
- 10 down for customers, and particularly those in equity
- 11 communities. Next slide.
- The focus of this informational proceeding will
- 13 be to build upon the work that was done this last year in
- 14 the IEPR volume by expanding our forecasts and assessments
- 15 of supply, demand, price and also looking more closely at
- 16 infrastructure.
- 17 Specifically, some of the items that we want to
- 18 dig into expanding our analysis of a variety of different
- 19 situations going beyond just looking at average years and
- 20 looking at cold winter situations, cold peak days.
- 21 Increase the granularity of our analysis hourly, monthly,
- 22 etcetera.
- 23 Improve our price forecasts, expand our long-term
- 24 rate forecasts, assess the assets, and help to identify
- 25 where we can prevent stranded assets and make smart

- 1 investment decisions.
- 2 Begin our distribution modeling, and that's
- 3 pretty important to target building electrification and
- 4 possible segmentation of the of the system for retirement
- 5 in certain areas.
- 6 And also, we need to evaluate alternatives to
- 7 fossil gas, such as renewable gas and hydrogen. Next
- 8 slide.
- 9 With that, we request the approval to launch the
- 10 informational proceeding on gas decarbonization. I'm here
- 11 if you have any questions, and happy to answer them.
- 12 CHAIR HOCHSCHILD: Thank you, David.
- 13 Let's go to public comment on Item 7.
- MS. MURIMI: Thank you, Chair Hochschild.
- 15 For those interested in making a public comment
- 16 use the raised-hand feature if you're on Zoom it looks like
- 17 an open hand, it should be at the bottom of your screen or
- 18 device. For those calling in to the meeting dial *9 to
- 19 raise your hand and *6 to unmute on your end. If you're
- 20 called, please restate and spell your first and last name,
- 21 state your affiliation if any, and begin your comment. I
- 22 see Sean S. Go ahead and state and spell your name and
- 23 unmute on your end and give your comment.
- MR. SONI: Thank you. Good morning CEC
- 25 Commissioners and staff, my name is Sean Soni, spelled S-E-

- 1 A-N S-O-N-I. And I'm speaking today on behalf of SoCalGas.
- 2 This informational proceeding seeks to tackle several
- 3 challenges the state faces and decarbonizing the gas
- 4 system. And as we plan to decarbonize our system, we're
- 5 encouraged to partner with the CEC to advance and achieve
- 6 the state's decarbonization goals.
- 7 We understand that meeting GHG reduction goals is
- 8 a long-term initiative that will run parallel and feed into
- 9 the IEPR process. And in the spirit of collaboration, we
- 10 highlight that clean fuels are an important component of
- 11 any solution to decarbonize hard to abate sectors of the
- 12 California economy.
- 13 At the same time, specific end use
- 14 electrification may diminish the role of gas in the
- 15 distribution system over time. A clean fuels network
- 16 supports both decarbonization and electrification efforts
- 17 by providing reliability and resiliency to all
- 18 Californians. As the Energy Commission moves through Phase
- 19 I of this proceeding, we highlight that pursuing a diverse
- 20 set of decarbonization levers reduces the risk of over-
- 21 dependence on any one technology.
- We look forward to working with CEC staff and
- 23 Vice Chair Gunda on the upcoming hearings and workshops.
- 24 Thank you, that's it.
- MS. MURIMI: Thank you, Sean.

- 1 Chair Hochschild, I see no other hands raised at
- 2 this time.
- 3 CHAIR HOCHSCHILD: Okay, let's do Commissioner
- 4 discussion, beginning with the Vice Chair.
- 5 VICE CHAIR GUNDA: Thank you, Chair. I just
- 6 wanted to begin by kind of laying the kind of high-level
- 7 vision on this.
- 8 As we discussed in January's business meeting, or
- 9 our kind of retreat where we discussed the future of
- 10 thinking through IEPR, how do we make it more of a
- 11 consolidated summary document, but at the same time keep
- 12 alive the recommendations and important trends of our work
- 13 in kind of venues that allow for longer discussion and
- 14 better coordination. So that's the spirit in which the OII
- 15 was first conceived.
- In the IEPR 2022 we were hoping to continue to
- 17 tackle the natural gas work and the recommendations. But
- 18 what we really recognized after we got a bunch of comments
- 19 from the stakeholders, but also feedback from our sister
- 20 agencies there's two specific things that we've received.
- 21 One is having a dedicated venue for advancing important
- 22 planning assumptions and analytical work in a way that
- 23 allows broad coordination and communication. And so that's
- 24 one element we were trying to tackle.
- 25 And the second one that specifically came from

- 1 our sister agencies is to ensure that whatever work CEC
- 2 develops really becomes, for it to be used to readily,
- 3 needs a strong record. And so the IEPR doesn't necessarily
- 4 allow the time for that record keeping, so we really
- 5 thought this could be a good way to do it.
- 6 So those twin goals are really what this OII is
- 7 trying to address, this giving a venue for staff to really
- 8 collaborate with their peers and stakeholders across
- 9 agencies, as well as create groups and such. And also
- 10 develop the necessary record and develop detailed analysis
- 11 that they need to docket on an ongoing basis.
- 12 Again, as Sean pointed out in his comments, the
- 13 insights and the updates from these proceedings will become
- 14 a part of the IEPR docket as we move forward, but they are
- 15 critical updates.
- 16 So I want to just thank everybody that has been
- 17 involved in this: obviously Melissa Jones, Jennifer
- 18 Campagna, David Erne, who just presented, Aleecia the
- 19 Deputy of the Division, and many other people in the Energy
- 20 Assessments Division who have been working on this vision
- 21 for a while and really helped bring this to fruition.
- I also want to thank Mike Florio, a former
- 23 Commissioner at CPUC, and Katie Elder who are consultants
- 24 and supporting some of this work in terms of the analysis,
- 25 so just want to recognize them. Linda Barrera, Kristen

- 1 Driskell and Renee Webster-Dawkins (phonetic), Deborah Dyer
- 2 in the Chief Counsel's Office who have all contributed to
- 3 thinking through how best to do this in a way we allow, and
- 4 then meet those goals that we stated at the top.
- 5 And also, I want to thank CPUC and CARB for their
- 6 ongoing coordination at the staff level, so the
- 7 (indiscernible) forums to really advance this conversation.
- 8 And this OII has been thoroughly discussed with sister
- 9 agencies, and really glad to have the support from them,
- 10 including the CPUC Commissioners, Commissioner
- 11 Rechtschaffen.
- 12 My advisors Liz Gill, Ben Finkelor, and Larry
- 13 Klein (phonetic) always I cannot do anything without you
- 14 all, so thank you so much for your ongoing support in the
- 15 office.
- In kind of laying out the overarching
- 17 recommendations from the 2021 IEPR, Jennifer kind of laid
- 18 out the need for a comprehensive, inclusive, integrated,
- 19 and a long-term planning for gas systems and then the
- 20 criticality of that as we move forward. I think this is
- 21 what I would like to bring back one of the things that we
- 22 have been socializing over the last year and a half and the
- 23 role of CEC, as we think through the various stages of
- 24 policymaking, planning, implementation. And then looking
- 25 back and assessing how we are doing I think CEC has an

- 1 important role in the front end of that, really developing
- 2 venues and forums to have broad discussions that are not
- 3 necessarily through under a regulatory structure. So CEC
- 4 really allows for that initial conversation on bringing
- 5 together ideas that are not necessarily set readily for a
- 6 regulatory implementation process. So I think this
- 7 particular OII will help us with that comprehensive
- 8 thinking and making CEC a venue to think through that.
- 9 And two, as CEC's core competency as an
- 10 aggregator of data, and being the data repository for the
- 11 state as well as being the backbone for some of the
- 12 planning work we do in terms of products such as demand
- 13 forecast, demand scenarios, hydraulic modeling price
- 14 forecasts, whatever we do. We have a lot of competency at
- 15 the Energy Commission to really develop the formative
- 16 planning assumptions and tools and methods. So that's
- 17 another thing this particular OII can really help develop.
- 18 So thinking again through the overall
- 19 policymaking space, this is a front-end activity and I'm
- 20 really glad that CEC staff are jumping with both feet and
- 21 both hands in this important work. I think it's going to
- 22 be a lot of work over the next two to three years.
- 23 So with all that I want to lend my support to
- 24 David and all the staff for the incredible amount of work
- 25 we are conceiving and thinking through for this OII.

- 1 And really welcome Commissioner McAllister,
- 2 Commissioner Monahan, Commissioner Vaccaro, your input on
- 3 how to best shape this OII in a way that it could
- 4 collectively help with some of the ideas that you've
- 5 mentioned over time, which is the integrated nature of the
- 6 electricity and the gas sector, but also the integrated
- 7 nature of the different domains that we're all working in
- 8 whether it be transportation, industry, or buildings and so
- 9 on.
- 10 So we hope this would be a venue for us to think
- 11 about a variety of workshops and have staff try some of
- 12 this work for us. So with that I really look forward to
- 13 hearing your feedback and continuing to work with all of
- 14 you.
- 15 CHAIR HOCHSCHILD: Thank you, Vice Chair, that
- 16 was terrific.
- 17 Unless there are Commissioner comments, I'd
- 18 welcome a motion from you on Item 7.
- 19 VICE CHAIR GUNDA: Yes, I very enthusiastically
- 20 move Item 7.
- 21 CHAIR HOCHSCHILD: Thank you.
- Commissioner McAllister, would you be willing to
- 23 second?
- 24 COMMISSIONER MCALLISTER: I'll second Item 7.
- 25 CHAIR HOCHSCHILD: All in favor say aye.

1	Vice Chair Gunda?
2	VICE CHAIR GUNDA: Aye.
3	CHAIR HOCHSCHILD: Commissioner McAllister?
4	COMMISSIONER MCALLISTER: Aye.
5	CHAIR HOCHSCHILD: Commissioner Monahan?
6	COMMISSIONER MONAHAN: Aye.
7	CHAIR HOCHSCHILD: Commissioner Vaccaro?
8	COMMISSIONER VACCARO: Aye.
9	CHAIR HOCHSCHILD: And I vote aye as well. Let's
10	turn now to Item 8, which is Order Instituting
11	Informational Proceeding on Distributed Energy Resources.
12	MR. ERNE: Hello again. So this is another
13	informational proceeding that we want to set up, this one
14	on distributed energy resources. Again, this one will be a
15	proceeding would be led by Vice Chair Gunda. Next slide.
16	Distributed energy resources are defined in the
17	state as pretty broadly as a number of technologies and
18	solutions, including solar storage, EVs, efficiency
19	measures, and demand response. And they're being
20	implemented a much increasing rate, but what we don't have
21	is good information that would allow us to help with more
22	strategic deployment of these resources and to expand the
23	markets in a really substantial way. We want to ensure
24	that customers get the most value out of them, either
25	individually or collectively, and that they provide

1	resilience	for	customers	as	appropriate,	while	at	the	same

- 2 time we maintain grid reliability and also take advantage
- 3 of their ability to reduce our greenhouse gas emissions.
- 4 This proceeding will enable CEC to gather the
- 5 information, conduct assessments to support policymaking in
- 6 this area. And, again, as in the other OII lead to
- 7 facilitate greater collaboration and provide a venue for
- 8 engagement with all the stakeholders involved. Next slide.
- 9 Like with gas decarbonization we have a challenge
- 10 here, which is really having the information and the
- 11 analysis we need to make better policy decisions. And
- 12 that's really going to -- we're going to need to have a
- 13 better understanding of different customer types, their
- 14 needs, how distributed energy resources can support our
- 15 different weather conditions and operating conditions, how
- 16 they can serve customers individually or communities.
- 17 And also, where we can find ways to grow their
- 18 ability and expand the market in the state, while at the
- 19 same time taking advantage of their deployment to ensure
- 20 that we have grid reliability. And so that we have to
- 21 collectively think of all of these and balance these
- 22 objectives in the state.
- We're seeing a lot more kinds of technologies
- 24 that can be involved in this process such as smart
- 25 appliances, strategies such as an aggregation of these

- 1 technologies that we can take advantage of and provide for
- 2 greater value to customers. And again we do this with
- 3 collaboration with the Public Utility Commission, Air
- 4 Resources Board, other state agencies and the various
- 5 stakeholders. And this activity would be conducted in
- 6 cooperation with some of the many proceedings that are
- 7 going on the PUC, such as the high DER, OIR. Next slide.
- 8 Through this OIIP, we plan to investigate and get
- 9 a better sense of what the trends are with distributed
- 10 energy resources, their performance, their cost, customer
- 11 value and adoption, both qualitatively and quantitatively
- 12 understand these benefits, understand how to create the
- 13 right balance between building out distributed energy
- 14 resources. And building out utility scale resources so
- 15 that we can balance the need for what investments we need
- 16 to make in the distribution system and the transmission
- 17 system and make sure that we're thinking about those
- 18 holistically.
- 19 We also want to evaluate policies and incentive
- 20 structures, particularly those that would support equity
- 21 communities. And enable them, who currently cannot take
- 22 very much advantage of these technologies, to do it more.
- 23 And lastly, we need to identify technology gaps
- 24 and focus our R&D to support for the development in these
- 25 areas. Next slide.

1 With th	at we	request	adopting	this	order
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- 2 instituting informational proceeding on distributed energy
- 3 resources. You have any questions I'm available to answer
- 4 them, thank you.
- 5 CHAIR HOCHSCHILD: Thank you, David.
- 6 Any public comment on Item 8?
- 7 MS. MURIMI: Thank you, Chair Hochschild.
- 8 So just instructions again for those that are on
- 9 Zoom go ahead and use the raised-hand feature. It looks
- 10 like a high-five or an open hand at the bottom of your
- 11 screen or device. And if you're calling into the meeting
- 12 dial *9 to raise your hand.
- I see no hands at this time, Chair Hochschild.
- 14 CHAIR HOCHSCHILD: Okay. Let's go to
- 15 Commissioner discussion, starting with Vice Chair Gunda.
- VICE CHAIR GUNDA: Thank you, Chair. I don't
- 17 want to repeat the vision element of why this OII was put
- 18 together, but generally it's in the same spirit which is
- 19 helping to have a venue for ongoing coordination on an
- 20 important element, which is the DER work.
- 21 I want to just start with thanking again David
- 22 Erne, who has been phenomenal just as he has been with
- 23 everything, but specifically on kind of envisioning this
- 24 particular proceeding. Tom Flynn and Erik Lyon for their
- 25 incredible leadership on developing this. Again, I could

- 1 not do this without the support of CCO: Linda Barrera,
- 2 Kristen Driskell, Renee Webster-Dawkins (phonetic) and
- 3 Deborah, all from the Chief Counsel's Office.
- And we just want to note one element on one of
- 5 the reasons why we did it as an OII is to really lean on
- 6 some of the mandates and the statutes and the authority
- 7 that CEC has on data collection and really using this as a
- 8 way to collect data that's needed as we go.
- 9 In this particular area we do have a consulting
- 10 support from Lorenzo Kristov. Most of the people who work
- 11 in distributed energy resources know his name, are really
- 12 thankful for his support on this particular area, and my
- 13 advisor Liz who's also been supporting this.
- 14 Finally, I want to note the incredible
- 15 collaboration that has been going on between CEC and CPUC.
- 16 As the Commission members recognize over the last year,
- 17 we've gotten two or three specific requests from CPUC in
- 18 terms of providing analytical support in decision making
- 19 that included reliability analysis, included analysis on
- 20 some of the stack work that we have done, all in the
- 21 reliability space. But also specifically on the DER
- 22 accounting that CPUC requested CEC to help with that. And
- 23 I could not have done any of that without the support of
- 24 Commission McAllister, so I just want to call out as my
- 25 secret partner behind the scenes. He was always advising

- 1 on improving our analysis.
- 2 So overarching, this particular OII will help us
- 3 further the work on DER accounting that we have done. But
- 4 also really opens the overarching idea on what is the
- 5 taxonomy that we want to develop on for DERs and how do we
- 6 integrate the evolving DERs into both the reliability and
- 7 resiliency planning, but overall resource planning the SB
- 8 100 context. So we would like to develop modeling
- 9 frameworks and some scenarios on DERs in this particular
- 10 proceeding that can feed into both future IEPRs, but also
- 11 into SB 100 directly so we could look at the optimization
- 12 between the overall bulk investment versus the distribution
- 13 side investments.
- 14 So this would be a great opportunity for, again,
- 15 all of us to coordinate. And I really look forward to
- 16 working with Commissioner Monahan on (indiscernible)
- 17 particularly in this proceeding, your leadership on V2G and
- 18 how that can inform development of some of the DER
- 19 scenarios we could probably conceive for SB 100.
- In the last SB 100 report under Commissioner
- 21 McAllister's leadership we did envision the building
- 22 flexibility as one of the core scenarios, but I think we
- 23 really have an opportunity to think about how to maximize
- 24 the distribution side.
- 25 And so the OII opens a venue for a broad

- 1 stakeholder engagement, looking forward to developing new
- 2 forums as needed but also expanding the existing forums to
- 3 have more dialogue with the stakeholders and really inform
- 4 the Blue Sky policy ideation that is required for this
- 5 particular area, so looking forward to this work. Again
- 6 David, thank you for your leadership and looking forward to
- 7 doing a lot of good work.
- 8 CHAIR HOCHSCHILD: Great. Thank you.
- 9 Any public comments?
- 10 VICE CHAIR GUNDA: Oh, Chair, I think
- 11 Commissioner Monahan has a comment.
- 12 CHAIR HOCHSCHILD: Oh sorry, yeah.
- 13 Yeah sorry, go ahead Commissioner Monahan, yeah.
- 14 COMMISSIONER MONAHAN: I'm so excited to work on
- 15 this with you, Vice Chair Gunda.
- And I feel like we have such great talking points
- 17 with the Chair, which actually I'm always quoting the
- 18 Chair. You know, good EVs need to be good citizens of the
- 19 grid, we want our EVs to run on sunshine, all of this. But
- 20 now we could actually put some numbers to some of the
- 21 statements, which I feel like will just help sharpen us.
- 22 And up to 21 percent flexible load by 2030,
- 23 compared to today's baseline, like that's huge and how do
- 24 we capitalize on that? How do we put some numbers around
- 25 it? How do we get the policies in there so that we can

- 1 make sure the technologies can capitalize on that? And
- 2 school districts that are providing V2G back to the grid
- 3 they get money. That's what we want to create, that
- 4 ecosystem so just really excited about this, working with
- 5 you on this.
- 6 CHAIR HOCHSCHILD: Yeah, so any other
- 7 Commissioners?
- 8 Commissioner McAllister, please.
- 9 COMMISSIONER MCALLISTER: Yeah, I just want to
- 10 share in the excitement here. I think the buildings piece
- 11 of this is sort of in parallel with the transportation
- 12 piece. And I just think the old concept of load factor is
- 13 still very, very relevant today. We're moving past a lot
- 14 of our sort of planning, grid planning kind of conventional
- 15 wisdom right, as we have new technologies. And we really
- 16 are working hard to incorporate renewables at all scales.
- 17 And this OIR approach that Vice Chair Gunda is initializing
- 18 or initiating with the Chief Counsel's kind of guidance, I
- 19 think, is really going to be a powerful way to keep these
- 20 threads in the same tapestry at each step.
- 21 So I think load factor, improving load factors
- 22 and using the grid optimally and optimizing investments in
- 23 it is the way that we protect ratepayers and address the
- 24 equity problem, the equity challenge rather, and end up
- 25 with a grid that's reliable and cost-effective.

- 1 And I just think that I'm really excited to push
- 2 forward together on the building's front and really
- 3 ensuring that as we invest in earnest in building
- 4 decarbonization electrification. Every device that goes
- 5 into a home, business, industry that is electric, is also a
- 6 good citizen of the grid. And so I think these
- 7 technologies are going across platforms in a lot of ways.
- 8 And so we have a lot of -- we have much potential in our
- 9 R&D investments and other investments, program investments,
- 10 to really make sure that we're planning, avoiding silo-ing
- 11 and really planning across the board to leverage the right
- 12 technologies in the right places and the right
- 13 applications. So very, very excited to move forward on
- 14 this together.
- 15 CHAIR HOCHSCHILD: Great. Thank you.
- Vice Chair, please.
- 17 VICE CHAIR GUNDA: Okay. Yeah, just wanted to --
- 18 I forgot in my thanks -- I mean I kind of spoke quickly --
- 19 I think I really want to thank Commissioner Houck who,
- 20 when she was here with us before, became an extended
- 21 family. Really some of the OII ideas were her thought
- 22 leadership. I know kind of, I think between the Chair, to
- 23 you, and Commission McAllister and as me being staff back
- 24 then, this really was your kind of thought leadership along
- 25 with Commissioner Houck now. So I'm really excited to

- 1 carry on that kind of thought leadership you set up, at the
- 2 start of the vision you set up, so thank you again.
- 3 Looking forward to working with you all.
- 4 CHAIR HOCHSCHILD: Thank you.
- 5 All right, unless there are further comments, I'd
- 6 welcome a motion from the Vice Chair on Item 8.
- 7 VICE CHAIR GUNDA: Yeah, I move Item 8.
- 8 CHAIR HOCHSCHILD: Okay. Commissioner
- 9 McAllister, would you be willing to second that?
- 10 COMMISSIONER MCALLISTER: I second.
- 11 CHAIR HOCHSCHILD: Thank you, let's go to vote.
- 12 All in favor say aye.
- 13 Vice Chair Gunda?
- 14 VICE CHAIR GUNDA: Aye.
- 15 CHAIR HOCHSCHILD: Commissioner McAllister?
- 16 COMMISSIONER MCALLISTER: Aye.
- 17 CHAIR HOCHSCHILD: Commissioner Vaccaro?
- 18 COMMISSIONER VACCARO: Aye.
- 19 CHAIR HOCHSCHILD: Commissioner Monahan?
- 20 COMMISSIONER MONAHAN: Aye.
- 21 CHAIR HOCHSCHILD: And I vote aye as well. That
- 22 item passes unanimously.
- We'll return now to Item 6, Building Standards
- 24 Code Petition.
- 25 And what I'd like to do folks, is just take us

- 1 through to about 12:30. And then we'll break for a short
- 2 lunch for a half hour and then come back. So let's keep
- 3 going with Item 6.
- 4 MR. STRAIT: Chair, just a quick check, can you
- 5 all hear me?
- 6 CHAIR HOCHSCHILD: Yes. Hi, Peter.
- 7 MR. STRAIT: Excellent. Good morning, Chair and
- 8 Commissioners. My name is Peter Strait and I'm presenting
- 9 Item 6, a petition submitted by ACCO Engineered Systems
- 10 requesting a change to help clarify part of California's
- 11 Building Standards Code. Next slide, please.
- The item benefits California in a few small but
- 13 significant ways. Requests such as this one help to ensure
- 14 that language in the California Building Standards Code is
- 15 clear, straightforward to apply, and free of avoidable
- 16 hurdles.
- 17 Enhancing clarity and removing hurdles improves
- 18 the ability of builders to comply with requirements,
- 19 improves the ability of building officials to hold builders
- 20 accountable, and reduces costs.
- 21 In addition, following the petition process
- 22 ensures that the voices of Californians are heard and that
- 23 issues in the code aren't ignored, creating accountability
- 24 for state agencies like ours empowered to adopt building
- 25 standards. Next slide, please.

1	ACCO	Engineered	Systems	submitted	their	petition

- 2 to the Building Standards Commission on January 11th, 2002
- 3 [sic] and the petition was forwarded to the California
- 4 Energy Commission on January 27th, 2002. The Energy
- 5 Commission has 45 days to respond from the date of
- 6 forwarding. And the petition relates to minimum
- 7 ventilation standards present in the 2019 Mechanical Code,
- 8 Part 4 and Energy Code, Part 6 of our Building Standards
- 9 Code.
- 10 The petition requests amended language in the
- 11 Mechanical Code that more clearly states which sets of
- 12 ventilation standards apply, so there is not a need to
- 13 perform minimum airflow calculations under both codes and
- 14 compare those results.
- The petition also requests that the Energy Code
- 16 standards be prioritized over the Mechanical Code standards
- 17 as the Energy Code references a more current version of
- 18 ASHRAE Standard 62.1 and uses a simpler calculation method.
- 19 Next slide, please.
- 20 Staff reviewed the petition and found that the
- 21 minimum criteria for petitions in the Building Standards
- 22 Code are met. Ventilation standards apply statewide to a
- 23 broad range of building types and potential conflicts
- 24 between code provisions are expressly included in the
- 25 petition process.

- 1 Staff also reviewed the petition against the
- 2 causes for denial stated in the Building Standards Code and
- 3 found that one of these criteria are met, specifically a
- 4 petition should be denied if "the issue cited by the
- 5 petitioner have been raised and answered during the
- 6 previous rulemaking." The ambiguity noted by the
- 7 petitioner was also noticed by staff and commentators
- 8 during the 2022 rulemaking proceeding. And amendments to
- 9 the 2022 Mechanical Code were adopted by the Energy
- 10 Commission to clarify its language consistent with the
- 11 request in the petition. Next slide, please.
- 12 Staff therefore recommends that the petition be
- 13 denied, but for the reason that staff took steps to address
- 14 those concerns in the 2022 rulemaking. We are fortunate
- 15 that the work we would have needed to do to be responsive
- 16 to that this petition has, in effect, already been done.
- 17 Staff reached out to the Petitioner, and they
- 18 agreed that the amendments adopted for the 2022 Mechanical
- 19 Code resolves their concerns. And I'm available to answer
- 20 any questions regarding this item.
- 21 CHAIR HOCHSCHILD: Thank you, Peter. I like the
- 22 beard, by the way. It looks good.
- MR. STRAIT: Oh, thank you.
- 24 CHAIR HOCHSCHILD: Let's go to public comment on
- 25 Item 6.

1	MS.	MURIMI:	Thank '	vou,	Chair	Hochschild.
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- 2 For those interested in making public comment use
- 3 the raised-hand feature if you're on Zoom, looks like an
- 4 open hand and should be at the bottom of your screen or
- 5 device. For those calling in to the meeting dial *9 to
- 6 raise your hand and *6 to unmute on your end.
- 7 At this time Chair Hochschild I see no hands
- 8 raised.
- 9 CHAIR HOCHSCHILD: Okay, Commission McAllister?
- 10 COMMISSIONER MCALLISTER: Well great and thanks.
- 11 This is a pretty straightforward item as you heard from
- 12 Peter. I will reiterate that I think Peter at some point
- 13 should do voiceovers for some of our videos with that
- 14 voice. (Laughter.) And thanks for the presentation, it was
- 15 just crystal clear.
- So I don't have anything to add other than just
- 17 to thank Peter and the whole staff for evaluating the
- 18 petition and working with the petitioner. And just also
- 19 over the longer term getting ahead of all these issues as
- 20 they pop up and as we update the building code
- 21 periodically. Just we have a good team that's sort of
- 22 always surveying the landscape for these kinds of issues.
- 23 And a bunch of committed stakeholders whom I also
- 24 want to thank, including the Petitioner for bringing all
- 25 the issues in every cycle and consistently bringing up

- 1 issues that they noticed as they use and implement the
- 2 Building Code.
- 3 So I don't have anything further to add,
- 4 obviously very much support this item.
- 5 CHAIR HOCHSCHILD: Okay. Do you support it
- 6 enough to move the item?
- 7 COMMISSIONER MCALLISTER: I do, I'll move Item 6.
- 8 CHAIR HOCHSCHILD: All right, Vice Chair Gunda,
- 9 would you be willing to second that?
- 10 Vice Chair Gunda: I second Item 6.
- 11 CHAIR HOCHSCHILD: All in favor say aye.
- 12 Commissioner McAllister?
- 13 COMMISSIONER MCALLISTER: Aye.
- 14 CHAIR HOCHSCHILD: Vice Chair Gunda?
- 15 VICE CHAIR GUNDA: Aye.
- 16 CHAIR HOCHSCHILD: Commissioner Vaccaro?
- 17 COMMISSIONER VACCARO: Aye.
- 18 CHAIR HOCHSCHILD: Commissioner Monahan?
- 19 COMMISSIONER MONAHAN: Aye.
- 20 CHAIR HOCHSCHILD: And I vote age as well.
- 21 Let's turn now to Item 9, Order to Rulemaking on
- 22 Power Source Disclosure.
- MS. LEE: Good afternoon, Chair and
- 24 Commissioners, my name is Ariel Lee with the Renewable
- 25 Energy Division's Clean Energy Office. I am joined by Lisa

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- 1 DeCarlo from the Chief Counsel's Office. Today I am
- 2 requesting approval for an Order Instituting a Rulemaking,
- 3 or OIR, for a Rulemaking to Amend the Regulations Governing
- 4 the Power Source Disclosure Program. Next slide, please.
- 5 The benefits expected from the proposed
- 6 regulatory update include ensuring that consumers have
- 7 reliable, accurate, timely, consistent, and simple to
- 8 understand information about the electricity procured to
- 9 serve their demand, including percentages of renewable
- 10 energy and other fuel types, the greenhouse gas emissions
- 11 intensity of the portfolio offered by their retail
- 12 supplier, and the amount of unbundled renewable energy
- 13 credits associated with the sales of the portfolio.
- 14 Additionally, this rulemaking is intended to
- 15 improve and better support consistent reporting across all
- 16 retail suppliers in California.
- 17 This rulemaking updates reporting deadlines
- 18 codified in Assembly Bill 242. This rulemaking clarifies
- 19 existing sections in the regulations for new Community
- 20 Choice Aggregators and unbundled Renewable Energy Credits.
- 21 Additionally, this rulemaking considers
- 22 regulatory modifications to the audit requirements with the
- 23 intent of minimizing the reporting burden for public
- 24 agencies.
- 25 Finally, this rulemaking modifies the formatting

- 1 rules for the power content label providing retail
- 2 suppliers more flexibility to adjust the dimensions of the
- 3 label to meet scaling limitations of various promotional
- 4 materials. Next slide, please.
- 5 Staff hosted a pre-rulemaking workshop in
- 6 December 2021. The intent of this rulemaking is to update
- 7 program regulations with clarifying language, and to
- 8 incorporate changes formalized by Assembly Bill 242,
- 9 authored by Assemblymember Chris Holden.
- 10 The scope of this rulemaking is focused on the
- 11 following six topics:
- 1. Audit Requirements and Alternatives for Public
- 13 Agencies
- 14 2. Power Content Label Due Dates
- 15 3. Clarify Greenhouse Gas Reporting Requirements
- 16 for New Community Choice Aggregators
- 4. Clarifying unbundled Renewable Energy Credit
- 18 Reporting Requirements
- 19 5. Power Content Label Template Formatting
- 20 6. Power Charge Indifference Adjustment Resource
- 21 Allocations. Next slide, please.
- In conclusion, we ask the Commission to approve
- 23 the OIR proceeding to consider modifications to the Power
- 24 Source Disclosure Program regulations in compliance with
- 25 the rulemaking process set forth by the California

- 1 Administrative Procedure Act. Thank you.
- 2 CHAIR HOCHSCHILD: Thank you, Ariel.
- 3 Let's turn now to public comment on Item 9.
- 4 MS. MURIMI: Thank you, Chair Hochschild.
- 5 For those interested in making public comment use
- 6 the raised-hand feature, looks like an open hand at the
- 7 bottom of your screen or device, that's if you're on Zoom.
- 8 And for those calling in to the meeting dial *9 to raise
- 9 your hand and *6 to unmute on your end. I'll give that one
- 10 moment. Again, use the raised-hand feature, looks like an
- 11 open hand at the bottom of your screen or device and *9 to
- 12 raise your hand.
- 13 Chair Hochschild, I see no raised hands at this
- 14 time.
- 15 CHAIR HOCHSCHILD: Okay, let's turn to
- 16 Commissioner discussion, starting with Commissioner
- 17 Vaccaro.
- 18 COMMISSIONER VACCARO: So thank you, just a few
- 19 brief comments. Thank you, Ariel and thanks to you and the
- 20 team. I know you, Jordan, Gina, Lisa have been doing a
- 21 great job listening to stakeholders, interacting with
- 22 stakeholders, and being responsive. And you kind of framed
- 23 these as maybe modest, clarifying type of changes that
- 24 we're looking at in this rulemaking. But what they tell me
- 25 is that you're listening and you're engaging. And I think

- 1 the December workshop was a really good example of that
- 2 robust participation and support for staff's proposals and
- 3 many of them being responsive to what staff has heard. So
- 4 looking forward to following this rulemaking and just
- 5 thanks to you and the team for the work on this.
- 6 CHAIR HOCHSCHILD: Terrific.
- 7 Well this continues a long process as a power
- 8 source disclosure regs and all that was a lengthy ordeal.
- 9 And I know a lot of progress has been made over the years,
- 10 so we look forward to continuing that.
- 11 Unless there are other Commissioner comments,
- 12 Commissioner Vaccaro, would you be willing to move Item 9?
- 13 COMMISSIONER VACCARO: Yes, I move approval of
- 14 Item 9.
- 15 CHAIR HOCHSCHILD: Thank you.
- 16 Commissioner Monahan, would you be willing to
- 17 second that?
- 18 COMMISSIONER MONAHAN: I second Item 9.
- 19 CHAIR HOCHSCHILD: All in favor say aye.
- 20 Commissioner Vaccaro?
- 21 COMMISSIONER VACCARO: Aye.
- 22 CHAIR HOCHSCHILD: Commissioner Monahan?
- 23 COMMISSIONER MONAHAN: Aye.
- 24 CHAIR HOCHSCHILD: Vice Chair Gunda?
- VICE CHAIR GUNDA: Aye.

1	CHAIR HOCHSCHILD: Commissioner McAllister?
2	COMMISSIONER MCALLISTER: Aye.
3	CHAIR HOCHSCHILD: And I vote age as well. That
4	item passes unanimously.
5	Let's turn now to Item 10, Humboldt Bay Harbor,
6	Recreation and Conservation District.
7	MS. DEMESA: Good afternoon, I guess, Chair, Vice
8	Chair and Commissioners. My name is Rhetta deMesa and I
9	work in the Energy Resource and Land Use Planning Office in
10	the Siting, Transmission and Environmental Protection
11	Division. I'm presenting for your approval today a grant
12	for up to \$10,450,000 to the Humboldt Bay Harbor,
13	Recreation and Conservation District, or the Port of
14	Humboldt, for the initial development stages of the
15	Humboldt Bay Offshore Wind Heavy Lift Marine Terminal.
16	Next slide, please.
17	Investing in offshore wind port infrastructure is
18	critical to opening the state's opportunity for offshore
19	wind development in California. Moving forward with the
20	Humboldt Bay Offshore Wind Heavy Lift Marine Terminal will
21	provide offshore wind developers increased confidence in
22	pursuing offshore wind development in California.
23	At scale the terminal is expected to initially

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support the development of up to 1.6 gigawatts of offshore

wind in the Humboldt call area as well as any future

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25

- 1 offshore wind development in the north coast. The project
- 2 is expected to revitalize the waterfront industry in
- 3 Humboldt County and provide living-wage jobs to nearby
- 4 communities.
- 5 An economic assessment of the project was
- 6 conducted and found that the Humboldt Bay Offshore Wind
- 7 Heavy Lift Marine Terminal could generate as many as 830
- 8 local jobs and over \$130 million in industry output over a
- 9 five-year period. Next slide, please.
- 10 California, particularly the northern coast
- 11 region, has some of the best offshore wind resources in the
- 12 country and floating offshore wind is emerging as a
- 13 promising source of renewable energy generation for the
- 14 state. In addition to providing renewable energy, the
- 15 development of floating offshore wind in California will
- 16 diversify the state's energy portfolio and provides an
- 17 opportunity for good paying jobs and statewide economic
- 18 benefits.
- 19 As offshore wind energy develops off the coast
- 20 California ports have the potential to serve as strategic
- 21 hubs, supporting the assembly, fabrication, installation
- 22 and maintenance of offshore wind turbines and their related
- 23 components.
- 24 However, given the size and expected scale of the
- 25 floating offshore wind components, California's existing

1	port	facilities	are	not	equipped	to	support	these	offshore

- 2 wind activities. To do so it will require significant
- 3 investments to upgrade and expand their existing
- 4 infrastructure. Next slide, please.
- 5 In close coordination with the State of
- 6 California, and through a robust outreach and stakeholder
- 7 engagement process, the Bureau of Ocean Energy Management,
- 8 or BOEM, has identified and is moving forward leasing two
- 9 areas for offshore wind development off the coast of
- 10 California: one off the north coast, near Humboldt, and one
- 11 off the central coast near Morro Bay.
- The Port of Humboldt is well suited to support
- 13 offshore wind development in the north coast. As you can
- 14 see on the map there, the Port is only 30 miles from the
- 15 Humboldt Call area. Additionally, the port has no overhead
- 16 lines or bridges that would obstruct port access and has an
- 17 existing 168-acre marine terminal where offshore wind
- 18 components can be assembled and where vertical integration
- 19 and onsite manufacturing can be placed. However, heavy
- 20 lift port facilities and infrastructure would need to be
- 21 constructed before offshore wind development could occur.
- 22 Next slide, please.
- The Port of Humboldt has initiated a phased plan
- 24 to develop the new Humboldt Bay Offshore Wind Heavy Lift
- 25 Marine Terminal. The port will be renovating their

- 1 existing Redwood Marine Terminal which will include
- 2 redeveloping underdeveloped or vacant industrial areas
- 3 within the port to support offshore wind activities. Once
- 4 renovated, the new terminal will be capable of handling
- 5 large heavy cargo vessels, offshore wind platform assembly,
- 6 decommissioning, and other maritime activities.
- 7 The 2021-2022 State Budget included an allocation
- 8 of \$10.45 million to support this project. This grant
- 9 funding will support work under Phase 1 of the Humboldt Bay
- 10 Offshore Wind Lift Marine Terminal. Activities funded by
- 11 this grant will include completing preliminary engineering
- 12 and design work, conducting site surveys and special
- 13 studies, preparing necessary CEQA and NEPA materials,
- 14 implementing early construction activities, and initiating
- 15 early mitigation efforts. Next slide, please.
- The Port of Humboldt is currently in the process
- 17 of applying for a federal grant through the US Department
- 18 of Transportation's Port Infrastructure Development Program
- 19 to further support this project.
- To maximize the amount of our grant funding that
- 21 can be used as match for their federal application, we have
- 22 broken the scope of work into two phases. Phase 1 will
- 23 make \$780,000 available to the port upon execution of the
- 24 agreement so they can continue to make progress on the
- 25 project over the next year. Phase 2 funds are being

- 1 reserved for later grant activities to serve as match
- 2 funding and will only be made available with written
- 3 approval from the agreement manager.
- I also want to note that Task 10 of the agreement
- 5 includes construction activities that will require CEQA
- 6 and/or NEPA and will be brought back to a future business
- 7 meeting for approval. Next slide, please.
- 8 With that, staff would like to recommend approval
- 9 of the proposed agreement with the Humboldt Bay Harbor,
- 10 Recreation, and Conservation District and adopt staff's
- 11 determination that Tasks 1 through 9 are exempt from CEQA.
- 12 I would be happy to answer any questions. And also want to
- 13 make note that we also have Larry Oetker, Executive
- 14 Director of the Harbor District joining us today to say a
- 15 few words about the project.
- 16 CHAIR HOCHSCHILD: Thank you, Rhetta. Well, on
- 17 our march to offshore wind this is a very significant
- 18 milestone so thanks for all your work on that.
- 19 Let's turn now to public comment on Item 10. If
- 20 we have Larry Oetker, maybe we can start with Larry.
- MS. MURIMI: Yes, we can.
- Larry? Larry Oetker. Oh Peter, pardon me.
- MR. OETKER: Yes, I'm Larry Oetker. I'm the
- 24 Executive Director of the Port of Humboldt Bay. And I
- 25 really want to thank the California Energy Commission and

- 1 the Governor's Office for working with the port to make
- 2 this happen.
- It is that, as you know, California ports are
- 4 unlike the east coast, where we have very few ports and
- 5 they're really scattered a couple of hundred miles apart.
- 6 And so it's really important that the ports work together
- 7 to achieve, help California to achieve its energy goals.
- 8 On the coastal access, there should be no new
- 9 changes in the location or number of ports. And so really,
- 10 we're working with the California Energy Commission and our
- 11 local partners, the Redwood Coast Energy Authority and
- 12 Humboldt Polytechnical University's Schatz Energy Resource
- 13 Lab, to really ready our region for the offshore wind
- 14 industry. We're looking at the Humboldt call areas,
- 15 (phonetic) but also in the future the Del Norte and the
- 16 Mendocino call areas.
- 17 And the private sector industry is regularly
- 18 coming to the port and then looking at how can we work as a
- 19 public/private partnership to develop these resources? As
- 20 part of this, we have to coordinate the offshore wind
- 21 development with the supply chain, the port, the
- 22 transmission, the workforce and really ensure that the
- 23 areas that are going to be impacted by the offshore wind
- 24 received community benefits to sort of offset those so that
- 25 all the benefits from the offshore wind resources go to

- 1 other areas and the areas that are impact don't receive
- 2 local benefits as part of this.
- 3 And so when we look at California's goals
- 4 basically, including two gigawatts of transmission lines
- 5 off of the north coast to accommodate the offshore wind
- 6 industry and additional transmission of the central coast,
- 7 the private sector investment in the port infrastructure
- 8 and these other resources they really need to have the
- 9 overarching signal from the state of what are their large
- 10 picture goals.
- 11 We're looking at having the Humboldt call area
- 12 and the Morro Bay call area at least approximately
- 13 November, December of this year, which is right around the
- 14 corner. And so tomorrow night our board has on the agenda
- 15 to approve the contract to really start this process.
- 16 We're well underway and we're ready to get this moving.
- 17 And the private sector is standing behind us and wants to
- 18 do investments in the Port of Humboldt Bay and the other
- 19 areas. But the size of the investment is going to be
- 20 dictated based upon the policy decisions that the state of
- 21 California has laid out.
- 22 And so at the port we have 168 acres here that we
- 23 have identified. And we could be a marshalling port where
- 24 the components are manufactured in other locations, or we
- 25 could be the full West Coast Hub, which is what our goals

- 1 are. And these 168 acres includes locations for a tower
- 2 manufacturing facility, foundation, repairs, and full
- 3 integration where these 450-foot tall, 300-foot-wide areas
- 4 can go out the existing federally maintained navigation
- 5 channel.
- And so we stand ready to be your partner. Now we
- 7 really thank the California Energy Commission for your
- 8 leadership on this because we are truly on the front line
- 9 of climate change and we regularly see the impacts of sea
- 10 level rise, so these issues are critically important to us.
- 11 CHAIR HOCHSCHILD: Thank you.
- 12 Any further public comments on Item 10 Dorothy?
- MS. MURIMI: No more public comments at this time
- 14 Chair.
- 15 CHAIR HOCHSCHILD: Okay, let's turn to
- 16 Commissioner Vaccaro.
- 17 COMMISSIONER VACCARO: Yes, thank you.
- 18 So first of all, Rhetta, thank you for the
- 19 presentation and your hard work and the work of CEC staff
- 20 to bring this agreement to the meeting today. And thank
- 21 you, Larry, for your comments and also for the work that
- 22 you've put into this to make this agreement and this moment
- 23 a reality. As an advisor to former Commissioner Douglas I
- 24 had the benefit of seeing this concept come together. And
- 25 now as a Commissioner I'm really pleased to see that it's

- 1 reached this first phase.
- 2 So just a little bit by way of background, I
- 3 think that what several of us know is that preparing the
- 4 infrastructure in California for developing wind energy in
- 5 federal waters off California's coast, is a critical
- 6 component of how we're going to maximize the benefits of
- 7 this new industry. And floating offshore wind technologies
- 8 are large in scale and to realize the benefits it's going
- 9 to require a significant scale of technology to be
- 10 deployed. And there are very few ports in California that
- 11 have the conditions for floating offshore wind deployment,
- 12 such as new bridge obstructions, ample space for assembling
- 13 large components, and deep-water, things that Rhetta just
- 14 mentioned. But thanks to the proactive action and analyses
- 15 by the port and other partners it's clear that the port in
- 16 Humboldt Bay has the capability to function as a port for
- 17 offshore wind deployment.
- 18 I think it's also important to know that the
- 19 timing of this work aligns very well with the Bureau of
- 20 Ocean Energy Management's leasing process. And this
- 21 investment is a signal that California is being strategic
- 22 about phasing targeted investments to early actions that
- 23 are aligned with BOEM's leasing and industry development,
- 24 so we hear what you're saying Larry for sure.
- I think I'm also really encouraged to see that

- 1 the federal government is focusing its efforts to support
- 2 infrastructure improvement at ports. And there's a clear
- 3 focus on making ports more efficient and cleaner, but
- 4 there's also a focus on the longer-term investments that
- 5 are necessary to support the construction of large, clean
- 6 energy projects.
- Well today's item is really about the first phase
- 8 of the work. I'm really looking forward to watching this
- 9 progress and seeing us get through Phase 10, the next
- 10 phase, and getting through Task 10.
- 11 And just in closing, I mean it's clear but I'm
- 12 fully in support of this item. And I want to give due
- 13 credit to Commissioner Karen Douglas for her leadership in
- 14 this offshore wind energy space. My exceptional advisor,
- 15 Eli Harland, who's also been leading in this space, who's
- 16 worked on this agreement development, and who played an
- 17 integral role in helping me sort of shape the comments and
- 18 the thoughts for today's meeting. So with that, very much
- 19 support this item.
- 20 CHAIR HOCHSCHILD: Thank you. I just wanted to
- 21 strongly concur about the market signal that it sends to
- 22 approve funds like this. I really think the market watches
- 23 very closely what the state is doing. And this is the kind
- 24 of thing that that is really helpful in leveraging further
- 25 private sector investment for their innovation investment

- 1 and further deployment resources, including federal
- 2 resources for what we're trying to do here. So thank you,
- 3 Commissioner, for your work and the team.
- Any other comments or questions? Hearing none,
- 5 Commissioner Vaccaro, would you be willing to move Item 10?
- 6 COMMISSIONER VACCARO: Yes, I move Item 10.
- 7 CHAIR HOCHSCHILD: Okay. Why don't we go --
- 8 Commissioner Monahan, would you be willing to second?
- 9 COMMISSIONER MONAHAN: I second it.
- 10 CHAIR HOCHSCHILD: All in favor say aye.
- 11 Commissioner Vaccaro?
- 12 COMMISSIONER VACCARO: Aye.
- 13 CHAIR HOCHSCHILD: Commissioner Monahan?
- 14 COMMISSIONER MONAHAN: Aye.
- 15 CHAIR HOCHSCHILD: Commissioner McAllister?
- 16 COMMISSIONER MCALLISTER: Aye.
- 17 CHAIR HOCHSCHILD: Vice Chair Gunda?
- 18 VICE CHAIR GUNDA: Aye.
- 19 CHAIR HOCHSCHILD: And I vote age as well. That
- 20 item passes unanimously.
- 21 We'll turn now to Item 11 -- and I hope I'm not
- 22 mangling the pronunciation of this -- Porifera. I hope I'm
- 23 pronouncing that correctly. Go ahead, Michael.
- MR. FERREIRA: Good afternoon, Chair and
- 25 Commissioners. My name is Michael Ferreira and I'm here

- 1 today seeking approval of Item 11, an agreement with
- 2 Porifera for approximately \$3 million. This project will
- 3 support manufacturing scale-up of a forward osmosis
- 4 membrane, which enables efficient industrial and
- 5 agricultural and municipal wastewater reuse. Next slide,
- 6 please.
- 7 The expected benefits to California include
- 8 reducing the cost for waste, for water treatment and reuse,
- 9 as well as expanding the opportunities for water reuse
- 10 technologies, which could increase availability during
- 11 droughts.
- 12 Also, since this project is focused on scaling up
- 13 production, the project is expected to result in an
- 14 increase in the manufacturing-related job opportunities.
- 15 Next slide.
- 16 Agriculture and industry face increasing pressure
- 17 to reduce water consumption and increase reuse in the face
- 18 of continuing drought in California. However, high purity
- 19 water reuse is traditionally energy intensive, expensive,
- 20 and requires large treatment facilities. Porifera has
- 21 developed forward osmosis membrane technology that can
- 22 treat challenging waste streams with high concentrations of
- 23 dissolved organics and suspended solids. They are up to
- 24 three times more efficient and have a 50 percent smaller
- 25 footprint than forward osmosis membrane. This project

1	seeks	to	scale	up	production	of	these	membrane	modules.	Ву
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- 2 the end of the project, Porifera seeks to increase the
- 3 production rate by up to four times and achieve more than a
- 4 50 percent cost reduction then what they can achieve today.
- 5 Next slide, please.
- 6 This membrane technology has two broad uses. The
- 7 first is agriculture and industrial use at facilities such
- 8 as cattle farms, food processing facilities, and paper and
- 9 pulp mills.
- 10 The second is treatment for a direct potable use
- 11 at municipal facilities and military bases.
- 12 Altogether, the global water reuse and recycle
- 13 market is expected to generate over \$32 billion in revenue
- 14 by the end of 2024. Next slide, please.
- 15 And this concludes my presentation. Staff
- 16 recommends approval of this item and adopting staff's
- 17 determination that this project is exempt from CEQA.
- 18 CHAIR HOCHSCHILD: Thank you, Michael.
- 19 Let's go to public comment on Item 11.
- MS. MURIMI: Thank you, Chair Hochschild.
- 21 For those interested in making public comment use
- 22 the raised-hand feature if you're on Zoom, it looks like an
- 23 open hand and should be at the bottom of your screen or
- 24 device. For those calling into the meeting dial *9 to
- 25 raise your hand and *6 to unmute on your end. If you're

- 1 called on please restate and spell your first and last
- 2 name, state your affiliation and begin your comment.
- 3 I'm looking for individuals on the phone and on
- 4 Zoom.
- Again, if you're on the phone press *9 to
- 6 indicate you'd like to make a comment and use the raised-
- 7 hand feature, looks like an open hand at the bottom of your
- 8 screen if you are on Zoom.
- 9 Chair Hochschild, I see no raised hands at this
- 10 time.
- 11 CHAIR HOCHSCHILD: Okay. Well I'll just start
- 12 off by saying I'm thrilled to see anything we're doing
- 13 around water, water efficiency, water recycling. That is
- 14 welcome, as Commissioner McAllister noted earlier. And of
- 15 course any time we can do anything that's going to reduce
- 16 the pumping of water in any fashion that is also a
- 17 pollution reduction, an energy use reduction and so very
- 18 encouraged to see anything water-related. And this builds
- 19 on a good legacy we have going on, on these types of
- 20 technologies.
- 21 Let me just open it up. Maybe Commission
- 22 McAllister, any thoughts on this you would like to share?
- 23 COMMISSIONER MCALLISTER: Yeah, just a couple of
- 24 points. So I want to thank Jonah and the whole Division,
- 25 the R&D Division just for so ably throwing out a wide net

- 1 for innovative ideas and just bringing them into the fold
- 2 and identifying areas for investment in each subsequent
- 3 investment plan. The team is just really firing on all
- 4 cylinders. And that's great because there's lots of
- 5 opportunity and challenge ahead and we're going to need
- 6 every dollar in that R&D bucket. So the EPIC program, this
- 7 is another example of it just providing huge benefit.
- 8 And I'm very supportive of this project. And
- 9 just really excited about all the different applications of
- 10 membranes that the team is supporting across all industrial
- 11 sectors really and including here potable or recycled
- 12 waters. So really great for both water efficiency and for
- 13 energy efficiency.
- So I don't have anything else to add, but just
- 15 want to thank the staff and really appreciate the
- 16 presentation, Michael.
- 17 CHAIR HOCHSCHILD: Great. Thank you,
- 18 Commissioner. Commissioner McAllister, would you be
- 19 willing to move this item?
- 20 COMMISSIONER MCALLISTER: Yes, I'll move Item 11.
- 21 CHAIR HOCHSCHILD: All right. Commissioner
- 22 Vaccaro, would you be willing to second?
- 23 COMMISSIONER VACCARO: Yes, I second.
- 24 CHAIR HOCHSCHILD: All in favor say aye.
- 25 Commissioner McAllister?

1	COMMISSIONER MCALLISTER: Aye.
2	CHAIR HOCHSCHILD: Commissioner Vaccaro?
3	COMMISSIONER VACCARO: Aye.
4	CHAIR HOCHSCHILD: Commissioner Monahan?
5	COMMISSIONER MONAHAN: Aye.
6	CHAIR HOCHSCHILD: Vice Chair Gunda?
7	VICE CHAIR GUNDA: Aye.
8	CHAIR HOCHSCHILD: And I vote age as well.
9	We'll turn now to Item 12. What I'd like to do
10	is get all the way through this item. And then we'll take
11	a 30-minute break for lunch.
12	So let's go to Michael again for Item 12.
13	MR. FERREIRA: Thank you, Commissioner.
14	Good afternoon again, Michael Ferreira again.
15	And I'm here for this agreement, seeking approval. This
16	agreement came out of our BRIDGE 2020 Solicitation. BRIDGE
17	is one of a series of programs we've established to enable
18	clean energy startups with this funding opportunity having
19	the specific purpose of bridging the gap between public and
20	private funding opportunities. Next slide, please.
21	Some of the expected benefits of this agreement
22	are reducing battery costs for electric vehicles, which
23	will make them more affordable while also allowing for
24	increased electric vehicle range. Also the battery system
25	and fabrication method proposed in this agreement are

- 1 expected to increase domestic manufacturing-related job
- 2 opportunities. Next slide, please.
- This agreement is with SPARKZ to develop an all-
- 4 solid-state, cobalt-free lithium metal battery system. All
- 5 solid-state batteries can offer higher energy density,
- 6 longer cycle life, and better inherent safety then state-
- 7 of-the-art lithium-ion batteries. However, their
- 8 application has been restricted by several technical
- 9 challenges, including poor interfacial contact between
- 10 active materials and the solid electrolyte and resistance
- 11 filter in battery cycling.
- In this project SPARKZ will utilize a method
- 13 called "freeze-tape-casting" to improve the interfacial
- 14 contact and eliminate the formation of a lithium-depleted
- 15 area between the lithium metal and solid electrolyte. This
- 16 increases the energy and power density of the cell on
- 17 decreasing how quickly the battery degrades. The result is
- 18 an estimated doubling in the energy density compared to
- 19 current lithium-ion technology. In terms of electric
- 20 vehicles, this translates to increased range between
- 21 charges or a lighter battery load.
- Additionally, by eliminating cobalt and making
- 23 other components more sustainable and localized they
- 24 estimate a 40 percent reduction in cell manufacturing
- 25 costs, while also reducing choke points created by foreign

- 1 supply chains.
- This will also enable the domestic manufacturing
- 3 of the next generation of energy storage, leading to local
- 4 clean energy job creation and workforce development. Next
- 5 slide, please.
- 6 Staff recommends approval of this grant agreement
- 7 and staff findings that this project is exempt from CEQA.
- 8 This concludes my presentation.
- 9 CHAIR HOCHSCHILD: Thank you, Michael.
- 10 Any public comment on Item 12?
- MS. MURIMI: Yes Chair, we have a hand raised.
- 12 So for the commenter go ahead and state your name and spell
- 13 it as well, state your affiliation, if any, and unmute on
- 14 your end. Go ahead, Abby Rodriguez.
- MS. RODRIGUEZ: Hi, my name is Abby Rodriguez, A-
- 16 B-B-Y R-O-D-R-I-G-U-E-Z. I'm the Product and Business
- 17 Development Manager with SPARKZ and I'll be serving as the
- 18 Project Manager on this work.
- I wanted to extend our gratitude and thanks to
- 20 the California Energy Commission, and your team, for your
- 21 support of our work we'll be doing with LBNL on this
- 22 project. As for SPARKZ, because of the BRIDGE program we
- 23 chose to move our corporate headquarters from Knoxville,
- 24 Tennessee, to Livermore, California. Our facility in
- 25 Livermore will house our pilot manufacturing of our current

- 1 battery technology and will also house our work under the
- 2 BRIDGE program.
- 3 As recently as the last 24 hours, we have
- 4 actually chosen to expand into 20,000 additional square
- 5 feet, so we'll be at 30,000 square feet in our Livermore
- 6 facility. And this will be happening over the next three
- 7 to four months as we ramp up. We're very excited to be
- 8 growing in California, working with the State of California
- 9 through GO-Biz to locate manufacturing by, let's see, 2026.
- 10 We're looking to have about 8 gigawatt hours of capacity of
- 11 production.
- We will locate our giga factory somewhere in the
- 13 Central Valley. And just to discuss our ramp-up across our
- 14 work in Central Valley by Q4 of this year we'll have about
- 15 50 megawatts of production in place. by March or April of
- 16 next year we'll have about half-a-gigawatt hour of
- 17 production in place. And by the end of 2023 we'll have
- 18 one-gigawatt hour of production and will scale up to that
- 19 eight-gigawatt hour of production from there.
- 20 And to give you a frame of reference, I know jobs
- 21 were mentioned as part of this project, one-gigawatt hour
- 22 of capacity will give about, will provide about 150 to 175
- 23 jobs to the Central Valley area. And as we ramp up to the
- 24 eight-gigawatt hour it'll provide around 1,000 jobs to the
- 25 Central Valley area. And the greater majority of these

- 1 jobs will be manufacturing jobs.
- 2 So I again thank you to the California Energy
- 3 Commission for your support on this work and look forward
- 4 to working with you all moving forward. Thanks.
- 5 CHAIR HOCHSCHILD: Thank you.
- Any further public comment on Item 12, Dorothy?
- 7 MS. MURIMI: Chair Hochschild, there are no more
- 8 hands raised at this time.
- 9 CHAIR HOCHSCHILD: Okay. Well first of all let
- $10\,$ me just give my congratulations to SPARKZ and to the CEC
- 11 team who's been working on this, super-encouraged by this.
- 12 This is a critical piece of the Lithium Valley vision that
- 13 we're focused on at the Energy Commission, which is to
- 14 build out in a robust way lithium production in California,
- 15 ensure the downstream markets are healthy. That's both for
- 16 electric vehicles, electric buses, electric delivery vans
- 17 and trucks as well as energy storage.
- 18 And then to do as much as we possibly can to
- 19 bring that production of batteries back to California. And
- 20 we're doing that through grants like this that support
- 21 technology development, as well as a new program we're
- 22 going to be rolling out in the months ahead, directly
- 23 focused on manufacturing scale.
- 24 So I want to thank SPARKZ. I've been in touch
- 25 with the CEO on Sanjiv Malhotra about the decision to go to

- 1 Livermore, welcome that, congratulate that. And there is
- 2 a lot of moment now in this space. Tesla recently opened a
- 3 big new battery factory in Lathrop and there's a bunch of
- 4 other battery companies we're engaging with; more to come
- 5 on this.
- I just want to congratulate everybody who's been
- 7 working on this at the SPARKZ team and the Energy
- 8 Commission team, so I'm really happy to see this on the
- 9 agenda today. Unless there are other Commissioner
- 10 comments? Yes, Commissioner Monahan, please go ahead.
- 11 COMMISSIONER MONAHAN: Well, you stole many of
- 12 the words right out of my mouth Chair. So I'm just going
- 13 to add one more comment, which is this focus on a cobalt-
- 14 free battery and human rights abuses in the Congo. And we
- 15 want to have, as you said, a domestic supply chain here.
- 16 Especially here in California where we can be assured that
- 17 we're doing the best we can for our workers, the best we
- 18 can for the environment, and so really excited.
- I have never visited SPARKZ. I actually want to,
- 20 putting as my to-do to go visit your facility in Livermore
- 21 and hopefully soon visit your facility in the Central
- 22 Valley. I'm sure there may be other Commissioners
- 23 interested in this as well, so just congratulations to the
- 24 team at SPARKZ for this and really looking forward to you
- 25 investing here in California.

1	Oh, the last thing I would say is that we had
2	from the last budget \$250 million for zero-emission vehicle
3	manufacturing grants here in California and batteries are
4	in that chain, so just a heads-up on that opportunity. We
5	really want to make sure that California remains the
6	Michigan of the United States when it comes to zero-
7	emission vehicle manufacturing.
8	CHAIR HOCHSCHILD: Yep, well said. So with that
9	Commissioner Monahan would you be willing to move Item 12?
10	COMMISSIONER MONAHAN: I move Item 12.
11	CHAIR HOCHSCHILD: All right, Vice Chair Gunda,
12	would you be willing to second that?
13	VICE CHAIR GUNDA: Yes, second it.
14	CHAIR HOCHSCHILD: All in favor say aye.
15	Commissioner Monahan?
16	COMMISSIONER MONAHAN: Aye.
17	CHAIR HOCHSCHILD: Vice Chair Gunda?
18	VICE CHAIR GUNDA: Aye.
19	CHAIR HOCHSCHILD: Commissioner Vaccaro?
20	COMMISSIONER VACCARO: Aye.
21	CHAIR HOCHSCHILD: And Commissioner McAllister?
22	COMMISSIONER MCALLISTER: Aye.
23	CHAIR HOCHSCHILD: And I vote age as well. That
24	item passes unanimously.
25	Let's take a short break and reconvene at 1:00,
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- 1 we'll pick up with Item 13.
- 2 (Off the Record at 12:32 p.m.)
- 3 (On the Record at 1:00 p.m.)
- 4 MS. MURIMI: Oh, pardon me, I was speaking while
- 5 muted. We have everyone on board, and we are now live.
- 6 CHAIR HOCHSCHILD: Okay, thank you. Welcome back
- 7 everybody. Let's pick up where we left off, which is Item
- 8 13, Hydrogen Fuel Cell Truck and Bus Technology
- 9 Integration and Demonstration.
- 10 MR. CHEN: Good afternoon, Chair, Vice Chair, and
- 11 Commissioners. My name is Peter Chen and I work in the
- 12 Energy Research and Development Division. Today I am
- 13 presenting two recommended awards from the solicitation
- 14 titled "Hydrogen Fuel Cell Truck and Bus Technology
- 15 Integration and Demonstration." The goal of this
- 16 solicitation was to improve the performance and cost-
- 17 effectiveness of heavy-duty hydrogen fuel cell vehicles
- 18 with challenging duty cycles. Next slide.
- 19 The projects will reduce greenhouse gas and air
- 20 pollutant emissions by displacing heavy-duty diesel trucks
- 21 with zero-emission hydrogen fuel cell electric trucks. The
- 22 trucks will incorporate advanced components and vehicle
- 23 integration strategies to improve efficiency, durability,
- 24 and economics over previous prototypes. The trucks will be
- 25 demonstrated out of freight facilities located in

1	disadvantage	ed and	low-income	communities	in	Santa	Fe
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- 2 Springs and Fontana, as shown on the map.
- 3 This research and demonstration effort will
- 4 accelerate progress towards the introduction of more
- 5 commercially attractive hydrogen fuel cell trucks that can
- 6 address challenging duty cycle requirements such as long
- 7 routes, limited refueling opportunities, and high payload
- 8 weights. The projects also align well with efforts to
- 9 deploy green hydrogen at scale to decarbonize difficult-to-
- 10 reach sectors of our economy. Next slide.
- 11 The first project with Cummins Electrified Power
- 12 NA Inc. will develop and demonstrate two hydrogen fuel cell
- 13 electric trucks in an industrial gas bulk delivery
- 14 application that involves transporting heavy cryogenic
- 15 payloads over a large service area with limited refueling
- 16 opportunities. Air Products, the fleet partner, will
- 17 operate these trucks in the Greater Los Angeles region over
- 18 a 12-month demonstration period.
- 19 The project incorporates Cummins' next generation
- 20 120-kilowatt heavy-duty fuel cell module, which operates at
- 21 higher pressures and temperatures to achieve a 59 percent
- 22 lower volume, 45 percent lower weight, and improved
- 23 efficiency and durability compared to their current module.
- 24 A truck-mounted electrified power take-off system
- 25 will be developed to power pumps for the cryogenic tank

- 1 trailers that will be pulled by the truck. And the project
- 2 will also assess the feasibility of on-board liquid
- 3 hydrogen storage to further extend range.
- 4 The project is part of an effort to upgrade
- 5 Cummins service and support facilities in California, to
- 6 repair and maintain electric trucks as they roll out.
- 7 Targeted outreach activities will be conducted for fleets
- 8 and communities to help raise awareness about the project
- 9 and technology. Next slide.
- 10 The second project with Gas Technology Institute
- 11 will develop and demonstrate a hydrogen fuel cell electric
- 12 truck on an extended regional haul operation that involves
- 13 a combination of urban driving, steep grades across the
- 14 Grapevine, and long highway routes. Total Transportation
- 15 Services Inc., or TTSI the fleet partner, will operate
- 16 these trucks between the Inland Empire and Northern San
- 17 Joaquin Valley over a 12-month demonstration. The project
- 18 will integrate a 400-kilowatt heavy-duty fuel cell system
- 19 with advanced controls and a lightweight onboard hydrogen
- 20 storage system.
- 21 The project will also demonstrate pre-production
- 22 low rolling resistance tires to assess fuel economy
- 23 improvement and longevity benefits for a high-torque
- 24 electric vehicle application. The project team is
- 25 partnering with Rio Hondo Community College to engage one

- 1 of their electric vehicle technician training programs in
- 2 the design process of the truck through webinars,
- 3 discussions with the builders and operators, hands-on work,
- 4 and data interpretation.
- 5 Service and Maintenance Education Workshops will
- 6 also be conducted with fleet operators, independent
- 7 commercial dealers, truck stops, and other stakeholders to
- 8 help educate the workforce on hydrogen and fuel cell
- 9 technology. Next slide.
- 10 Both projects are targeting a maximum range of
- 11 450 to 500 miles to comfortably meet their challenging
- 12 operational requirements. The California Air Resources
- 13 Board recently conducted a large entity fleet reporting
- 14 survey, which identified 27,000 California tractors or
- 15 semi-trucks owned by large entities that travel over 300
- 16 miles per day. If these 27,000 tractors adopt the hydrogen
- 17 fuel cell truck technology advanced by these projects and
- 18 use 100 percent green electrolytic hydrogen, annual CO2
- 19 equivalent emissions can be reduced by 4.2 million metric
- 20 tons, and annual NOx emissions can be reduced by 1,100
- 21 metric tons. Under-resourced communities located around
- 22 highly trafficked freight corridors would directly benefit
- 23 from these emission reductions. Next slide.
- 24 Staff recommends approval of these two grant
- 25 agreements and adoption of staff's determination that these

- 1 projects are exempt from CEQA. I'm available for any
- 2 questions. And I believe Jean-Baptiste Gallo from Cummins
- 3 and Ted Barnes from GTI are on the line as well. That
- 4 concludes my presentation and thank you for your time.
- 5 CHAIR HOCHSCHILD: Thank you. Let's go to public
- 6 comment on Item 13.
- 7 MS. MURIMI: Thank you, Chair Hochschild.
- 8 We do have two raised hands at this time. So for
- 9 individuals who'd like to make a comment go ahead and use
- 10 the raised-hand feature, it looks like an open hand at the
- 11 bottom of your screen or device. And if you're on the
- 12 phone dial *9.
- 13 When you're called upon restate and spell your
- 14 first and last name and state your affiliation, if any. So
- 15 we'll start with Ted Barnes, you may give your comment.
- MR. BARNES: Thank you. Hello, my name is Ted
- 17 Barnes, T-E-D B-A-R-N-E-S. I am the Director of the
- 18 Transportation Group at GTI.
- I would like to start by thanking the Chair, Vice
- 20 Chair and Commissioners as well as all the Energy
- 21 Commission for their leadership in deploying zero-emission
- 22 vehicles, particularly heavy-duty vehicles that are so
- 23 important to environmental justice topics and equity,
- 24 particularly for heavy-duty space all of the respiratory
- 25 health issues caused in priority communities across

- 1 California.
- 2 I'd also like to thank the long-term leadership
- 3 of Peter Chen and Rey Gonzalez in this space and in the
- 4 funding and the support that they have provided to these
- 5 types of projects over the years.
- 6 TGI is very happy to be selected for award on
- 7 this program working with all of our project partners,
- 8 including Symbio, Michelin, Faurecia, Ricardo, but also
- 9 receiving funding support and project support from SoCalGas
- 10 as well as Rio Hondo Community College and our fleet
- 11 partner TTSI.
- 12 This project is very exciting for us because it
- 13 will allow this team to create a truck that will be a true
- 14 one-to-one replacement with a diesel truck. Because of the
- 15 increased range and power capabilities of the truck that is
- 16 being produced it will open up the market sector for long
- 17 regional haul routes, without having to disadvantage the
- 18 vehicle compared to its evil counterparts.
- 19 So with that I'd just like to say thank you
- 20 again. We're so happy to continually work with the Energy
- 21 Commission and particularly with hydrogen vehicles and
- 22 zero-emission vehicles. Thanks so much.
- 23 CHAIR HOCHSCHILD: Thank you.
- 24 Any further public comments?
- MS. MURIMI: Yes, Chair, we have one more. I see

- 1 Jean-Baptiste. Again, restate and spell your name and give
- 2 your affiliation, if any. And then go ahead and give your
- 3 comment.
- 4 MR. GALLO: Hi, this is Jean-Baptiste Gallo from
- 5 Cummins. So first name Jean-Baptiste, J-E-A-N-B-A-P-T-I-S-
- 6 T-E and name Gallo, G-A-L-L-O. So I'm from Cummins,
- 7 Manager of Government Programs in our New Power Business
- 8 Unit. Yeah, and I want to thank the Energy Commission for
- 9 approving or considering to approve our project for award.
- 10 Peter Chen did a pretty good job at presenting the
- 11 technology, it's really putting our latest and greatest
- 12 technology, since some of it is in current development. It
- 13 is really exciting. Like GTI, it's a one-to-one
- 14 replacement with diesel vehicles. And our goal is really
- 15 to bring our latest and greatest technology together into a
- 16 Class 8 truck, test it, demonstrate it, and really build it
- 17 for customers in mind.
- 18 And in this particular project or products with
- 19 where we are working very closely, you may have seen now
- 20 Cummins and their product announced a (indiscernible) an
- 21 understanding for 2,000 vehicles, all fuel cells. And as
- 22 you know, our product has a vested interest in hydrogen, so
- 23 it's a great relationship. And they were really excited to
- 24 partner together, to do it in California where it makes a
- 25 lot of sense.

1	We're	also	partnering	with	SoCalGas	and	South

- 2 Coast AQMD, so it's going to be a great partnership. We're
- 3 looking forward to getting started, and I think it'll
- 4 really prove the validity of this technology for this
- 5 application and really a one-to-one replacement for this
- 6 long-range hard-to-electrify transportation area.
- 7 So I get really excited and I'm really thankful
- 8 for the Energy Commission to approve this project. And I
- 9 think the exciting thing is it builds on previous CEC
- 10 projects that were awarded to Hydrogenics that was acquired
- 11 by Cummins and in Cummins as well.
- 12 And then it builds on hundreds of millions of
- 13 dollars of investment that Cummins has made in the space,
- 14 and investment that Cummins has made in the space in
- 15 California with our facility in West Sacramento, which is
- 16 going to support this project. So yeah, a great, great
- 17 project. I'm really excited about it and in a great
- 18 relationship with all the partners and really excited to do
- 19 that in California with the support of the Energy
- 20 Commission and Peter Chen's group. So thank you very much.
- 21 CHAIR HOCHSCHILD: Thank you.
- 22 Any further public comment?
- 23 MS. MURIMI: Thank you Chair, no more comments at
- 24 this time.
- 25 CHAIR HOCHSCHILD: Okay. Let's go to

- 1 Commissioner Monahan.
- 2 COMMISSIONER MONAHAN: Well, thanks Peter and to
- 3 the whole team that is working at this intersection of R&D
- 4 with clean transportation. And I thought the data you
- 5 shared, Peter, was really compelling around the number of
- 6 long-haul trucks that are traveling more than 300 miles per
- 7 day. And why that's such a critical sector that we want to
- 8 focus on for hydrogen technologies.
- 9 I think this is a place, long-haul trucking,
- 10 where we don't have -- where it's much more complicated to
- 11 use battery electric vehicles. I think it's not
- 12 impossible, but it's more difficult. And the fast refuel
- 13 time, the lighter weight of fuel cells relative to battery
- 14 electric vehicles, just it'll be a more -- as everybody
- 15 keeps saying -- diesel-like experience. And so for that
- 16 sector, in particular, there could be a very important role
- 17 to be played by fuel cell vehicles. So I'm excited to
- 18 support these projects.
- 19 I'm glad Cummins is building here in California.
- 20 I'll say again, we have \$250 million worth of manufacturing
- 21 grants that we want to make sure that manufacturing of
- 22 zero-emission vehicles and their components happens here in
- 23 California. We are the number one market in terms of off-
- 24 takers, and we want to make sure we're the number one
- 25 market in terms of actually manufacturing these vehicles as

- 1 well.
- 2 CHAIR HOCHSCHILD: Great.
- 3 Any other Commissioners wishing to comment on
- 4 this item? If not, it seems like a terrific project.
- 5 Commissioner Monahan, would you like to move Item 13.
- 6 COMMISSIONER MONAHAN: I move Item 13.
- 7 CHAIR HOCHSCHILD: Okay, how about Commissioner
- 8 Vaccaro, do you want to second Item 13.
- 9 COMMISSIONER VACCARO: I second that.
- 10 CHAIR HOCHSCHILD: All in favor say aye.
- 11 Commissioner Monahan?
- 12 COMMISSIONER MONAHAN: Aye.
- 13 CHAIR HOCHSCHILD: Commissioner Vaccaro?
- 14 COMMISSIONER VACCARO: Aye.
- 15 CHAIR HOCHSCHILD: Commissioner McAllister?
- 16 COMMISSIONER MCALLISTER: Aye.
- 17 CHAIR HOCHSCHILD: Vice Chair Gunda?
- 18 VICE CHAIR GUNDA: Aye.
- 19 CHAIR HOCHSCHILD: And I vote age as well. That
- 20 item passes unanimously. Thanks to all the stakeholders
- 21 and staff.
- We'll turn now to Item 14, City of Long Beach
- 23 Harbor Department.
- MR. BRECHT: Yes. Good afternoon, Chair, Vice
- 25 Chair and Commissioners. I'm Patrick Brecht, staff with

- 1 the Fuels and Transportation Division and I'm here to
- 2 present Item Number 14. This item is a proposed \$2.5
- 3 million agreement with the City of Long Beach Harbor
- 4 Department, also known as the Port of Long Beach, and
- 5 funded through the Clean Transportation Program. Next
- 6 slide.
- 7 The benefits to California are to improve
- 8 accessibility charging infrastructure by accelerating
- 9 towards California's zero-emission vehicle infrastructure
- 10 goals. This will also reduce the barriers to zero-emission
- 11 vehicles. And the workforce component will create green
- 12 jobs. Next slide, please.
- 13 The agreement proposed for approval today
- 14 reflects the investment targets of the Clean Transportation
- 15 Program in supporting the development, deployment, and
- 16 scaling of zero-emission vehicles and infrastructure. The
- 17 agreement with the Port of Long Beach is part of the 2020
- 18 CEC grant funding opportunity entitled, "Electric Vehicle
- 19 Ready Communities Phase II-Blueprint Implementation," which
- 20 is a follow-up to the Phase I, the blueprint development
- 21 solicitation.
- Now in September 2021, the CEC added over \$9
- 23 million to the original solicitation by utilizing funds
- 24 from the Clean Transportation Program investment plans
- 25 Recovery and Reinvestment Funding category from Fiscal Year

- 1 2020 to 2021. This allowed the full funding of three
- 2 additional projects and to fund one project that was
- 3 originally only partially funded. Three projects were
- 4 approved at January's CEC's business meeting, the fourth
- 5 project is seeking approval today.
- 6 If approved the project proposes the following
- 7 activities, as noted here. Install 10 Level 2 ZEV charging
- 8 stations and 6 additional stub-outs for use by port fleet
- 9 vehicles, employees, and visitors.
- 10 This project will provide an Electric Drayage
- 11 Truck Charging Station Siting Toolkit for local business
- 12 owners.
- 13 This project will also produce a Workforce
- 14 Assessment Report to support the ZEV industry.
- 15 Additionally, it will provide ZEV industry
- 16 workforce outreach and recommendations. Next slide.
- Now in closing staff recommends approval of this
- 18 agreement with the Port of Long Beach for \$2.5 million, and
- 19 approval of staff's determination that the project is
- 20 exempt from CEQA. That concludes my presentation. Thank
- 21 you.
- 22 CHAIR HOCHSCHILD: Thank you.
- 23 Any public comment on Item 14?
- MS. MURIMI: Thank you, Chair. At this time I
- 25 see no raised hands.

- 1 CHAIR HOCHSCHILD: Okay, let's go to Commissioner
- 2 Monahan.
- 3 MS. MURIMI: I'm going to give a --
- 4 CHAIR HOCHSCHILD: I'm sorry. Dorothy, sorry,
- 5 did you need more time there?
- 6 MS. MURIMI: Pardon me, Chair, no, no.
- 7 CHAIR HOCHSCHILD: Okay, let's go to Commissioner
- 8 Monahan.
- 9 COMMISSONER MONAHAN: I think you guys are
- 10 getting used to these blueprints. This has been something
- 11 we've heard time and again from our advisory committee that
- 12 it's really important to have planning grants. And then
- 13 it's really important to have the funds to actually be able
- 14 to implement these planning grants. So this is, as Patrick
- 15 said, the last in the long chain of planning grants and
- 16 implementation that we have been funding.
- 17 The City of Long Beach had, and the Port of Long
- 18 Beach in particular is a member, a very active member of
- 19 our Ports Collaborative, and they are really one of the
- 20 lead ports in California really trying to think through how
- 21 to zero out emissions and do it in a way that's great for
- 22 their community.
- 23 So I'm excited to support this blueprint
- 24 implementation and look forward to actually being able to
- 25 visit the Port of Long Beach, hopefully in the not-too-

1	distant future, and seeing some of these investments play
2	out.
3	CHAIR HOCHSCHILD: How many of these planning
4	grants have we done for ports now or is this the first?
5	Yeah, Patrick, do you remember?
6	MR. BRECHT: I think this is only Port One, but
7	I'm not too sure, though. (Overlapping colloquy.)
8	CHAIR HOCHSCHILD: Okay, okay. So this is the
9	first of the ports, I was just trying to remember something
10	on that. Okay that's helpful. But anyways I am in
11	agreement, it's strategic to do them. So unless there are
12	Commissioner comments on this, Commissioner Monahan, would
13	you be willing to move Item 14?
14	COMMISSIONER MONAHAN: I move Item 14.
15	CHAIR HOCHSCHILD: Okay, Commissioner McAllister,
16	would you be willing to second that?
17	Commissioner McAllister: I second.
18	CHAIR HOCHSCHILD: All in favor say aye.
19	Commissioner Monahan?
20	COMMISSIONER MONAHAN: Aye.
21	CHAIR HOCHSCHILD: Commissioner McAllister?
22	COMMISSIONER MCALLISTER: Aye.
23	CHAIR HOCHSCHILD: Commissioner Vaccaro?
24	COMMISSIONER VACCARO: Ave.

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CHAIR HOCHSCHILD: Vice Chair Gunda?

25

1	VICE CHAIR GUNDA: Aye.
2	CHAIR HOCHSCHILD: And I vote age as well. That
3	item passes unanimously.
4	We'll turn out Item 15, Ultra-Low-Carbon Fuel:
5	Commercial-Scale Production Facilities and Blending
6	Infrastructure.
7	MR. NGUYEN: Hello. Good afternoon, Chair, Vice
8	Chair and Commissioners. My name is Hieu Nguyen, staff
9	with the Fuels and Transportation Division. Today staff is
10	seeking approval of two projects that were proposed for
11	funding under the Ultra-Low-Carbon Fuel: Commercial-Scale
12	Production Facilities and Blending Infrastructure
13	solicitation. Next slide.
14	Before I present the two projects, I wanted to
15	provide an overview of GFO-20-608, the Ultra-Low-Carbon
16	Fuel: Commercial-Scale Production Facilities and Blending
17	Infrastructure solicitation. The two areas of focus for
18	this solicitation were to provide support for projects that
19	increase the in-state fuel production and/or blending
20	capacity of ultra-low-carbon alternative fuels, defined as
21	a fuel with a carbon intensity score of equal or less than
22	30 grams of carbon dioxide equivalent per megajoule.

Proposed projects must use commercially tested

24 fuel production or blending technologies and expand their

25 fuel production capacity by 1 million diesel gallon

- 1 equivalents or more per year.
- 2 A total of \$9 million were awarded under this
- 3 solicitation. I will now be presenting two of the projects
- 4 that were proposed for funding under this solicitation.
- 5 There will be one fuel production project and one fuel
- 6 blending project. Next slide, please.
- 7 The following slides provide an overview of the
- 8 proposed agreement with Merced Pipeline LLC for a \$1.5
- 9 million dollar grant to support an expansion of an ultra-
- 10 low carbon fuel production facility. The agreement with
- 11 Merced Pipeline is to construct a new expansion to their
- 12 existing centralized gas clean-up and upgrading facility in
- 13 Merced County, California. The project will collect biogas
- 14 captured from an additional seven dairies, which are
- 15 represented on this picture as red boxes, and transport the
- 16 biogas to a centralized gas upgrading facility by a
- 17 private, low-pressure pipeline which is represented on this
- 18 picture as the yellow line.
- 19 This expansion facility will have the capability
- 20 to produce approximately 1.8 million diesel gallon
- 21 equivalents per year of renewable compressed natural gas
- 22 with a carbon intensity of about -375 grams of carbon
- 23 dioxide equivalents per megajoule. The finished fuel will
- 24 be injected into the Pacific Gas and Electric utility
- 25 pipeline and transported to new and existing compressed

- 1 natural gas refueling stations in the San Joaquin Valley.
- 2 Next slide, please.
- 3 The benefits of the Merced Pipeline agreement are
- 4 to improve economic opportunities within disadvantaged and
- 5 low-income communities by providing over 39 full-time
- 6 equivalent jobs during the duration of the project.
- 7 The project will also increase the supply of
- 8 waste-derived carbon negative renewable fuels and decrease
- 9 fugitive methane emissions from the participating dairies
- 10 on-site management of dairy manure.
- 11 The project supports the state's short-lived
- 12 climate pollution strategy and methane reduction goals
- 13 under Senate Bill 1383.
- 14 When the project is operating at full capacity
- 15 the project is expected to reduce greenhouse gas emissions
- 16 by over 113,000 metric tons of carbon dioxide equivalents
- 17 on an annual basis. Next slide, please.
- 18 The following slides provide an overview of the
- 19 proposed agreement with New Leaf Biofuel LLC for a \$1
- 20 million dollar grant to support an expansion of an ultra-
- 21 low carbon fuel blending infrastructure facility.
- This project will upgrade their existing fuel
- 23 blending terminal in Fontana located in Southern California
- 24 by completing a series of upgrades designed to increase the
- 25 fuel throughput. Currently, railcars arrive at this

1	existing	terminal	and	transload	biodiesel	or	renewable

- 2 diesel directly to trucks via a blending skid at a rate of
- 3 350 gallons per minute for transport throughout Southern
- 4 California.
- As seen in the image here, the proposed tank farm
- 6 and associated upgrades will enable more than one railcar
- 7 to simultaneously offload biofuel at over 1,100 gallons per
- 8 minute directly into tanks instead of into waiting trucks.
- 9 Freed from the constraint of having to be simultaneously
- 10 present, both railcars and trucks can arrive at any time,
- 11 offload, or load, and move on to their next destination
- 12 allowing for an estimated increase of 78 million gallons
- 13 per year of blended biofuel available to the marketplace.
- 14 Next slide.
- The particular benefits of the New Leaf Biofuel
- 16 project are to improve economic opportunities within
- 17 disadvantaged and low-income communities by supporting 12
- 18 new full-time jobs, with 3 to 5 jobs being long-term and
- 19 increasing the supply of waste-derived renewable fuels.
- When the project is complete and running at full
- 21 capacity the project is expected to reduce greenhouse gas
- 22 emissions by more than 700,000 metric tons of carbon
- 23 dioxide equivalents per year. Next slide.
- Merced Pipeline's renewable and natural gas
- 25 conditioning facility was evaluated by the lead agency,

- 1 Merced County, which conducted an Initial Study and found
- 2 that the proposed project, with mitigation, would have no
- 3 significant impact on the environment. On November 20th,
- 4 2019, Merced County's Planning Commission adopted and
- 5 approved the Initial Study, the Mitigated Negative
- 6 Declaration, and the Mitigation Monitoring and Reporting
- 7 Plan for Conditional Use Permit 19-003.
- 8 Staff analyzed these documents and determined
- 9 that this project causes no new significant or
- 10 substantially more severe environmental impacts beyond
- 11 those already considered and mitigated by the lead agency.
- 12 For the Merced Pipeline agreement staff is
- 13 seeking your adoption of the CEQA findings and approval of
- 14 the grant award in Item 15a. Stephen Hatley with Maas
- 15 Energy Works is attending this meeting remotely and is
- 16 available to answer any questions.
- 17 For the New Leaf Biofuel agreement staff is
- 18 seeking your approval of the grant award in Item 15b.
- 19 Staff has also determined that this project is exempt from
- 20 CEQA. Jennifer Case with New Leaf Biofuel is attending
- 21 this meeting remotely and is available to answer any
- 22 questions.
- This concludes my presentation for Items 15a and
- 24 15b. Thank you for your consideration of these two items.
- 25 CHAIR HOCHSCHILD: Thank you.

- 1 Let's go to public comment.
- MS. MURIMI: Thank you, Chair Hochschild. For
- 3 those interested in making public comment use the raised-
- 4 hand feature if you're on Zoom, it looks like an open hand
- 5 and should be at the bottom of your screen or device. For
- 6 those calling into the meeting dial *9 to raise your hand
- 7 and *6 to unmute on your end. After you are called, please
- 8 restate, and spell your first and last name, state your
- 9 affiliation if any.
- 10 I see Jennifer Case. Go ahead and state your
- 11 name and affiliation.
- MS. CASE: Good afternoon, can you hear me?
- MS. MURIMI: Yes, we can.
- MS. CASE: Awesome. This is Jennifer Case, J-E-
- 15 N-N-I-F-E-R, last name is Case, C-A-S-E. I am affiliated
- 16 with New Leaf Biofuel. I am one of the founders and owners
- 17 of the company.
- 18 I just wanted to thank the California Energy
- 19 Commission for its continued investment in low-carbon
- 20 biofuels in the state of California. This would be New
- 21 Leaf's third competitive grant we've received from the
- 22 California Energy Commission over the years. Twice we were
- 23 blessed with the opportunity to build a low-carbon
- 24 biodiesel plant in San Diego and upgrade it several times,
- 25 so we really wanted to thank the Commission for that.

1 And then on this particular project we are real	1	And	then	on	this	particular	project	we	are	real
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- 2 thankful for releasing funds for infrastructure. It's been
- 3 one of our big goals here in California as an industry over
- 4 the last decade to improve the infrastructure, to support
- 5 all the low carbon fuels that have been -- all the low
- 6 carbon projects that have been started or announced in the
- 7 last few years to meet the demands of the LCFS.
- 8 This project will bring more renewable diesel and
- 9 biodiesel in from other parts of the country that are
- 10 currently having trouble getting distribution efficiently
- 11 and low cost into the market. This will be a 100 percent
- 12 renewable fuels distribution facility and we're really
- 13 proud of the project and we're really thankful for your
- 14 support.
- 15 CHAIR HOCHSCHILD: Thank you. Any further public
- 16 comment?
- MS. MURIMI: No more public comment at this time
- 18 Chair.
- 19 CHAIR HOCHSCHILD: Great.
- 20 Let's go to Commissioner discussion, Commissioner
- 21 Monahan.
- 22 COMMISSIONER MONAHAN: Well thanks to Hieu and
- 23 the team for bringing this forward. I wonder Hieu, I think
- 24 you didn't mention it but when we talked, you had said that
- 25 the offtakes for all the Merced project is that the R&D is

- 1 going to be used directly by vehicles, like there's already
- 2 off takers for those. And that's one aspect that I really
- 3 want to highlight, this idea that we want facilities here
- 4 in California, we want that fuel to go directly to
- 5 transportation, and to get credit under the Low Carbon Fuel
- 6 Standard. The Low Carbon Fuel Standard, it's really doing
- 7 its job in California. I mean it's remarkable how much
- 8 change there has been, how much investment there has been
- 9 directly due to the Low Carbon Fuel Standard. And so we're
- 10 looking for scaleup solutions, we're looking for ways to
- 11 leverage our limited amount of public dollars to scale up,
- 12 but not to do what the LCFS would do by itself. So I want
- 13 to emphasize there's been a shift over time in the grants
- 14 towards biofuels, recognizing that policy driver is the one
- 15 that's doing the heavy work.
- 16 So just thanks to Hieu and the team really for
- 17 the thoughtfulness around this. These are complicated
- 18 issues to navigate. A lot of positive impacts in terms of
- 19 community, jobs, and capturing the methane that would
- 20 otherwise be released to the atmosphere, and some concerns
- 21 in communities around biofuels that we need to recognize.
- 22 So we're navigating these issues and really
- 23 looking for opportunities for our dollars to leverage
- 24 sustainable solutions for biofuels.
- 25 CHAIR HOCHSCHILD: Well said. Unless there are

- 1 other Commissioner comments, Commissioner Monahan, would
- 2 you be willing to move Item 15?
- 3 COMMISSIONER MONAHAN: I move Item 15.
- 4 CHAIR HOCHSCHILD: And how about Commissioner
- 5 Vaccaro? Would you be willing to second that?
- 6 COMMISSIONER VACCARO: Yes, I second.
- 7 CHAIR HOCHSCHILD: All in favor say aye.
- 8 Commissioner Monahan?
- 9 COMMISSIONER MONAHAN: Ave.
- 10 CHAIR HOCHSCHILD: Commissioner Vaccaro?
- 11 COMMISSIONER VACCARO: Aye.
- 12 CHAIR HOCHSCHILD: Commissioner McAllister?
- 13 COMMISSIONER MCALLISTER: Aye.
- 14 CHAIR HOCHSCHILD: And Vice Chair Gunda?
- 15 VICE CHAIR GUNDA: Aye.
- 16 CHAIR HOCHSCHILD: And I vote age as well. That
- 17 item passes unanimously.
- 18 Let's go to Item 16, Business Meeting Minutes.
- 19 Do we have any public comment on that?
- MS. MURIMI: Thank you, Chair. I'll go ahead and
- 21 give instruction. So this is the period for any person --
- 22 oh no sorry, pardon me -- so for individuals who would like
- 23 to make a comment go ahead and use the raised-hand feature
- 24 if you're on Zoom, it looks like a raised hand. It's at
- 25 the bottom of your screen or device. And if you're calling

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- 1 into the meeting press *9.
- We'll give that one moment. I see no raised
- 3 hands Chair.
- 4 CHAIR HOCHSCHILD: Okay. Let's see, Vice Chair
- 5 Gunda, would you be willing to move Item 16?
- 6 VICE CHAIR GUNDA: Yes, Chair, I'll move Item 16.
- 7 CHAIR HOCHSCHILD: Okay. Commissioner Monahan
- 8 could you second?
- 9 COMMISSIONER MONAHAN: I second it.
- 10 CHAIR HOCHSCHILD: All in favor say aye.
- 11 Vice Chair Gunda?
- 12 VICE CHAIR GUNDA: Aye.
- 13 CHAIR HOCHSCHILD: Commissioner Monahan?
- 14 COMMISSIONER MONAHAN: Aye.
- 15 CHAIR HOCHSCHILD: Commissioner Vaccaro?
- 16 COMMISSIONER VACCARO: Abstain.
- 17 CHAIR HOCHSCHILD: Okay. And Commissioner
- 18 McAllister?
- 19 COMMISSIONER MCALLISTER: Aye.
- 20 CHAIR HOCHSCHILD: And I vote age as well. That
- 21 item passes 4-0, with Commissioner Vaccaro abstaining.
- Let's go to Item 17, Lead Commissioner, Presiding
- 23 Member Reports. Started with the Vice Chair.
- VICE CHAIR GUNDA: Yes, thank you, Chair. Just I
- 25 want to provide a few updates, there's a lot happening

- 1 early in the year. But before I start into kind of my
- 2 updates just wanted to note, I believe it's been a year
- 3 since I've been in this role. And just it went really,
- 4 really fast this last year. And I just wanted to not
- 5 provide like an exhaustive thanks, but just wanted to note
- 6 specifically my thanks to this group of Commissioners, my
- 7 colleagues. Especially Chair, thank you on working with me
- 8 on reliability and issues that we both were in the trenches
- 9 last year.
- 10 And then Commission McAllister thank you for
- 11 including me on the IEPR and having the opportunity to work
- 12 with you on IEPR, it's been great.
- I also want to just thank my office, Miina, thank
- 14 you so much for everything you do and the advisors. Also
- 15 Aleecia Gutierrez, she's a friend but now a colleague. I
- 16 mean thank you so much, I couldn't do anything without you,
- 17 And the entire 80 staff who I work with every day.
- 18 We have done some big things last year including
- 19 launching reliability products, enhancing our analytical
- 20 work around demand scenarios, DR forecasting, gas analysis.
- 21 So it was a big year, so thanks to everybody. We have four
- 22 more years to do good work, what an opportunity.
- 23 At our last meeting I think I kind of mentioned
- 24 at a high level that we're going to put out a draft scoping
- 25 order for IEPR, so the IEPR update for 2022. And I just

- 1 wanted to make sure everybody, colleagues and also the
- 2 public, know that we're thinking about broadly three
- 3 elements. There'll be a chapter on energy transition and
- 4 equity considerations. We'll be working with the Public
- 5 Advisor's Office, Noemi and her team, Katrina, thank you
- 6 so much for that part.
- 7 We are going to consolidate all our planning
- 8 work, all the analytical work we do into a planning
- 9 library; that's what we're calling that. That way we could
- 10 take all the EAD analysis, but also siting analysis, some
- 11 of the cool analysis that Siting is developing into one
- 12 library, and a good cadence around that.
- 13 And obviously there'll be an element on emerging
- 14 issues. So again, leaning on other dockets we have,
- 15 anything we might want to highlight, such as hydrogen.
- 16 Commissioner Monahan, you are kind of working on the
- 17 hydrogen elements, so there is an opportunity to talk about
- 18 that a little bit.
- 19 And also thinking through some regional
- 20 considerations and evolution of the CAISO market on the
- 21 electricity side. So we'll get some public comment and
- 22 think through what we want to include there.
- 23 And then kind of going into a couple of cool
- 24 meetings we've been a part of. Commissioner Monahan,
- 25 myself, and Commissioner McAllister, all three of us were

- 1 able to attend the Affordability En Banc last week. I'm
- 2 sure they both might want to add their comments to that,
- 3 but I just want to thank Commissioner Houck and her
- 4 leadership on that and the CPUC's leadership. An extremely
- 5 timely conversation, some really meaty stuff. I mean, I
- 6 got a passive sense of the role of a Commissioner at PUC,
- 7 and it is not easy, so I was just thankful for the CPUC
- 8 Commissioners for the incredible work they do. And it's
- 9 tough, tough situations and some tough issues that they
- 10 have to grapple with there.
- 11 And I also joined in on the en banc and provided
- 12 some opening comments. And so just a couple of quick
- 13 things in it that that I stuck with me, and I think it's
- 14 important for us to consider moving forward, I think there
- 15 was an overall agreement that we need to manage utility
- 16 costs. We have seen proposals from PG&E and SDG&E, has
- 17 been over the last month on the rates. Again, everybody's
- 18 trying to grapple with these things as we try to mitigate
- 19 climate change by rapid decarbonization of our system. But
- 20 also are trying to deal with the wildfires and such. So I
- 21 think there are elements we need to really think through.
- I think there was an ask for thinking of energy
- 23 systems holistically, both the gas side and the electricity
- 24 side. And thinking about energy affordability and access
- 25 as an important element of that. So I thought that was a

- 1 very helpful discussion.
- 2 There was also kind of discussions on reimagining
- 3 which costs have to be stacked into the rates and how do we
- 4 think about that, and whether we want to put on some fixed
- 5 costs or whether they're differentiated by income. So
- 6 there was a lot of good discussions, and I would really
- 7 encourage our staff to kind of look at the notes from that
- 8 proceeding. I think that it's extremely important for CEC
- 9 to consider.
- I think, from a CEC perspective, I think as we
- 11 move towards these conversations, I want to encourage our
- 12 staff to think about modeling specifically that allows and
- 13 helps this conversation. Whether it might be rates or
- 14 impact on demand, the key policy areas such as cost-
- 15 effectiveness and building standards. I think these are
- 16 the important elements we're already considering. But
- 17 having those discussions as we think through
- 18 electrification and DR options is an extremely useful thing
- 19 to talk through. So I just wanted to flag that for
- 20 colleagues as well as public that I heard it loud and
- 21 clear, and our staff as well.
- 22 From a reliability standpoint, again Chair and I
- 23 have been in a lot of different in work streams over the
- 24 last month, a lot of the work we're doing is not really
- 25 visible. And I did hear loud and clear that it's not

- 1 visible, so I just want to send a signal to the public that
- 2 there is a lot of interagency coordination that's happening
- 3 behind the scenes. We are meeting many, many times on a
- 4 variety of issues. So I think it's important that we begin
- 5 to daylight some of this interagency work and then we're
- 6 thinking through how to daylight them.
- 7 And I attended a California energy storage
- 8 alliance market development forum last week, which was
- 9 super-interesting. I was able to directly hear from the
- 10 storage industry on some of the issues that they're
- 11 tackling with, and then the importance of having market
- 12 certainty. But also as we develop new technologies it's
- 13 not readily easy for them to get insurance on stuff like
- 14 that.
- 15 For example, Lithium Valley is a success,
- 16 lithium-ion is as successful, because of its operational
- 17 record. And it's easy for funding to be brought through,
- 18 but also insurance and other things to be brought through.
- 19 So I thought that was really helpful, so as we move towards
- 20 more and more R&D efforts in long-duration storage and
- 21 other chemistries I think thinking through the investment
- 22 lens, what does it take for private investors to really
- 23 scale this I think is an important element. Maybe
- 24 Commissioner McAllister and Monahan, I don't know if
- 25 there's an opportunity for us to think about a workshop to

1 really bring the industry and investment perspectives i	es into
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- 2 this dialogue.
- 3 The other thing that the Chair and I are kind of
- 4 working on is really de-risking our reliability through mid
- 5 (indiscernible) electric grid. So we've heard a lot from
- 6 industry on the interconnection issues, supply chain
- 7 issues. And so even though we have a solid procurement,
- 8 for example, from PUC and about 11,500 their recent IRP
- 9 decision there is this concern on how fast can we get that
- 10 built and are we sure that can be interconnected and built?
- 11 So we, again, all the agencies together -- from
- 12 our end it's the Chair and myself -- are really working
- 13 through thinking about a variety of strategies on how to
- 14 de-risk this, including improving our coordination. And
- 15 there is, again, as an opportunity to daylight there is a
- 16 task force at GO-Biz called Ted Task Force (phonetic) that
- 17 really is coordinating on issues like project, mid-project
- 18 issues. For example, if something could be a supply chain,
- 19 something could be a land use permit. So we are kind of
- 20 like working through those elements in a coordinated
- 21 fashion, but there is a lot to do. So this kind of has
- 22 been our main focus.
- 23 And moving forward over the next couple of weeks
- 24 Commissioner McAllister and I are going to be attending the
- 25 Native Conference in Southern California and we are looking

- 1 forward to that.
- There is as a part of the trip, I think, we're
- 3 hoping to learn the vision that SoCalGas put out in the
- 4 decarbonization strategy, but also the broader L.A. regions
- 5 we're really looking forward to understanding the
- 6 decarbonization of the gas system and how we're thinking
- 7 about L.A. Basin.
- 8 Also I'm planning to attend a kind of a solar and
- 9 storage ribbon-cutting in Kings County on March 15th.
- 10 So looking forward to all these learnings and
- 11 helping advance our work and being a good ambassador of the
- 12 state and the CEC, will keep you all apprised.
- 13 CHAIR HOCHSCHILD: Thank you, Vice Chair.
- 14 Let's go next to Commissioner McAllister.
- 15 COMMISSIONER MCALLISTER: Well, great now it's my
- 16 turn to follow Commissioner Gunda, so a hard act to follow
- 17 as well.
- But so yeah, I'll try not to repeat but the joint
- 19 work we're doing together is just a pleasure. And I think
- 20 really emblematic of the fact that we're trying to connect
- 21 dots across all of our offices and all our activities to
- 22 the extent we can integrate those conversations and avoid
- 23 silo-ing, so great to be working together on these various
- 24 issues.
- I also enjoyed the en banc. And I did want to

- 1 make just a couple of comments about that. Commissioner
- 2 Houck's leadership on that has been tremendous. And
- 3 Commissioner Rechtschaffen obviously is deep into that as
- 4 well as is President Reynolds and all the Commissioners
- 5 over there. There's a fundamental job that the PUC has.
- 6 And we want to be sort of helpful, proactively helpful with
- 7 them, so that we -- so that really just to help them help
- 8 facilitate good decision-making over the PUC. But their
- 9 job of ratemaking is just very complex and nuanced. And I
- 10 think at the en banc we gained an even higher appreciation
- 11 of that.
- I think this idea that there seemed to be
- 13 relative consensus on about needing to move back to sort of
- 14 forthrightly toward cost-of-service ratemaking, but with a
- 15 core of equity, I think was really the overarching theme
- 16 that I heard, at least.
- 17 And doing that at the same time we're doing --
- 18 trying to provide incentives through rates for time-of-use
- 19 and load flexibility and a number of other goals that we
- 20 have is no mean feat.
- 21 And so I just think things are headed in a good
- 22 direction in general, some movement toward a binomial rate
- 23 structure is more pervasively. So that's something like a
- 24 fixed charge or demand-based charge. And then less
- 25 emphasis on volume-metric charges. I think that's where

- 1 we -- that's the direction, I think, that the things will
- 2 go and that's the right direction, but in any case, just
- 3 very much willing to support our colleagues over at the PUC
- 4 as they were grapple with some of these issues.
- 5 Let's see, I wanted to just again thank, Heather
- 6 and the team, for the IEPR. I think we've sort of tied it
- 7 up with a bow now with the adoption of the gas volume this
- 8 month. But Heather and team have just been tremendous and
- 9 already starting on the next IEPR update in earnest. And
- 10 so it's sort of a permanent revolution that never ends, but
- 11 really glad that that's kicked off and the scoping order is
- 12 taking shape.
- Next, I wanted to really congratulate Deana
- 14 Carrillo for stepping into the role of Deputy over the
- 15 Renewables Division, just very, very well deserved. She's
- 16 been with the Commission a short time, but has a long
- 17 history of working with us at the Commission at CAEATFA and
- 18 just really have appreciated her professionalism and so
- 19 congrats Deana. And she spearheaded the development of the
- 20 BUILD program which has rolled out and has some
- 21 applications and has been a long time coming, a relatively
- 22 complex structure of how that program is funded and
- 23 administered. But it's now on the street and I think the
- 24 marketplaces, the builders and other stakeholders are very
- 25 excited about it.

1 The Chair and I are going this Friday down
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- 2 L.A. to do a precedent with Senator Stern, author of the
- 3 bill that created the BUILD program along with Commissioner
- 4 Rechtschaffen from the PUC. And I just wanted to thank
- 5 all of our staff here, so Deana and team and last but not
- 6 least, the local Assistance and Financing Office, and then
- 7 our colleagues over the PUC as well. Lots of interaction
- 8 between our staffs in our respective agencies.
- 9 I'm looking forward to leveraging that trip to
- 10 meet with the folks involved in decarbonization, building
- 11 decarbonization more broadly. Southern California Edison
- 12 has a big application over at PUC, and so a lot of
- 13 innovative thinking about those issues around
- 14 implementation there as well. So really excited about sort
- 15 of developing BUILD as a platform for even bigger things in
- 16 the future.
- 17 The CalSHAPE program, just sort of heads-up, this
- 18 is a two-pronged program that is water efficiency and
- 19 energy efficiency evaluations and upgrades in schools
- 20 across the state and disadvantaged communities. The team
- 21 there has done a fabulous job. We're entering the second
- 22 phase of funding. A great participation from schools, a
- 23 lot of knowledge about the program across the state, and
- 24 flexibility to keep improving that program over time to
- 25 make sure that the work is done, that when actually

- 1 retrofits take place they'll be done well and accountably
- 2 by qualified labor.
- But I just wanted to thank Jonathan Fong and
- 4 Theresa Daniels, Hughson Garnier, and Danny Velazquez in
- 5 particular, for their great work on that program. And then
- 6 also Natalie Lee, the former deputy of Renewables, who
- 7 really I think waded through that whole process over a
- 8 number of many months to get it in place and get a robust
- 9 program established, so thank you, Natalie, for that.
- 10 Let's see, I wanted to also thank my Advisor,
- 11 Bryan Early for spearheading a bunch of work in Mexico. We
- 12 don't talk about it publicly that much, but we have a
- 13 number of MOUs and partnerships with colleagues across
- 14 Mexico and Jalisco state. We just renewed that MOU, so
- 15 that was a really productive first MOU. And we've now
- 16 renewed it for another few years. They're sort of the Cal
- 17 Jalisco (phonetic), I think arguably sort of the California
- 18 of Mexico, and there's been a lot of innovative things.
- 19 And so it's great to have that sort of moving down the
- 20 tracks again.
- 21 Lots of great work with Mexico City and the
- 22 prospect of doing more work with the federal government and
- 23 also with Baja California state, Baja Norte. So lots of
- 24 counterparts want to work with us in Mexico in sort of
- 25 figuring out how we can touch even more partners down

- 1 there. But there's a lot to like with our closest
- 2 neighbor.
- 3 And then finally I just want to sort of highlight
- 4 building decarbonization as really one of the challenges of
- 5 our time. I mean, we are doing a lot on it, we're going to
- 6 be doing even more. And I think it's relatively complex,
- 7 buildings are diverse; a building that was built 100 years
- 8 ago is not the same as one that was built yesterday. The
- 9 Building Code has helped a lot. But we have a huge diverse
- 10 population and that's reflected in our building stock. And
- 11 so there are many, many opportunities to improve people's
- 12 lives in innumerable ways as we invest in our building
- 13 stock. And do that, really look at that challenge through
- 14 an equity lens first and foremost.
- So I'm incredibly excited to do innovative things
- 16 in the state in the coming years to really impact our
- 17 building stock, make savvy investments, and achieve scale
- 18 and private sector partnerships. And really begin now in
- 19 the next year and couple of years to build the models that
- 20 are going to serve us for the long term.
- 21 So we have a lot of supply chain challenges.
- 22 We've heard those in a number of different arenas. You
- 23 know, "supply chain" is sort of the buzzword these days.
- 24 And it's real, because manufacturers really are having a
- 25 hard time with the global supply chain and all the

- 1 disruptions coming, and seemingly new disruptions every
- 2 week. But we need to relate into that. And I think we
- 3 have the policies in California to be able to do that, to
- 4 bring investment in the private sector partner with our
- 5 public funds and really fund that value that's going to
- 6 draw the private sector to sustainable business models.
- 7 And along the way we're going to create a lot of
- 8 jobs, the labor sector is going to grow even greater than
- 9 it is now. We have hundreds of thousands of jobs in
- 10 California in the clean energy sector and around half a
- 11 million jobs in the clean energy sector. And most of
- 12 those, the lion's share, are in buildings and efficiency in
- one manner of another or another. And we could double,
- 14 triple, quadruple that number with the concerted long-term
- 15 investment in our buildings.
- So I'm really excited also to partner with
- 17 Commissioner Gunda, and our GIS team actually as well, to
- 18 do the analytical underpinnings that will enable us to
- 19 target the right communities where really the value of our
- 20 investment is highest with a savings potential, with a
- 21 greenhouse gas reduction potential, and where all the other
- 22 co-benefits are greatest.
- 23 And I think we now have the analytical chops and
- 24 the data to be able to do that, so it's super-exciting to
- 25 be able to sort of bring big data to making good policy and

- 1 directing actual funds on the ground and identifying the
- 2 communities with the most potential for good in terms of
- 3 channeling our investments, so lots of great work ahead.
- 4 I'm really, really pleased to be working with
- 5 all of you on it and particularly Commissioner Vaccaro,
- 6 it's good to have you here. I'm looking forward to
- 7 partnering on those as well.
- 8 CHAIR HOCHSCHILD: Thank you, Commissioner.
- 9 Let's go to Commissioner Monahan.
- 10 COMMISSIONER MONAHAN: Well, I want to start by
- 11 recognizing that yesterday was International Women's Day.
- 12 And just that it's an important moment, I think, for us all
- 13 to reflect on the women and girls in our lives and just to
- 14 acknowledge the barriers that they still face today.
- And I just want to start with my daughters, who
- 16 of course I love dearly. And they're both STEM majors in
- 17 college and I really couldn't be prouder of them. But one
- 18 thing that really still is hard for me, and for them, is
- 19 that they're still encountering harassment at school for
- 20 being girls. And I'm sorry, it gets me a little choked up,
- 21 just that idea that the "Me too" movement highlighted some
- 22 of the challenges that girls face and women face. And I
- 23 just think we need to acknowledge that barrier still
- 24 exists. Barriers exist I think, on a racial basis, on a
- 25 gender basis, and there's so much we need to do to make our

- 1 societies more equitable for everyone.
- 2 And International Women's Day is just a good time
- 3 to reflect on that. And I was actually looking at the
- 4 leadership of the Energy Commission and thinking, "Wow
- 5 we're doing pretty good," in terms of having strong women
- 6 leaders who are, I think, good role models. From Linda
- 7 Spiegel, Linda Barrera, Lindsay Buckley, Carousel Gore, our
- 8 Public Advisor Noemi, Katrina her compatriot. And that's
- 9 something that we can be proud of, and yet recognize we
- 10 still need to do more. So I just wanted to start with
- 11 that, thanks. Sorry for getting emotional but it's very
- 12 personal to me.
- So pivoting to the broader work of the Energy
- 14 Commission I wanted to say that there has been a process,
- 15 which Chief Counsel Linda Barrera has really been
- 16 instrumental in defining a revised roles and responsibility
- 17 document for all of our advisory committee members. So
- 18 this applies in particular to the DACAG and to the Clean
- 19 Transportation Program Advisory Committee.
- 20 And there's been a lot of work, we did a lot of
- 21 work to make sure that these committees were attentive to
- 22 equity and diversified. And the roles and responsibilities
- 23 document I think was really very careful to make sure that
- 24 we're following the law. And we're being really clear
- 25 about what it means to be on our advisory committee in

- 1 terms of getting funding.
- 2 So I just feel a lot of -- I just have a lot of
- 3 thanks to Linda and to my Advisor Mona Badie. This took a
- 4 -- it was hard. I don't want to go into how hard it was,
- 5 but it was pretty hard to get a document and Q&A mapped out
- 6 that the average person would have to be like a lawyer to
- 7 be able to understand what it means to be on our advisory
- 8 committees. And we should still be able to have a diverse
- 9 set of advisors based on these roles and responsibilities.
- 10 So there has been a fair amount of work to defend
- 11 the Governor's Budget. And I guess if you guys haven't
- 12 seen Drew and Hannon defending the budget you should watch,
- 13 they're both doing amazing jobs. It's hard, I'm sure
- 14 everybody feels like when we were up there for our
- 15 confirmation process it's hard to testify in front of these
- 16 committees and it's very extremely stressful. And they're
- 17 both just doing a great job and taking it very seriously
- 18 and really working to make sure that the final budget will
- 19 be a good one for the state of California.
- 20 And let's see, I want to appreciate the fact that
- 21 Andrew and I have been doing a lot of learning tours around
- 22 industrial decarb and really exploring. We talked just
- 23 yesterday with Rajinder, CARB's Deputy Executive Officer,
- 24 around how we can make sure that whatever we do here at the
- 25 Energy Commission aligns with what Air Resources Board is

1	thinking.	We've	talked	to	various	technical	experts	and
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- 2 just it's been a lot of fun to learn from Andrew,
- 3 Commissioner McAllister I mean.
- 4 And there have also been a lot of high-level
- 5 international issues. I mean it's wonderful to me that
- 6 California can be this petri dish -- sorry my dog, that's
- 7 my dog moaning not me -- this petri dish for the rest of
- 8 the world. And that idea of like, "How do we make sure
- 9 that whatever we do in California can migrate to other
- 10 states and even internationally?"
- 11 And the even internationally opportunities,
- 12 there's been a lot lately with China, Denmark. Los Angeles
- 13 is going to be hosting the Summit of the Americas, so I
- 14 think that's an opportunity for all of us to think through
- 15 how do we have and use that as a platform to migrate the
- 16 great work here in California on clean energy. And Mexico,
- 17 as well, as Commissioner McAllister talked about.
- 18 Okay, and the last thing I want to mention,
- 19 because I think this company is kind of interesting. And
- 20 you guys might want to visit, is I talked to this company
- 21 called Tae Technologies, T-A-E Technologies. They're doing
- 22 fusion energy, yes fusion energy, and they're really
- 23 interesting in terms of their level of ambition. They're
- 24 not just working on fusion energy they're also working on
- 25 through scalable energy solutions, including in the EV

1	space	and	then	the	ΕV	charging	management	space,	or

- 2 charging management more broadly. So strongly recommend
- 3 that if you're interested in fusion energy --who isn't
- 4 interested in fusion energy -- that you talk to them.
- 5 CHAIR HOCHSCHILD: Thank you, Commissioner.
- I just really wanted to appreciate you raising
- 7 the International Women's Day. And I think we need to live
- 8 that as well as acknowledge it.
- 9 I really wanted to just lift up how important
- 10 mentoring is, and internships is a way to provide that. My
- 11 former Chief of Staff, Emilio Camacho, helped us launch
- 12 this summer fellowship program, which we've been doing ever
- 13 since. And now it's scaled to a bunch of different
- 14 agencies through Stanford. But there's other programs as
- 15 well, and I think those can be life-changing for a young
- 16 person. I know for myself some of the mentoring and
- 17 encouragement I got early on changed the direction of my
- 18 life. And I think especially for young women coming into
- 19 energy where it has been more of a male-dominated field, it
- 20 can make all the difference and we've got to start early.
- 21 So those summer fellowships and even we have some
- 22 internships that now run around the year are a great way to
- 23 be on that, so I really appreciate you sharing that.
- Let's turn next to Commissioner Vaccaro.
- 25 COMMISSIONER VACCARO: Thank you. I'll just keep

- 1 this very brief. Between now and the end of the month
- 2 there is quite a bit going on in terms of travel for my
- 3 office down to the Imperial and Coachella Valley we have
- 4 quite a delegation of representatives from state agencies,
- 5 Secretary Crowfoot will be there and others, really, to
- 6 engage with the community, to engage with developers. We
- 7 have a Tribal Roundtable that we're going to be
- 8 participating in. And at the next business meeting I'm
- 9 going to be happy to share what we learned and what came
- 10 out of some of that.
- 11 And then we've got some offshore wind events
- 12 coming up and just want to go backwards again to give a
- 13 great shoutout to our team for a wonderful offshore wind
- 14 workshop that we held on March 3rd, really talking for the
- 15 first time about how we're going to be implementing AB 525,
- 16 so much more to say about that in the coming months.
- 17 And then at the end of this month, Chair
- 18 Hochschild as you know, there is the Pacific Rim Summit in
- 19 San Francisco that's also going to be a wonderful
- 20 opportunity for people to learn what California is doing in
- 21 this space. So in the next meeting I'll probably have a
- 22 little bit more to say about those events but thank you for
- 23 the time today.
- 24 CHAIR HOCHSCHILD: Great. Thank you. Yes, I'm
- 25 speaking at that event. We'll be meeting with the wind

1 leadership. And look forward to working with you and t	orward to working with you and	id the
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- 2 team on that. I'm very glad it's finally happening here in
- 3 California.
- I will just give a couple of updates. I think
- 5 most people saw the news about the waiver today, so the
- 6 Trump Administration had canceled this EPA waiver, and this
- 7 is a big step having that reinstated. And I think 13
- 8 states follow the California standards, so that's a
- 9 positive development from an air quality perspective.
- 10 I also wanted to highlight another piece of news
- 11 that came out in the last 24 hours, which is that PG&E has
- 12 made an announcement in cooperation with GM around using
- 13 electric vehicles as backup power supply for homes and for
- 14 the grid. And this is particularly encouraging giving that
- 15 we're now, we estimate, adding about 650 electric vehicles
- 16 a day in California. We recently passed a million EV
- 17 sales, so making use of those for grid support, and
- 18 particularly for areas that are hit with a PSPS event, is a
- 19 really exciting and important milestone, and I think more
- 20 to come. I'm optimistic that there'll even be software
- 21 upgrades for vehicles that came out the last few years
- 22 that will allow them to have a bidirectional capability.
- 23 And then, finally, I just wanted to share we had
- 24 a terrific carbon capture tour which Le-Quyen and Terra and
- 25 Jonah Steinbuck and I went on, organized by a colleague

- 1 Justin Ong, who has been working on this for CNRA.
- We visited four companies in the Bay Area:
- 3 Heirloom and Mosaic Materials are doing direct air
- 4 capturing, some really cutting-edge innovation there to how
- 5 to suck CO2 out of the atmosphere; a company called Ebb,
- 6 which is actually using the oceans as sort of re-alkalizing
- 7 the oceans to fight ocean acidification and help absorb
- 8 more CO2; and then Twelve, formerly Opus-12, which is
- 9 basically creating CO2 fuels.
- 10 That was just a sampling of a bunch of the
- 11 companies in that ecosystem. They're operating in
- 12 California, and we hope to help them scale, so really
- 13 exciting to see that firsthand. And I look forward to
- 14 partnering with all the companies in that space.
- 15 Let's turn now to Item 18, Executive Director's
- 16 Report. Drew.
- MR. BOHAN: Thank you Chair, just a couple items.
- 18 First, thank you, Andrew, for acknowledging Deana and
- 19 Natalie. I just want to do the same, and really excited to
- 20 have Deana on board. And I've already done so personally
- 21 and we're setting up some events for her. But Natalie's
- 22 been a great thought partner for the last five or six
- 23 years, and three or so of them as deputy. And so it's a
- 24 great transition.
- 25 Check in budget hearings were referred to. Yes,

- 1 today we have the Assembly Budget Hearing, Assembly Sub 3.
- 2 I thought it went well. We got a lot of very positive
- 3 feedback about the Governor's clean energy package. And we
- 4 did as well in front of the Senate last week, although
- 5 there were only two senators in attendance. We had almost,
- 6 I think, pretty close to the whole committee or nearly so,
- 7 at the Assembly today, so that was great.
- 8 And then back to the office, I just wanted to
- 9 tell you folks that we are -- the deputies -- we've had
- 10 deputies' meetings every week for a long time. We're going
- 11 to have those in the office. So not tomorrow, but next
- 12 Thursday and every Thursday thereafter I'm going to be in
- 13 the office every Thursday and so will the deputies.
- 14 And we want to project to staff that flexibility
- 15 remains paramount and we want to treat staff like adults,
- 16 and we can be flexible. But we also want to make the
- 17 office itself a welcoming place and demonstrate that
- 18 there's a good balance potentially to be striking, folks
- 19 should -- strike it as they see fit.
- 20 Finally, I just want to thank Commissioner
- 21 Monahan. I haven't convinced my daughter that what Daddy
- 22 does for a living is particularly interesting. But I'm
- 23 going to play the video of your comments and see if I can
- 24 change her mind. Thank you very much.
- 25 CHAIR HOCHSCHILD: Okay, thank you, Drew. And

- 1 then you reminded me of one other thing, I'm going to be
- 2 speaking to the Legislature on Monday on hydrogen for a
- 3 couple of the committees there. So thanks to you and to
- 4 Hannon for doing a great job presenting last week.
- 5 Let's turn now to Item 19, Public Advisor's
- 6 Report.
- 7 MS. GALLARDO: (Indiscernible.)
- 8 CHAIR HOCHSCHILD: We're having a little trouble
- 9 hearing. Can you hear us? (Audio difficulties.) Is that
- 10 Noemi or Dorothy? We're not hearing you very well.
- 11 COMMISSIONER MCALLISTER: You're coming through
- 12 garbled, Noemi.
- 13 CHAIR HOCHSCHILD: Dorothy, do you want to speak?
- MS. MURIMI: Oh, pardon me, Chair. I can get
- 15 the comments from Noemi in a minute.
- 16 CHAIR HOCHSCHILD: Okay.
- MS. MURIMI: In one moment.
- 18 CHAIR HOCHSCHILD: Well, if you're waiting for
- 19 those, we can do public comment first if you're waiting for
- 20 her to send you something.
- 21 MS. MURIMI: Okay. Great I'll go ahead and give
- 22 instructions for public comment and then we'll come back to
- 23 the Public Advisor's Report.
- 24 So this is a period for any person wishing to
- 25 comment on information items or reports of the meeting

- 1 agenda or any item. So each person has up to three minutes
- 2 to comment and comments are limited to one representative
- 3 per organization. We may reduce the comment time depending
- 4 on the number of commenters.
- 5 Use the raised-hand icon to indicate that you'd
- 6 like to make a comment. If you're on the phone press *9 to
- 7 raise your hand and *6 to unmute on your end.
- 8 After you're called upon, please restate, and
- 9 spell your first and last name, state your affiliation if
- 10 any if representing a tribe, agency, or organization. And
- 11 do not use the speakerphone feature when talking, we will
- 12 not be able to hear you clearly.
- I'll give that one moment. I see one hand
- 14 raised, Claire Warshaw. Claire, your line is open. You
- 15 may speak, you may go ahead.
- MS. WARSHAW: Hi. My name is Claire Warshaw, C-
- 17 L-A-I-R-E and then W-A-R-S-H-A-W. I'm a member of the
- 18 public. And I just wanted to thank the Public Advisor's
- 19 Office. I did get a response after sending you an email
- 20 regarding the auxiliary heat system that I've been working
- 21 with, with my heat pump and smart thermostat. And it was a
- 22 very extensive response from a person at the Energy
- 23 Commission, right now his name completely escapes me, I'm
- 24 so sorry. But I wanted to thank you because that is
- 25 follow-through that worked really well. Thanks.

- 1 CHAIR HOCHSCHILD: Thank you.
- 2 Any other public comment, Dorothy?
- 3 MS. MURIMI: No more raised hands at this time,
- 4 Chair.
- 5 CHAIR HOCHSCHILD: Okay. Anything else from the
- 6 Public Advisor's Report?
- 7 MS. MURIMI: Yes, one moment. We're going to try
- 8 Noemi one more time.
- 9 MS. GALLARDO: All right, can you hear me?
- 10 CHAIR HOCHSCHILD: Yes, we can hear you now.
- MS. MURIMI: Yes.
- 12 CHAIR HOCHSCHILD: We can hear you loud and
- 13 clear.
- MS. GALLARDO: Okay, thank you. I'll be quick.
- 15 I wanted to start out with just a quick congratulations to
- 16 Commissioner Vaccaro. And just noting that for
- 17 International Women's Day I'm also inspired to see the
- 18 heroes on the dais, including Commissioner Monahan and
- 19 Commissioner Vaccaro. So I appreciate the CEC always
- 20 having that at the forefront, gender balance and everything
- 21 else that we're doing on inclusion, diversity, equity, and
- 22 access.
- 23 I also wanted to highlight the collaboration, and
- 24 that was mentioned earlier between my office and other
- 25 divisions such as STEP. I think it's fantastic to be able

- 1 to do that and I wanted to appreciate Rosemary Avalos from
- 2 my office who's so committed to the community, making sure
- 3 that everyone gets heard. And it's wonderful to be able to
- 4 do that together with the divisions.
- 5 And finally, a big thanks to Dorothy Murimi and
- 6 Kaelynn Huelves from my office who are stepping up today to
- 7 handle the management of the meeting and have done such a
- 8 terrific job, bravo, bravo, bravo to you. And that's it,
- 9 thank you for enabling me to do the report today.
- 10 CHAIR HOCHSCHILD: Okay, thank you.
- 11 Let's go to Item 21, Chief Counsel's Report.
- MS. BARRERA: Good afternoon, Chair and
- 13 Commissioners, thank you. I also want to congratulate
- 14 Commissioner Vaccaro and just say on behalf of the entire
- 15 staff in the Chief Counsel's Office that we wish her much
- 16 success and we look forward to working with her.
- So, my report is to recommend that the
- 18 Commissioners break for a brief closed session to discuss
- 19 Agenda Item 21(a)(ii) and 21(a)(iv), which provides Notice
- 20 to the Energy Commission that may adjourn to a closed
- 21 session with its legal counsel pursuant to Government Code
- 22 section 11126(e) to discuss litigation to which the Energy
- 23 Commission is a party.
- 24 CHAIR HOCHSCHILD: Okay. Let's adjourn for
- 25 closed session, and we'll report back. Thank you, Linda.

1	MS. BARRERA: Thank you.
2	(Off the Record at 2:10 p.m. for Closed Session)
3	(On the Record at 2:23 p.m. from Closed Session)
4	MS. MURIMI: Thank you, Chair Hochschild, we are
5	back online.
6	CHAIR HOCHSCHILD: Okay, thank you. We are back
7	from closed session, nothing to report. And with that
8	we're adjourned, thanks everybody.
9	(The Business Meeting adjourned at 2:32 p.m.)
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CERTIFICATE OF REPORTER

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.

And I further certify that I am not of counsel or attorney for either or any of the parties to said hearing nor in any way interested in the outcome of the cause named in said caption.

IN WITNESS WHEREOF, I have hereunto set my hand this 5th day of April, 2022.

MARTHA L. NELSON, CERT**367

Martha L. Nelson

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